

**18<sup>th</sup> Surugadai International Symposium & Joint Usage/Research Program  
of Medical Research Institute Symposium**

**“The Future of Biomedical Research Pioneered by  
Advanced Technologies”**

---

**Monday, November 18, 2019 13:00 - 17:55**

**Akio Suzuki Memorial Hall M&D Tower 2F**

---

**13:00 - 13:05 Opening Remarks**

Dr. Fumitoshi Ishino (Director, Medical Research Institute, TMDU)

---

**Session 1 The Frontier of Genome Editing Technology**

**13:05 - 14:40**

**Chair:** Dr. Kohichi Tanaka (Medical Research Institute, TMDU)

---

**13:05 - 13:40** Dr. Hiroshi Nishimasu

(Department of Biological Sciences, Graduate School of Science,  
The University of Tokyo)

**Title:** Structure and engineering of CRISPR-Cas9

**13:40 - 14:10** Dr. Keiichiro Suzuki

(Institute for Advanced Co-Creation Studies, Osaka University)

**Title:** Development of in vivo genome-editing technologies and application for genome-editing therapy

**14:10 - 14:40** Dr. Tomomi Aida

( 1) McGovern Institute for Brain Research, Massachusetts Institute of Technology,  
2) Stanley Center for Psychiatric Research, Broad Institute of MIT and Harvard)

**Title:** Evidence, molecular basis, and cellular dynamics of genomic self-repair in mammalian zygotes

---

**14:40 - 15:00 Coffee Break**

---

---

**Session 2 The Frontier of Single Cell Biology and Technology**

**15:00 - 16:30**

**Chair:** Dr. Itoshi Nikaido (RIKEN)

---

**15:00 - 15:30** Dr. Saskia Freytag

(Lister Lab, Harry Perkins Institute of Medical Research)

**Title:** Addressing computational challenges of the analysis of single cell RNA-sequencing data

**15:30 - 16:00** Dr. Hironobu Fujiwara

(RIKEN Center for Biosystems Dynamics Research)

**Title:** A new model for coordinated hair follicle morphogenesis and stem cell induction

**16:00 - 16:30** Dr. Naganari Ohkura  
(Immunology Frontier Research Center, Osaka University)  
**Title:** Regulatory T cell manipulation for enhancing anti-tumor immune activity

---

**16:30 - 16:50 Coffee Break (Group Photo at Foyer)**

---

**Session 3 The Frontier of iPS Technology**

**16:50 - 17:50**

**Chair:** Dr. Tetsushi Furukawa (Medical Research Institute, TMDU)

---

**16:50 - 17:20** Dr. Hideki Masaki  
(Department of Stem Cell Therapy, Institute of Medical Science, University of Tokyo)  
**Title:** Creating human organs in animal body

**17:20 - 17:50** Dr. Jun K. Takeuchi  
(Medical Research Institute, Tokyo Medical and Dental University)  
**Title:** The Next Generation for Heart Research with Direct-Programming/Reprogramming Technologies

**17:50 – 17:55 Closing Remarks**

Dr. Toshiaki Ohteki (Division Chief, Medical Research Institute, TMDU)