



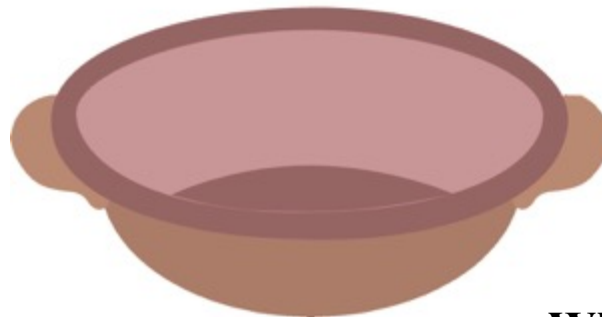
Taiwan- Japan Joint Meeting on Bioimaging for Young Researchers

November 1-2, 2017

Academia Sinica, Taipei, Taiwan



Let's gather everyone bringing something!



What is ?

A hot pot in which you don't know what the ingredients are.

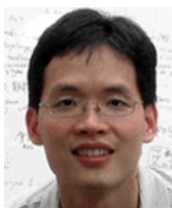
In this meeting, we anticipate emergence of a surprising flavor from the individual ingredients. Young researchers from three groups in Taiwan and Japan bring cutting-edge imaging methods and applications, aiming to establish connections/collaborations among participants in our current projects and also future works.

Who should attend?

Everybody interested in the field of imaging technologies and their applications in life sciences. The meeting provides many opportunities for scientific presentations, discussions and social activities to promote interactions among young researchers as well as senior investigators.

Organizers

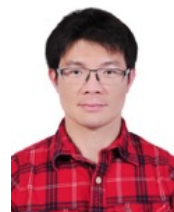
Academia Sinica



Wei Yuan Yang



Chia-Lung Hsieh

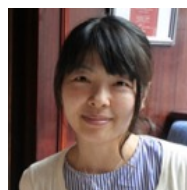


Bi-Chang Chen

Resonance Bio



Naoki Komatsu



Hiroko Sakurai

4D Cell



Kosuke DoDo



Kazuo Kurokawa



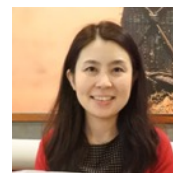
Yasuhiro Maeda



Satoko Takemoto

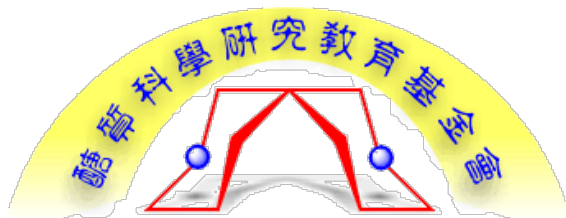


Masahiko Morita

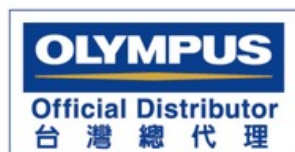


Kaori Fukaya

Our Sponsors



Your Vision, Our Future



元利儀器股份有限公司
YUAN LI INSTRUMENT CO., LTD.

台北市內湖區陽光街365巷39號6樓
6F, 39, Lane365, Yang-Guang St., Taipei, Taiwan, R.O.C.
TEL:886(2)8751-2222 FAX:886(2)8751-5356

Lunch & Banquet



RESONANCE BIO

Oral

No.	Author	Affiliation	Title
1	MIYAWAKI Atsushi 宮脇 敦史	RIKEN Brain Science Institute	Introduction of Resonance Bio
2	WATANABE Taku 渡部 拓	R&D Division Medical & Biological Laboratories Co Ltd	Fluoppi: Visualization of protein protein interactions (PPIs) using liquid phase transitions
3	KUCHIMARU Takahiro 口丸 高弘	Kondoh Laboratory Tokyo Institute of Technology	Development of a new murine model of bone metastasis using bioluminescence imaging
4	HASHIMOTO Daiki 橋本 大樹	Information and Communication Research Division Mizuho Information & Research Institute, Inc.	Tracking and Classification Method for Cells in the Images of Fluorescent Proteins.
5	TOYOSHIMA Yu 豊島 有	Lab. of Molecular genetics and ethology University of Tokyo	Bio-image informatics for whole brain activity imaging
6	KAMIYA Mako 神谷 真子	Lab. of Chemical Biology and Molecular Imaging The University of Tokyo	Detection of LacZ-Positive Cells in Living Tissue with Single-Cell Resolution

