

International Symposium on Bio-imaging and Gene Targeting Sciences in Okayama

Date : Sunday, February 15, 2015

Time : 9:00 a.m. – 5:00 p.m.

Venue : The 50th Anniversary Hall, Okayama University
(1-1-1 Tsushima-naka, Kita-ku, Okayama, 700-8530)

Registration fee: **Free**

Registration: <https://posgra.dent.okayama-u.ac.jp/medica/ebmsemi/2015molecular/registration.html>



** This symposium will be conducted in English and be counted as your fulfillment of your requirements for graduation of Okayama University Graduate School of Medicine, Dentistry and Pharmaceutical Sciences.*

Program

9:00 - 9:10 a.m. **Opening Remarks**

9:10 - 10:30 a.m. **Special Lectures**

Special Lecture 1

Chair: Prof. Hideki Matsui (Okayama University)

“Stop Preclinical Alzheimer’s Disease!”

Dr. Takaomi Saïdo (Riken Brain Science Institute)

Special Lecture 2

Chair: Prof. Takuo Kuboki (Okayama University)

“Okayama Medical Innovation Center (OMIC) and Molecular Targeting Technology”

Dr. Eiji Matsuura (OMIC, Okayama University)

10:30 a.m. **Break**

10:40 a.m. - 12:10 p.m. **Symposium -Session 1-**

Characterization of Cellular Status by Nuclear Architecture Imaging

Chair: Prof. Satoshi Kubota (Okayama University)

“Mechanisms of Heterochromatin Positioning in the Nucleus”

Dr. Irina Solovei (Ludwig Maximilians University of München (LMU))

“Role of Spatial Positioning of Chromosome Territories: Evolutionary Views and Characteristics in Cancer Cells”

Dr. Hideyuki Tanabe (The Graduate University for Advanced Studies (SOKENDAI))

“Visualization of Dynamics of Methylated DNA in living cell and animal”

Dr. Kazuo Yamagata (Osaka University)

12:10 p.m. **Break**

*** Complementary lunch boxes will be served in the 2nd-floor hallway
(Only for the pre-resistant)**

12:20 - 12:50 p.m. **Luncheon Seminar**

Chair: Prof. Masaharu Takigawa (Okayama University)

“Single Cell Transcriptome Analysis Dissects Cell Fate Determination from iPS Cells to Cardiomyocyte”

Dr. Akira Watanabe (CiRA, Kyoto University)

12:50 p.m. **Break**

1:00 - 2:30 p.m. **Symposium -Session 2-**

Current Topics in Nano-bioengineering

Chair: Prof. Takuya Matsumoto (Okayama University)

“Imaging and Gene Expression Patterning with Micro- and Nanofluidics”

Dr. Shu Takayama (University of Michigan)

“Nanobiomaterials for Diagnosis and Treatment of Vascular Disease”

Dr. Hyun Joon Kong (University of Illinois)

“Genetically-encoded Tools to Optically Control and Image Ca²⁺ Dynamics”

Dr. Takeharu Nagai (Osaka University)

2:30 - 2:45 p.m. **Break**

2:45 - 4:45 p.m. **Symposium -Session 3-**

Hot Topics in Bone and Cartilage Imaging

Chair: Prof. Toshitaka Oohashi (Okayama University)

Prof. Hiroshi Kamioka (Okayama University)

“Details in the Nano-world: Assessing Structure-function Relationship of Cartilage by Atomic Force Microscopy”

Dr. Attila Aszodi (Clinical Center University of München (LMU))

“A Feasible Study of Molecular Bio-imaging of Articular Cartilage Proteoglycans”

Dr. Toshitaka Oohashi (Okayama University)

“Quantitative Illumination on Bone Histology and Cell Biology by Fluorescence Imaging”

Dr. Ji-Won Lee (Ehime University)

“Bioimaging of Osteocytes *in vivo* and *in vitro*”

Dr. Hiroshi Kamioka (Okayama University)

4:45 - 5:00 p.m. **Closing Remarks**