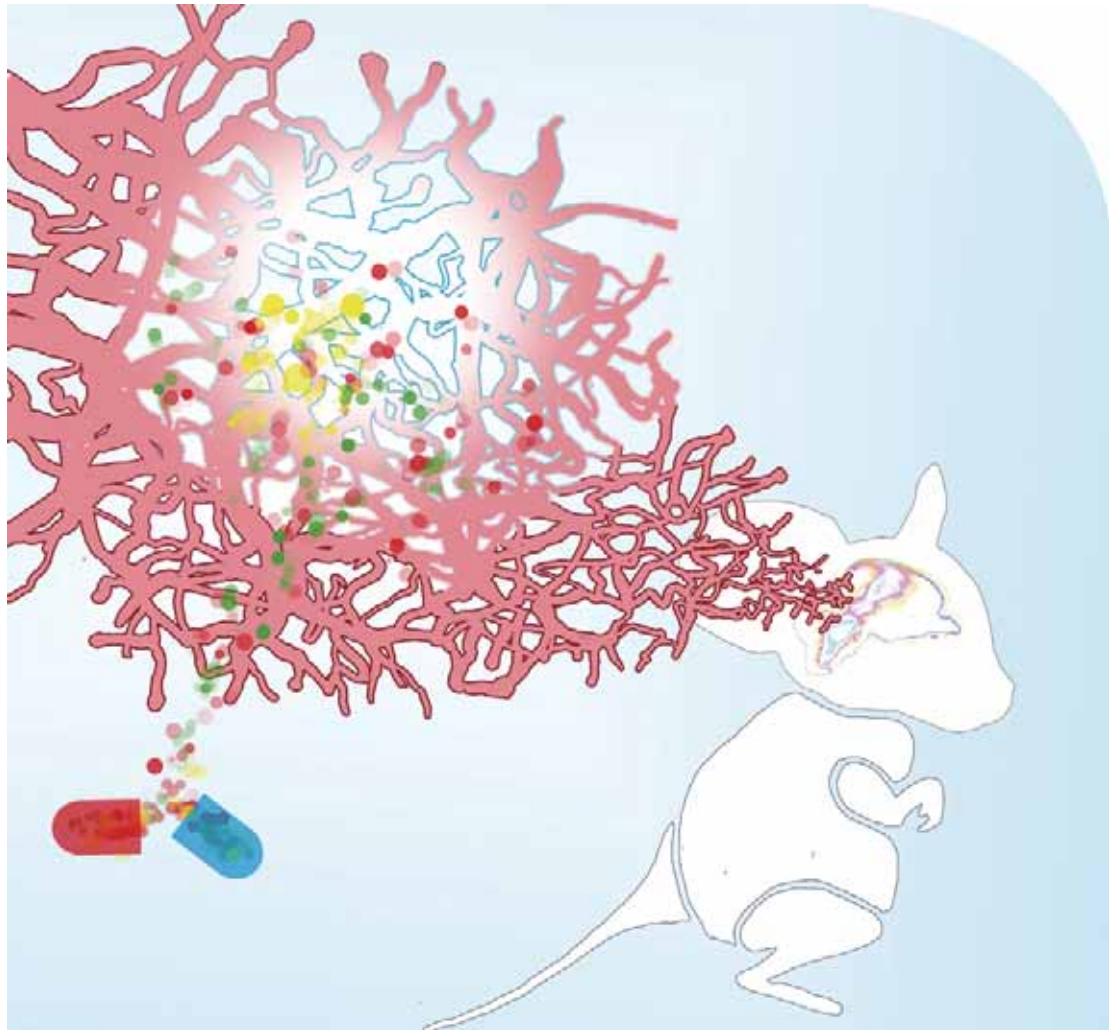


The 4th Taiwan-Japan Symposium on
Nanomedicine

January 13-14, 2013
Academia Sinica, Taipei

第四屆台日奈米醫學會議

The 4th Taiwan-Japan Symposium on Nanomedicine



Jan. 13-14, 2013

Institute of Physics, Academia Sinica, Nankang, Taipei, Taiwan.

Organized by Academia Sinica and “Nanomedicine Molecular Science”, Grant-in-Aid for Scientific Research on Innovative Areas from the Ministry of Education, Culture, Sports, Science and Technology, Japan.