Poster

No.	Author	Affiliation	Title
RB-01	WATANABE Taku 渡部 拓	R&D Division Medical & Biological Laboratories Co Ltd	Applications of Fluoppi method visualizing PPIs in live cells
RB-02	TOYOSHIMA Yu 豊島 有	Lab. of Molecular genetics and ethology University of Tokyo	Bio-image informatics for whole brain activity imaging
RB-03	HIRAMATSU Yuki 平松 侑樹	Hotta Laboratory Meijo University	Object Segmentation by Integrating Multiple Deep Networks
RB-04	HOSOKAWA Tomohisa 細川 智永	Lab. for Cell Function Dynamics RIKEN Brain Science Institute	Analysis for the activity and phosphorylation states of synaptic proteins.
RB-05	IMANISHI Ayako 今西 彩子	Laboratory of Bioimaging and Cell Signaling Kyoto University	A novel method of analyzing molecular activities at single cell level
RB-06	UMEZAWA Masakazu 梅澤雅和	Soga Laboratory Tokyo University of Science	Challenge to 3-Dimensional Imaging of Brain Vasculature by Near-Infrared Fluorescence Probe with Light-Sheet Excitation System
RB-07	ISHII Hirokazu 石井 宏和	Research Institute for Electronic Science Hokkaido University	Treadmilling of microtubules drives the directional transport of maternal factors in fertilized ascidian eggs
RB-08	KUCHIMARU Takahiro 口丸 高弘	Kondoh Laboratory Tokyo Institute of Technology	Development of a new murine model of bone metastasis using bioluminescence imaging
RB-09	OKABE Kohki 岡部 弘基	Graduate School of Pharmaceutical Sciences University of Tokyo	Imaging and Manipulation of Temperature in Single Living Cells
RB-10	HASHIMOTO Daiki 橋本 大樹	Information and Communication Research Division Mizuho Information & Research Institute, Inc.	Detection and Tracking Method for Cells Using Image Processing.
RB-11	GAO Jingchi 高 靖馳	Laboratory of Chemical Biology Osaka University	A fluorescent probe for quick live-cell protein labeling
RB-12	YEROSLAVSKY Gil	Laboratory for Bio-imaging Tokyo University of science	Visual Mapping of Strain in Elastic Silicone Polymers Based on Energy Transfer Phenomena
RB-13	KOMATSU Naoki 小松 直貴	Lab. for Cell Function Dynamics RIKEN Brain Science Institute	Development of fluorescent/luminescent protein-based biosensors for visualizing kinase activity in living cells
RB-14	MINEGISHI Misa 峯岸 美紗	Kondoh laboratory Tokyo Institute of Technology	A multi-bioluminescence reporter system visualizes crosstalk between cancer cells and bone marrow microenvironment
RB-15	MOROZUMI Akihico 両角 明彦	Lab. of Chemistry and Biology The University of Tokyo	Development of spontaneously blinking fluorophores based on nucleophilic addition of intracellular glutathione for super-resolution imaging
RB-16	YAMAGUCHI Kazushi 山口 和志	Research Institute for Electronic Science Hokkaido University	Two-photon imaging within living mouse brains improved by easy modifications in the laser irradiation condition
RB-17	KAMIMURA Masao 上村 真生	Soga Laboratory Tokyo University of Science	Over-1000 nm Near-Infrared (OTN-NIR) Fluorescence <i>in vivo</i> Imaging
RB-18	OTOMO Kohei 大友 康平	Research Institute for Electronic Science Hokkaido University	Multi-point scanning two-photon microscopy by utilizing a novel neodymium based laser
RB-19	KAMIYA Mako 神谷 真子	Lab. of Chemical Biology and Molecular Imaging The University of Tokyo	Detection of LacZ-Positive Cells in Living Tissue with Single-Cell Resolution

