

Joint Symposium between the University of Bonn and Waseda University

Date: October 4 (Fri) 9:00-18:30

Venue: Tokyo Women's Medical University-Waseda University Joint Institution for Advanced Biomedical Sciences (TWIns), Seminar Room 3

Organized by

*Graduate School of Advanced Science and Engineering Nano-Energy Unit of TGU Program, TWIns,
Institute for Advanced Research of Biosystem Dynamics, Global Consolidated Research Institute for Science Wisdom,
Waseda University
and
Life & Medical Sciences Institute (LIMES), The University of Bonn*

Program

Chairperson: Prof. Shinji Takeoka (Waseda)

9:00 Opening Address **Prof. Etsuro Ito** (Director of TWIns, Waseda)

9:05 Special Address **Prof. Micheal Hoch** (Rector, Bonn)

Chairperson: Prof. Haruko Takeyama (Waseda)

9:10 Invited Lecture "Essential role of conserved mRNA-processing protein TRIM71 in the development of brain and vasculature"

Prof. Waldemar Kolanus (Director of LIMES, Bonn)

9:35 "Physiology and pathology of brains revealed by single-molecule imaging and optogenetical manipulation" **Prof. Hiroko Bannai** (Waseda)

9:50 Invited Lecture "Spatial regulation of human chronic inflammation by dendritic cells"

Prof. Andreas Schlitzer (Bonn)

10:15 "Development of thin-film type sensors to measure human locomotion"

Prof. Shinji Takeoka (Waseda)

10:30 Invited Lecture "Novel CRISPR-based technologies for studying stochastic processes in cells"

Prof. Jonathan Schmid-Burgk (Bonn)

10:55 "Exploring life's origins via experimental evolution of artificial RNA replication systems"

Prof. Ryo Mizuuchi (Waseda)

11:10 **Break**

Chairperson: Prof. Waldemar Kolanus (Director of LIMES, Bonn)

11:20 "ATP release and Ca dynamics in astrocytes and Ca dynamics in astrocytes"

Prof. Takafumi Inoue (Waseda)

11:35 "Liver talks to pancreas with hepatokine"

Prof. Nobuhito Goda (Waseda)

11:50 "AI-dependent protein generation for recombination of multiple transcription factors"

Prof. Daisuke Kiga (Waseda)

12:05 "Advances in single-cell technologies: Analyzing bacterial genomes and gene expressions "

Prof. Masahito Hosokawa (Waseda)

12:20 **Lunch Break**

Chairperson: Prof. Nobuhito Goda (Waseda)

13:10 "Use of ultrasensitive ELISA for early diagnosis"

Prof. Etsuro Ito (Director of TWIns, Waseda)

13:25 "Constructing the Brain: Spatiotemporal control of neocortical development"

Prof. Carina Hanashima (Waseda)

13:40 "Two faces of CB2 receptors - what makes the difference"

Assoc. Prof. Chihiro Nozaki (Waseda)

- 13:55 "E3 ligase Praja1 mediates ubiquitination and degradation of microtubule-associated protein Tau"
Assist. Prof. Wataru Onodera (Waseda)
- 14:10 Invited lecture "Astrocyte regulation of brain physiology and pathophysiology"
Assoc. Prof. Jun Nagai (Riken)
- 14:25 Invited lecture "Covering genome studies from bacteria to humans with computational biology"
Prof. Kei Yura (Ochanomizu University/Waseda)
- 14:40 **Break**
- Chairperson: Prof. Andreas Schlitzer (Bonn)**
- 14:50 "Introduction to CESOAR" **Assist. Prof. Hiroko Matsunaga** (Waseda)
- 15:00 Oral Presentation on Host Lab Activity by Bonn Students ***10 min. including Q&A**
Lukas Rossnagel (Latz/Host: Bannai)
Matilde Vasconcelos (Latz/Host: Takeoka)
Marta Lovotti (Latz/Host: Takeoka)
Lea Seep (Hasenauer/Host: Takeyama)
Paul Maier (Schlitzer/Host: Takeyama)
- Chairperson: Prof. Jonathan Schmid-Burgk (Bonn)**
- Alexander Hoch** (Schmid-Burgk/Host: Asahi)
Kilian Dahm (Ulas/ Host: Asahi)
Hannah Rindsfusser (Bauer/Host: Ohshima)
Marc Vaisband (Hasenauer/Host: Kiga)
Sophie Reimer (Schlitzer/Host: Inoue)
- 16:40 **Break**
- Chairperson: Prof. Toshio Ohshima (Waseda)**
- 16:50 Invited lecture "Diversity of Tissue Engineering from Regenerative Therapy to Food Production"
Prof. Tatsuya Shimizu (Tokyo Women's Medical University)
- 17:05 Oral Presentation by Waseda Students ***7 min. including Q&A**
Kazuki Nakajima (D3, Goda), "Elucidation of the regulatory mechanism of adipogenesis by the NADH repair pathway"
Tomoyoshi Kaneko (D2, Tsuneda), "Identification of phages' receptor"
Masako Kifushi (D2, Takeyama/Hosokawa), "Functional evaluation of rhizosphere microbial consortium using single-cell genome"
Wen-han Sung (D2, Takeoka), "Fabrication of lysine-based cationic lipid nanoparticle"
Yuta Doi (D2, Semba), "Establishment of the cancer metastasis models using ALK+ lung cancer cell lines"
- Chairperson: Prof. Takafumi Inoue (Waseda)**
- Naosato Takagi** (D2, Kiga), "Optimization of In Vitro glycolytic pathway using machine learning"
Kotaro Kawasaki (D1, Asahi), "Novel substrates of E3 ligase Praja1 acquired during evolution"
Haruka Hosoki (LD1, Asahi/Nozaki), "Age regulates the CB2-mediated inflammatory response"
Tomoya Uchida (M2, Bannai), "Controlling tau aggregation using light-Induced cellular models of Tau oligomers"
Shinji Kinoshita (M2, Inoue), "Astrocytic responses to myelin fractions"
Satoshiro Takizawa (M2, Ohshima), "CRMPs prevent axonal miswiring in corticospinal tract"
- 18:25 Closing Address
Prof. Toru Asahi (Dean of School /Graduate School of Advanced Science and Engineering, Waseda)