Day 1: January 13, 2014 (Monday)

12:30-12:45 Registration

12:45-13:00 Opening Remarks

Kazuhiko Ishihara, The University of Tokyo

Moderators: Hsing-Wen Sun, and Kohsuke Gonda

13:00-13:40 Opening Remark and Plenary Lecture (PL1)

Chung-Yuan Mou, National Taiwan University
Nonviral Cell Labeling and Differentiation Agent for Induced Pluripotent Stem Cells Based on Mesoporous Silica Nanoparticles

13:40-14:20 Plenary Lecture (PL2)

Masahide Takahashi, Nagoya University
Roles of the Akt substrate Girdin in cancer progression and angiogenesis

14:20-14:50 Kohsuke Gonda, Tohoku University
High accuracy imaging of cancer and peripheral artery disease with nanoparticles

14:50-15:15 Hsing-Wen Sung, National Tsing Hua University
Multifunctional Nanoparticles for Oral Protein Drug Delivery

15:15-15:30 Coffee Break

Moderators: Peilin Chen, and Atsushi Maruyama

15:30-15:45 Chia-Ning Shen, Academia Sinica
Reprogramming of adult hepatocytes to bipotential progenitors and insulin-producing clusters in spheroid cultures utilizing polyvinyl alcohol substrates

15:45-16:00 Dueng-Yuan Hueng, National Defense Medical Center
Effect of radioactive gold nanoparticle (198Au-GNP) on brain glioma
16:00-16:30  **Atsushi Maruyama**, Tokyo Institute of Technology  
Enhancement of DNAzyme activity with cationic comb-type copolymer for nucleic acid detection

16:30-16:45  **Peilin Chen**, Academia Sinica  
Cell Sensing, Sorting and Manipulation by Advanced Nanotechnology

16:45-17:00  **Yi-Chung Tung**, Academia Sinica  
Study cellular responses under chemical and oxygen gradient combinations using microfluidic cell culture devices

17:00-17:30  **Hideo Higuchi**, The University of Tokyo  
Biophysics toward noninvasive imaging

17:30-18:00  **Nobuhiko Yui**, Tokyo Medical and Dental University  
Reduction of endosomal cholesterol storage using cytocleavable polyrotaxanes for treatment of lysosomal storage disorders

18:30- Banquet
**Day 2: January 14, 2014 (Tuesday)**

**Moderators: Joseph Jen-Tse Huan, and Hiroo Iwata**

10:00-10:30  Plenary Lecture (PL3)  
*Patrik C. H. Hsieh*, National Cheng Kung University & Hospital, Academia Sinica  
Cardiovascular Nanomedicine

10:30 -11:00  
*Hiroo Iwata*, Kyoto University  
Introduction of antioxidant-loaded liposomes into endothelial cell surfaces through DNA hybridization

11:00-11:15  
*Shuk-Man Ka*, National Defense Medical Center  
Validation of reno-protective components by a versatile platform for chronic kidney disease for drug development

11:15-11:30  
*Joseph Jen-Tse Huang*, Academia Sinica  
Toward the membrane-disrupting and seeding properties of the TDP-43 peptides in neurodegenerative diseases

11:30-11:45  
*Chau-Hwang Lee*, Academia Sinica, National Yang-Ming University  
Cancer Cell Responses to the Stimulations from Microenvironment in Microfluidic Devices

11:45-12:15  
*Norio Fukuda*, The Jikei University School of Medicine  
Real-time imaging of single sarcomeres in the mouse heart in vivo

12:15-13:30  Lunch

**Moderators: Andrew Miller, and Kazuhiko Ishihara**

13:30-14:00  Plenary Lecture (PL4)  
*Fu-Tong Liu*, Academia Sinica  
Galectins and intracellular vesicles

14:00-14:30  
*Kazuhiko Ishihara*, The University of Tokyo  
Cell membrane-permeable and cytocompatible phospholipid polymer nanoprobes conjugated with molecular beacons
14:30-14:45  Shann-Hui Hsu, National Taiwan University  
Nanoparticles for efficient labeling of stem cells

14:45-15:00  Coffee & Poster

15:15-15:45  Plenary Lecture (PL5)  
Keng-Liang Ou, Taipei Medical University  
Development of Antibacterial Nanostructured Composite Films for Minimally Invasive Surgery Applications: Microstructural Characteristics, Biocompatibility, Antibacterial Mechanisms and an Evaluation of Lateral Thermal Injury

15:45-16:15  Jun Miyake, Osaka University  
Towards molecular imaging in multiscale with using fluorescent nano-probes excited by both NIR light and electron beam

16:15-16:45  Andrew Miller, King’s College London  
Lipid-based nanoparticles and the future of RNAi therapeutics

16:45-17:15  Atsushi Natsume, Nagoya University School of Medicine  
Whole exome sequencing reveals the landscape of gene mutations and evolution in low-grade glioma

17:15  Closing Remarks  
Atsushi Natsume, Nagoya University School of Medicine