Academia Sinica

Oral

No.	Author	Affiliation	Title
1	LIAO, Jung-Chi 廖仲麒	Institute of Atomic and Molecular Sciences Academia Sinica	Introduction of Academia Sinica
2	CHEN, Bi-Chang 陳壁彰	Research Center for Applied Sciences Academia Sinica	Beyond the diffraction limit by light-sheet microscopy
3	HSIEH, Chia-Lung 謝佳龍	Institute of Atomic and Molecular Sciences Academia Sinica	Label-free interferometric imaging resolves high-speed dynamics of single bio-nanoparticles in live cells
4	LAI, Charles Pin-Kuang 賴品光	Institute of Atomic and Molecular Sciences Academia Sinica	From Seeing to Believing: Visualization and Tracking of Extracellular Vesicles
5	LEE, Hsien-Ming 李賢明	Institute of Chemistry Academia Sinica	Upconversion Nanoparticle as Light Emitting Photoactivation Platform
6	TU, Hsiung-Lin 涂熊林	Institute of Chemistry Academia Sinica	Integrated microfluidic platform for cell signaling study
7	HUANG, Jen-Tse 黃人則	Institute of Chemistry Academia Sinica	Light-induced Neurotoxic Aggregates in Neurodegenerative Disease

Poster

No.	Author	Affiliation	Title
AS-01	HUANG, Cherry Yu-Shan 黃鈺珊	Institute of Physics Academia Sinica	3D Time-Lapsed in vivo Imaging Study of Eye Development in Drosophila Embryo via Dual-illumination Light Sheet Microscopy
AS-02	CHU, Li-An 朱麗安	Institute of Physics Academia Sinica	Whole brain 5D functional imaging
AS-03	LIN, Keng-Hui 林耿慧	Institute of Physics Academia Sinica	The Origins of Apical Constriction Force of Madin--Darby Canine Kidney (MDCK) Cysts
AS-04	WANG, Po-Hsiang 王柏翔	Institute of Physics Academia Sinica	Topological influence on cell mechanics and signaling
AS-05	WU, Jheng-Syong 吳正雄	Institute of Chemistry Academia Sinica	A FRET Probe Strategy Based on Affinity Tag and Alternating-Laser Excitation Technique to Study the Position of the General Transcription Factor TFIIF in the RNA Polymerase II Transcription Preinitiation Complex
AS-06	HUANG, Jen-Tse 黃人則	Institute of Chemistry Academia Sinica	Light-induced Neurotoxic Aggregates in Neurodegenerative Disease
AS-07	TU, Hsiung-Lin 涂熊林	Institute of Chemistry Academia Sinica	Integrated Platform for Cell Signaling Study
AS-08	LEE, Hsien-Ming 李賢明	Institute of Chemistry Academia Sinica	Upconversion Nanoparticle as Light Emitting Photoactivation Platform
AS-09	GAO, Hua-De 高華德	Institute of Chemistry Academia Sinica	NIR Photoactivation of Protein Kinase A Using Upconversion Nanoparticles
AS-10	HSIEH, Feng Jen 謝豐任	Institute of Atomic and Molecular Sciences Academia Sinica	Lipid-Encapsulated Fluorescent Nanodiamonds for Correlative Light Electron Microscopy of Cell Surface Antigens
AS-11	TSENG, Ting-Yuan 曾鼎元	Institute of Atomic and Molecular Sciences Academia Sinica	Bioimaging of fluorescent probes reveals a potential universal cancer biomarker: G-quadruplex foci
AS-12	LAI, Charles Pin-Kuang 賴品光	Institute of Atomic and Molecular Sciences Academia Sinica	Subcellular and Whole Animal Imaging of Extracellular Vesicles with Engineered Fluorescent and Bioluminescent Reporters
AS-13	WU, Anthony Yan-Tang 吳晏瑋	Institute of Atomic and Molecular Sciences Academia Sinica	A Method-Comparison Study of Extracellular Vesicle Labeling for <i>in vitro</i> and <i>in vivo</i> Imaging
AS-14	CHONG, Weng Man 鍾穎文	Institute of Atomic and Molecular Sciences Academia Sinica	Superresolution Imaging Reveals Staggered Architecture of the Distal
AS-15	YANG, Tony 楊東霖	Institute of Atomic and Molecular Sciences Academia Sinica	Live-cell superresolution tracing reveals zone-dependent nonaxonomal dynamics of intraflagellar transport proteins at the ciliary base
AS-16	LI, Li-Tzu 李莉姿	Institute of Atomic and Molecular Sciences Academia Sinica	Superresolution Imaging Reveals Redirection of Intraflagellar Transport Proteins in Transition Zone--Deficient Mammalian Cells
AS-17	HSIEH, Chia-Lung 謝佳龍	Institute of Atomic and Molecular Sciences Academia Sinica	Label-free interferometric imaging resolves high-speed dynamics of single bio-nanoparticles in live cells
AS-18	LIAO, Yi-Hung 廖宜鴻	Institute of Atomic and Molecular Sciences Academia Sinica	Nanoscale single-molecule dynamics in cell membranes by ultrahigh-speed microscopy

