

NUS-JST(PRESTO) WORKSHOP: BIO-IMAGING AND SINGLE-CELL ANALYSIS

9th December 2016 University Hall @ NUS



*National University of Singapore (NUS)
& Japan Science and Technology Agency (JST)
Precursory Research for Embryonic Science and Technology (PRESTO)*

NUS-JST (PRESTO) Workshop

NUS University Hall, Auditorium, December 9th (Friday)

No.	Time	Program
	09:00 – 09:10	Opening Remarks <i>Prof. Young-Tae Chang</i> (National University of Singapore, Singapore Bioimaging Consortium, A*STAR Singapore)
Session 1. Novel Technologies in Microscopy and Cell Imaging (Chairman: Mako Kamiya)		
1	09:10 – 09:30	Development of Scanning Electrochemical - Ion Conductance Microscopy for Single Cell Analysis <i>Yasufumi Takahashi, College of Science and Engineering, Kanazawa University, JST-PRESTO</i>
2	09:30 – 09:50	Development of background-free tame probes for intracellular live cell imaging <i>Samira Husen Alamudi, Singapore Bioimaging Consortium, A*STAR Singapore</i>
3	09:50 – 10:10	Background-Free Deep Imaging by Multiphoton Excited Fluorescence Microscopy Using Modulation Techniques <i>Keisuke Isobe, Center for Advanced Photonics, Riken, JST-PRESTO</i>
<ul style="list-style-type: none"> Coffee Break 10:10 – 10:40 		
Session 2. Cell-Omics and Novel Imaging Technologies (Chairman: Etsuo Susaki)		
4	10:40 – 11:00	Development of Live Pluripotent Stem Cell Probe and its application for teratoma-free stem cell therapy <i>Nam-Young Kang, Singapore Bioimaging Consortium, A*STAR Singapore</i>
5	11:00 – 11:20	Cell-Omics Analysis Toward the Organism-Level Systems Biology <i>Etsuo Susaki, Graduate School of Medicine, The University of Tokyo, JST-PRESTO</i>
6	11:20 – 11:40	Evolving Generalized Voronoi Diagram for Cell Segmentation <i>Hwee Kuan Lee, Bioinformatics Institute, A*STAR Singapore</i>
7	11:40 – 12:00	Microstructure and Temperature of Muscle Cells <i>Madoka Suzuki, Comprehensive Research Organization, Waseda University, JST-PRESTO</i>
8	12:00 – 12:20	Construction of Human 3D-Tissue Models for Biomedical Application <i>Michiya Matsusaki, Graduate School of Engineering, Department of Applied Chemistry, Osaka University, JST-PRESTO</i>
<ul style="list-style-type: none"> Taking a Group Photo 		

• Lunch Break 12:20 – 13:40		
Session 3. Novel Technologies in Cellular Diagnosis (Chairman: Nam-Young Kang)		
9	13:40 – 14:00	A Chemical Fluorescent Probe for the Detection of A β Oligomers <i>Chai Lean Teoh, Singapore Bioimaging Consortium, A*STAR Singapore</i>
10	14:00 – 14:20	Rapid Cancer Imaging by Rationally Designed Fluorescence Probes <i>Mako Kamiya, Graduate School of Medicine, The University of Tokyo, JST-PRESTO</i>
11	14:20 – 14:40	Development of Fluorescent Inflammation Imaging Probes <i>Sung-Jin Park, Singapore Bioimaging Consortium, A*STAR Singapore</i>
12	14:40 – 15:00	Development of Artificial Nucleic Acids for Sensitive Detection of RNA in Cell <i>Hiromu Kashida, Graduate School of Engineering, Nagoya University, JST-PRESTO</i>
Session 4. Frontiers in Genomics, Proteomics, Chemical Libraries (Chairman: Chai Lean Teoh and Sung-Jin Park)		
13	15:00 – 15:20	Droplet Microfluidics for Massively Parallel Single-Cell Manipulation <i>Masahito Hosokawa, Research Organization for Nano & Life Innovation, Waseda University, JST-PRESTO</i>
14	15:20 – 15:40	Plant Circadian Clocks Regulate Cell Fate Determination <i>Motomu Endo, Graduate school of biostudies, Kyoto University, JST-PRESTO</i>
• Coffee Break 15:40 – 16:10		
15	16:10 – 16:30	Synthesis of Dye Libraries for Bioimaging Probe Development <i>Dongdong Su, Singapore Bioimaging Consortium, A*STAR Singapore</i>
16	16:30 – 16:50	Imaging Chromatin Structures <i>Yusuke Miyanari, Okazaki Institute for Integrative Bioscience, National Institute for Natural Science, JST-PRESTO</i>
17	16:50 – 17:10	Downscaling Proteome Profiling: Toward Single Cell Proteomics <i>Masaki Wakabayashi, Graduate school of Pharmaceutical sciences, Kyoto University, JST-PRESTO</i>
	17:10 – 17:20	Closing Remarks <i>Prof. Itaru Hamachi</i> (Graduate School of Engineering, Kyoto University, JST-PRESTO)