Jan. 13, 2013 (Sunday)	
Auditorium (IOP)	
	Morning session I Din Ping Tsai (Academia Sinica)
9:00	Opening remarks Kuan Wang (Academia Sinica)
9:10	Delivering Enzymatic Function to Biological Cells with Porous Nanoparticles Chung-Yuan Mou (National Taiwan University)
9:50	Cell/Protein and Protein/Materials Interactions-Evaluation of Interaction Force by AFM Technology Kazuhiko Ishihara (University of Tokyo)
10:30	Coffee Break
	Morning session II: Hiroo Iwata (Kyoto University)
10:40	Bioorthogonal Protein Design in Combination with Directed Evolution for Biomaterials Yoshihiro Ito (RIKEN)
11:10	Study of Diamine-functionalized SWCNTs as Vector for Gene Delivery Feng-Huei Lin (National Taiwan University)
11:40	Microarrays of Extracellular Microenvironments for Studying Stem Cell Fate Koichi Kato (Hiroshima University)
11:55	High Mineral Affinity of Polyphosphoester Ionomer-Phospholipid Vesicles Yasuhiko Iwasaki (Kansai University)
12:10	Lunch and Poster Session
	Afternoon session I: Feng-Huei Lin (National Taiwan University)
13:30	Programmable Cellular Retention of Nanoparticles by Replacing the Synergistic Anion of Transferrin Chung-Shi Yang (National Health Research Institutes)
14:00	Beads-on-a-String Structures of Human Telomere DNAs under Molecular Crowding Conditions Daisuke Miyoshi (Konan University)
14:15	Mechanism of Efficient Cellular Delivery via Imperceptible Electricity Kentaro Kogure (Kyoto Pharmaceutical University)
14:30	Biodegradable Polyurethane Nanoparticles Shan-Hui Hsu (National Taiwan University)
15:00	Novel Smart Polymers for Biological Application Atsushi Maruyama (Kyushu University)
15:30	Coffee Break
	Afternoon session II: Koichi Kato (Hiroshima University)
15:40	Patient Specific High Throughput Screening Devices of Neural Network Based on Incubation Type Planar Patch Clamp Tsuneo Urisu (Nagoya University)
16:10	Autonomous Cell Culturing Chip for Electrotaxis Studies – from Morphological to Molecular Analysis Ji-Yeng Cheng (Academia Sinica)
16:25	Cytocleavable Polyrotaxanes for the Intracellular Delivery of Biomacromolecules Atsushi Tamura (Tokyo Medical and Dental University)
16:40	Fluorescent Nanoparticle as a Temperature Sensor in Single Living Cells Madoka Suzuki (Waseda University)
16:55	Using Microfluidic Devices to Control Gaseous Microenvironments for Cell Culture Yi-Chung Tung (Academia Sinica)
17:10	Mimicking Intracellular Environments by Micro- and Nanotechnologies toward a Better Understanding of in vivo Biochemical Reactions Noritada Kaji (Nagoya University)
17:25	A Biomimetic Approach for Conducting Polymer-based Cell Engineering Bruce Yu (RIKEN)
17:40	Polyion Complex Micelles Entrapping TiO ₂ Nanoparticles in the Core for Sonodynamic Therapy Atsushi Harada (Osaka Prefecture University)
17:55	Welcome Reception and Poster Section (IOP)

Jan. 14 (Monday)	
Auditorium (IOP)	
	Morning session I: Winston Chen (Academia Sinica)
9:00	Nanomechanics of Elastic Proteins: Interplay of Force, Form and Function. Kuan Wang (Academia Sinica)
9:40	Cell LEGO Hiroo Iwata (Kyoto University)
10:10	Coffee break
	Morning session II: Special Section on Bio-imaging TK Lee (Academia Sinica)
10:20	Bio-imaging Platform in Academia Sinica TK Lee (Academia Sinica)
10:25	Seeing Small and Seeing Deep Peilin Chen (Academia Sinica)
10:40	Single Molecule Biophysics Toward In Vivo Hideo Higuchi (University of Tokyo)
11:20	Nanoparticles for X-ray Imaging and Therapy Yeu-Kuang Hwu(Academia Sinica)
11:50	Real-time Imaging of Single Sarcomeres in the Mouse Heart in vivo Norio Fukuda (Jikei University)
12:20	Lunch and Poster Session
	Afternoon session I: Special Section on Bio-imaging Tsuneo Urisu (Nagoya University)
14:00	Nanodiamond-Based Imaging for Nanomedicine Huan-Cheng Chang (Academia Sinica)
14:30	Development of “in vivo” Multi-Photon Laser Excitation Microscopy for Brain Research Tomomi Nemoto (Hokkaido University)
15:00	Cancer Cell Responses to the Stimulations from Microenvironment in Microfluidic Devices Chau-Hwang Lee (National Yang Ming University)
15:30	Thrombin Binding Aptamer-Peptide Conjugate for Fluorescence Imaging of Potassium Ion in A Cell Shigeori Takenaka (Kyushu Institute of Technology)
16:00	Coffee break
	Afternoon session II: Special Section on Bio-imaging Chau-Hwang Lee (National Yang Ming University)
16:10	Structural Basis for the Polarized Axonal Transport by Kinesin-1. Yasushi Okada (RIKEN)
16:40	Hybrid Electron Microscopy-FRET Imaging Reveals TFIIF as a Malleable Transcription Factor on RNA Polymerase II Wei-Hau Chang (Academia Sinica)
17:10	Development of Imaging Technology with Nanoparticles for Cancer Diagnosis Kohsuke Gonda (Tohoku University)
17:40	Microscopic Heat Pulses Induce Ca ²⁺ -independent Contractions in the Heart Muscle Cells Kotaro Oyama (Waseda University)
17:55	Closing remarks
18:30	Banquet