Poster

No.	Author	Affiliation	Title
AS-19	TSAI, YUN-CHI 蔡允齊	Research Center for Applied Science Academia Sinica	Light sheet fluorescence imaging on expanded samples
AS-20	LU, Chieh-Han 呂杰翰	Research Center for Applied Science Academia Sinica	Rapid, Large-scale, Three-Dimensional Super-Resolution Microscopy
AS-21	LIU, Yen-Ting 劉彥廷	Research Center for Applied Science Academia Sinica	Instrument Control, Numerical Evaluation and High-throughput Data Processing
AS-22	CHEN, Chin-Yi 陳靜怡	Research Center for Applied Science Academia Sinica	To monitor the subcellular voltage & Ca ²⁺ dynamics of hippocampal neurons on matrigel-based 3D culture by light-sheet microscopy
AS-23	TANG, Wei-Chun 湯為淳	Research Center for Applied Science Academia Sinica	Developing fluorescent probes for cytoskeleton of migrating cells and monitoring them by lattice light-sheet microscopy
AS-24	LEE, Chia-Wei 李家璋	Research Center for Applied Science Academia Sinica	Looking into tunneling nanotubes between pancreatic cancer cells induced by the macrophage conditioned medium and electric fields
AS-25	KUO, Chiung Wen 郭瓊雯	Research Center for Applied Science Academia Sinica	Real-Time Intravital Imaging for Revealing the Rare Cells in the Blood Vessels
AS-26	Chen, Chen-Hui 陳振輝	Institute of Cellular and Organismic Biology Academia Sinica	Live imaging of tissue regeneration in zebrafish
AS-27	HUANG, Wan-Chen 黃婉嬪	Institute of Cellular and Organismic Biology Academia Sinica	Dynamic analysis of DNA-topoisomerase II interaction based on fluorescence fluctuation and single molecule detection
AS-28	FU, Chiyu 傅琪鈺	Institute of Cellular and Organismic Biology Academia Sinica	Electron tomographic analysis reveals ultrastructural features of mitochondrial cristae architecture which reflect energetic state and aging
AS-29	LEE, Yi-Ching 李宜靜	Institute of Cellular and Organismic Biology Academia Sinica	Regulation of intracellular trafficking of a multiple transmembrane protein, GLUT10
AS-30	CHEN, Chun Wei 陳君璋	Institute of Biological Chemistry Academia Sinica	An image-based screening strategy for deubiquitinases in selective autophagy
AS-31	SANG, Chun 桑淳	Institute of Biochemistry Academia Sinica	ER to mitochondrial calcium transfer drives autophagy bursts during starvation
AS-32	CHEN, Bo-Hua 陳柏樺	Institute of Biochemistry Academia Sinica	Hsp70 quality controls peroxisomes
AS-33	CHEN, Sheng-hong 陳昇宏	Institute of Molecular Biology Academia Sinica	Functional Dynamics of Cellular Adaptation in Single Cells
AS-34	CHEN, Hung-Ta 陳宏達	Institute of Molecular Biology Academia Sinica	Biochemical and biophysical analyses of the eukaryotic RNA polymerase III transcription cycle
AS-35	WANG, Rachel Chung-Ju 王中茹	Institute of Plant and Microbial Biology Academia Sinica	Maize Synaptonemal Complex Structure Revealed by Super-Resolution Microscopy
AS-36	LEE, Ding-Hua 李頂華	Institute of Plant and Microbial Biology Academia Sinica	Patterns of SUMOylation and Ubiquitylation in Maize Meiosis Analyzed by Super-Resolution Microscopy
AS-37	LIU, Pei-Jou 劉珮柔	National Taiwan University Institute of Biochemical Sciences	Identification of Autophagic Clearance for Damaged Plasma Membrane

4D Cell

Oral

No.	Author	Affiliation	Title
1	NAKANO Akihiko 中野 明彦	Live Cell Super-Resolution Imaging Reseach Team, RIKEN Center for Advanced Photonics	Introduction of 4D Cell Project
2	MAEDA Yasuhiro 前田 康大	Photonics Control Technology Team, RIKEN Center for Advanced Photonics	Development of Laser for 4D Cell Imaging
3	ISOBE Keisuke 磯部 圭佑	Attosecond Science Research Team, RIKEN Center for Advanced Photonics	Modulation microscopy for super-resolution deep imaging
4	OKAMOTO Kazuko 岡本 和子	Laboratory for Comprehensive Bioimaging, RIKEN Quantitative Biology Center	Single molecule measurement of core transcriptional factors in living nuclei of mouse embryonic stem cells
5	OGURA Yosuke 小椋 陽介	Laboratory for Morphogenetic Signaling, RIKEN Center for Developmental Biology	Intercellular propagation of EGF-ERK signaling by relay mechanism directs epithelial invagination
6	TACHIKAWA Masashi 立川 正志	Theoretical Biology Laboratory, RIKEN	Physical modeling of Golgi formation process

Poster

No.	Author	Affiliation	Title
4D-01	ISOBE Keisuke 磯部 圭佑	Attosecond Science Research Team, RIKEN Center for Advanced Photonics	Deep imaging techniques using spatio-temporal modulation
4D-02	MAEDA Yasuhiro 前田 康大	Photonics Control Technology Team RIKEN Center for Advanced Photonics	Development of Laser for 4D Cell Imaging
4D-03	DODO Kosuke 園園 孝介	Synthetic Organic Chemistry Laboratory, RIKEN	Alkyne-tag Raman Imaging for Visualization of Small Molecules
4D-04	EGOSHI Syusuke 江越 脩祐	Synthetic Organic Chemistry Laboratory, RIKEN	Proposal of new mechanism with <i>in vivo</i> Raman Imaging: coronatine induces the infection of plant pathogens independently of known receptors
4D-05	KUROKAWA Kazuo 黒川 量雄	Live Cell Super-Resolution Imaging Reseach Team RIKEN Center for Advanced Photonics	4D imaging of cargo delivery in maturing Golgi cisternae
4D-06	Tojima Takuro 戸島 拓郎	Live Cell Super-Resolution Imaging Reseach Team RIKEN Center for Advanced Photonics	4D imaging of coat and adaptor proteins on the <i>trans</i> -Golgi network
4D-07	ITO Yoko 伊藤 容子	Live Cell Super-Resolution Imaging Reseach Team RIKEN Center for Advanced Photonics	COPII-independent core of the Golgi apparatus functions as the scaffold for Golgi regeneration in plant cells
4D-08	MIYASHIRO Daisuke 宮代 大輔	Live Cell Super-Resolution Imaging Reseach Team RIKEN Center for Advanced Photonics	Observations of the membrane traffic in living yeast cells via the high-speed super-resolution optical microscope
4D-09	TACHIKAWA Masashi 立川 正志	Theoretical Biology Laboratory, RIKEN	Physical modeling of Golgi formation process
4D-10	TAKEMOTO Satoko 竹本 智子	Image Processing Research Team RIKEN Center for Advanced Photonics	Sommelier: A system for performance evaluation of image segmentation methods toward better objectivity of cell image analysis
4D-11	MORITA Masahiko 森田 正彦	Image Processing Research Team RIKEN Center for Advanced Photonics	Cloud computing system for image processing and sharing in 4D Cell project
4D-12	TSAI Ming-Dar 蔡 明達	Image Processing Research Team RIKEN Center for Advanced Photonics Information and Computer Engineering Chung-Yuan Christian University	Human Induced Pluripotent Stem Cell Region Recognition in Microscopy Images Using Convolutional Neural Networks
4D-13	AZUMA Yusuke 東 裕介	Laboratory for Developmental Dynamics RIKEN Quantitative Biology Center	Quantitative analysis of variability of cellular dynamics in <i>C. elegans</i> embryogenesis
4D-14	KYODA Koji 京田 耕司	Laboratory for Developmental Dynamics RIKEN Quantitative Biology Center	Quantitative cell division dynamics data of RNAi-treated embryos for all essential embryonic genes in <i>C. elegans</i>
4D-15	SHINKAI Soya 新海 創也	Laboratory for Developmental Dynamics RIKEN Quantitative Biology Center	Bridging the gap between the dynamics and organization of chromatin domains by mathematical modeling
4D-16	ATUPELAGE Chamidu	Laboratory for Developmental Dynamics RIKEN Quantitative Biology Center	Deep neural network based segmentation method for detecting the nuclei in 4D DIC microscopic images of <i>C. elegans</i> embryos
4D-17	OKAMOTO Kazuko 岡本 和子	Laboratory for Comprehensive Bioimaging RIKEN Quantitative Biology Center	Single molecule measurement of core transcriptional factors in living nuclei of mouse embryonic stem cells
4D-18	ICHIMURA Taro 市村 垂生	Laboratory for Comprehensive Bioimaging RIKEN Quantitative Biology Center	Light scattering spectroscopy and imaging for cellular state quantification
4D-19	WEN Fu-Lai 溫 福來	Laboratory for Physical Biology RIKEN Quantitative Biology Center	Cell rearrangements in <i>Drosophila</i> tracheal tube elongation
4D-20	CHU Wei-Chen 朱 韋臣	Laboratory for Morphogenetic Signaling RIKEN Center for Developmental Biology	The role of apical extracellular matrix in force transmission and epithelial morphogenesis
4D-21	OGURA Yosuke 小椋 陽介	Laboratory for Morphogenetic Signaling RIKEN Center for Developmental Biology	Intercellular propagation of EGF-ERK signaling by relay mechanism directs epithelial invagination
4D-22	MASE Shun 間瀬 俊	Laboratory for Cell Asymmetry RIKEN Center for Developmental Biology	Notch Signaling Dynamics for the Asymmetric Cell Fate Determination in the Mouse Neurogenesis
4D-23	SHIOI Go 塩井 剛	Genetic Engineering Team RIKEN Center for Life Science Technologies	Collective cell rearrangement in visceral endoderm during the anterior-posterior axis formation in a pregastrula mouse embryo