POSTER

P01	Spatial Regulation of Specific Gene Expression through Photoactivation of RNAi Takashi Ohtsuki (Okayama University)
P02	Binary Self-Assembled Monolayers Modified Au Nanoparticles as Carriers in Biological Applications Hsun-Yun Chang (Academia Sinica)
P03	Cytoplasmic Delivery of Antigenic Peptides by β -Sheet Peptide Nanofibers Naoki Tanaka (Kyoto Institute of Technology)
P04	Adsorption Behavior of Plasmid DNA on Binary Self-Assembled Monolayers Modified Gold Substrates Wei-Lun Kao (National Taiwan University)
P05	Novel Single Cell Extraction Method Combined with Biomimetic Cell Surface Modification and Microfluidic Device Yukihiro Okamoto (Nagoya University)
P06	A Microfluidic Wound-Healing Assay to Study Endothelial Cell Proliferation and Migration under Oxygen Gradients Hsiu-Chen Shih (Academia Sinica)
P07	Nano-Imaging of Ciliary Motion and Structure with Light and Electron Microscopy Hironori Ueno (Tohoku University)
P08	A Microfluidic Array Platform for Simultaneous Cell Culture under Various Oxygen Tensions Chien-Chung Peng (Academia Sinica)
P09	Effect of Molecular Crowding on Antigen-Antibody Interactions at Solid-Liquid Interfaces Isao Hirata (Hiroshima University)
P10	Shape-Controlled Synthesis of Biopolymer-Coated Metal Nanocrystals and Their Antibacterial, Anticancer, Catalytic and SERS Properties Chih-Wei Chou (China Medical University)
P11	Efficient Labeling Method of Islets with Iron Oxide Nanoparticles for MR Imaging Based on DNA Hybridization N. Kitamura (Kyoto University)
P12	Multifunctional Graphene-PEDOT Microelectrodes for On-Chip Manipulation of Human Mesenchymal Stem Cells Yu-Sheng Hsiao (Academia Sinica)

POSTER

P13	Noninvasive in vivo Imaging of Tumor Cells in Mouse Auricles Sayaka Kita (Tokyo University)
P14	Bioelectronic Interface: Dimensional and Chemical Control of Conducting Polymer-based Micro/nanorod Arrays Yu-Sheng Hsiao (Academia Sinica)
P15	Comparison of Bare Metal and Statin-Coated Coil on the Rates of Intra-aneurysmal Tissue Organization in Rat Aneurysm Model. Tomonobu Kodama (Fukuoka University)
P16	Visualizing 3D Distribution of Gold Nanoparticles in Living Cells Sheng-Hann Wang (National Tsing-Hua University)
P17	Real-time Single Sarcomere Imaging in Rat Neonatal Cardiomyocytes via Expression of α -actinin-AcGFP at Z-discs Seine A. Shintani (Waseda University)
P18	Efficient Gene Delivery by Using Fluorescent Gold Nanoclusters Chia-Wei Lee (Academia Sinica)
P19	Introduction of Antioxidant-Loaded Liposomes into Endothelial Cell Surfaces through DNA Hybridization Sho Deno (Kyoto University)
P20	Manipulating Cell Fate by Surface Modified Polymeric Micro/Nanopillars Chiung Wen Kuo (Academia Sinica)
P21	Interaction between Lipid Membranes with Various Membrane Viscosity and Poly(ethylene glycol)-Lipid Conjugates Toru Itagaki (Kyoto University)
P22	Synthesis of Multiple Sequences in Single Spots (MS3) Using a Microfluidic Array Synthesizer Huai-Yi Chen (Academia Sinica)
P23	Development of Self-Assembled Fluorescent Nano Probe Based on Asymmetric Xanthene Scaffold for Detecting Enzymatic Activity Eiji Nakata (Kyoto University)
P24	Electric Field Chip for Long-term iPSc Culture and Differentiation. Ching-Wen Yang (National Yang-Ming University)