Other Participants

Resonance Bio	Name	Affiliation
Panelist	SOGA Kohei 曾我 公平	Tokyo University of Science
Panelist	NEMOTO Tomomi 根本 知己	Research Institute for Science, Hokkaido University
Panelist	HOTTA Kazuhiro 堀田 一弘	Meijo University
Attendance Only	IMAMURA Takeshi 今村 健志	Ehime University Graduate School of Medicine
Administrator	SAKURAI Hiroko 櫻井 絃子	RIKEN Brain Science Institute RIKEN Center for Advanced Photonics

Academia Sinica	Name	Affiliation
Organizer	YANG Wei-Yuan 楊維元	Institute of Biological Chemistry, Academia Sinica
Panelist	Chen, Peilin 陳培菱	Research Center for Applied Sciences, Academia Sinica
Attendance Only	Chen, Yen Wei 陳彥璋	Institute of Atomic and Molecular Sciences, Academia Sinica
Attendance Only	Chen, Zhengmin 陳正民	Institute of Atomic and Molecular Sciences, Academia Sinica
Attendance Only	SOTOMA Shingo 外間 進悟	Institute of Atomic and Molecular Sciences, Academia Sinica
Attendance Only	HSUEH Ching-chong 薛景中	Institute of Physics, Academia Sinica
Attendance Only	Cheng, Ching-Ya 鄭敬亞	Institute of Atomic and Molecular Sciences, Academia Sinica
Attendance Only	Lin, Chih-Hsiang 林智翔	Institute of Atomic and Molecular Sciences, Academia Sinica
Attendance Only	Christine Wong 黃慧清	Institute of Atomic and Molecular Sciences, Academia Sinica

4D Cell	Name	Affiliation
Panelist	OKADA Yasushi 岡田康志	Laboratory for Cell Polarity Regulation, RIKEN QBiC
Panelist	ONAMI Shuichi 大浪修一	Laboratory for Developmental Dynamics, RIKEN QBiC
Panelist	HAYASHI Shigeo 林茂生	Laboratory for Morphogenetic Signaling, RIKEN CDB
Administrator	FUKAYA Kaori 深谷 香織	Live Cell Super-Resolution Imaging Research Team, RIKEN Center for Advanced Photonics