

# Special Symposium II in Commemoration of 20 Years of Collaboration in Life Sciences between the University of Bonn and Waseda University

**Date: Sept. 25 (Fri) 9:00-18:10**

**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,  
Institute for Advanced Research of Biosystem Dynamics, Global Consolidated Research Institute for Science Wisdom,  
Research Organization for Nano & Life Innovation, TWIns,  
Waseda University  
and  
Life & Medical Sciences Institute (LIMES), The University of Bonn*

## Program

**Chairperson: Prof. Toru Asahi** (Dean of Graduate School of Advanced Science and Engineering, Waseda)

- 9:00      Opening Address  
**Prof. Waldemar Kolanus** (Director of LIMES, Bonn)
- 9:05      Lecture " Molecular Structure of Cationic Lipids Changes Molecular Assembling Structures, Leading to  
Altered Interactions with Cells "  
**Prof. Shinji Takeoka** (Waseda)
- 9:25      Invited Lecture "Regulation of Skin Macrophage Function by Dietary Salt"  
**Prof. Waldemar Kolanus** (Director of LIMES, Bonn)
- 9:50      Lecture "AI, Experimental Automation, and Cell-Free/Synthetic Cells: Emerging Focus Areas in Japan's  
Synthetic Biology Policy"  
**Prof. Daisuke Kiga** (Waseda)
- 10:10     Invited Lecture "Spatial Organization of Human Inflammation"  
**Prof. Andreas Schlitzer** (Bonn)
- 10:35     Lecture "Genomic RNA Replication and Evolution in LLPS-based Artificial Cell-like Systems"  
**Assoc. Prof. Ryo Mizuchi** (Waseda)
- 10:55     Invited Lecture "Vascularized Lung Organoids to Model Lung Metastasis"  
**Prof. Ana Ivonne Vazquez-Armendariz** (Bonn)
- 11:20     Lecture "Spike Timing Synchrony among Purkinje Cells Revealed by In Vivo Optical Voltage Imaging in the  
Mouse Cerebellum"  
**Prof. Takafumi Inoue** (Waseda)
- 11:40     Lecture "What High Salt will do against High Fat Diet-induced Systemic Inflammation?"  
**Assoc. Prof. Chihiro Nozaki** (Waseda)
- 12:00     **Lunch Break**
- Chairperson: Prof. Shinji Takeoka** (Waseda)
- 12:50     Oral Presentation for Host Lab Activity by Bonn Students      **\*10 min. Presentation and 5 min. Q&A**
- ✓ Lukas Jens Petri (Schmid-Burgh Lab /Host Lab. Takeoka)
  - ✓ Marie König (Schmid-Burgh Lab/Host Lab. Bannai)
  - ✓ Linda Müller (Kolanus Lab/Host Lab. Nozaki)
  - ✓ Aqilah Benjamin (Vasquez Lab/Host Lab. Asahi)
- Chairperson: Prof. Takafumi Inoue** (Waseda)
- ✓ Olin Yolitzin Arteaga Transito (Schlitzer Lab/Host Lab. Takeyama)
  - ✓ Theresa Eulgem (Mass Lab/Host Lab. Takeyama)
  - ✓ Jake Thomas (Schlitzer Lab/Host Lab. Takeyama)
  - ✓ Michelle Krogemann (Hasenauer Lab/Host Lab. Hosokawa)

14:50 **Break**

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

15:20 Lecture "From Strain Diversity to Mobile Element Dynamics in Human Microbiomes with Single-Cell Genomics"

**Prof. Masahito Hosokawa** (Waseda)

15:50 Lecture "Raman Single-cell Metabolomics: What a Spectrum Can Tell Us about a Living Cell"

**Assoc. Prof. Masahiro Ando** (Waseda)

16:10 Lecture "Praja1 Shields DNA from Damage through Direct Binding"

**Assist. Prof. Wataru Onodera** (Waseda)

16:30 **Break**

**Chairperson: Prof. Masahito Hosokawa** (Waseda)

16:40 Oral Presentation by Waseda Students **\*5 min. Presentation and 2 min. Q&A**

- ✓ Matthew Imanaka (D3, Tsuneda Lab.)  
"Phage Isolation Against Carbapenem-Resistant Enterobacter Clinical Isolates"
- ✓ Wenhan Sung (D3, Takeoka Lab.)  
"Overcoming Delivery Barriers of Large All-in-one CRISPR/Cas9 Plasmids Using Lysine-based Lipid Nanoparticles"
- ✓ Yamato Kasahara (D2, Semba Lab.)  
"Leveraging Transposon Traps to Isolate Cell Cycle-specific Reporter Cells"
- ✓ Nevin McCone (D2, Hosokawa Lab.)  
"Development of a Whole-genome Sequencing Method for Single Fungal Spores"
- ✓ Norihide Tarui (M2, Goda Lab.)  
"Cathepsin F Deficiency Promotes an Aged-Like Phenotype in Hematopoietic Stem Cells During Stress Hematopoiesis"
- ✓ Ayaka Ito (M2, Takeda Lab.)  
"Highly Mucus-secreting Tissue Engineered on Dual-layer Scaffold for Immunological Studies"
- ✓ Haruka Tamura (M2, Takeyama Lab.)  
"Integrated Spatial and Single-Cell Transcriptomic Analysis of EMT-Intermediate States in Uterine Carcinosarcoma"
- ✓ Yuto Nose (M1, Asahi Lab.)  
"Diagnosing and Resolving Path Dependence in the Alignment of Multiple Tissue Sections"
- ✓ Ryutaro Aonuma (M1, Sato Lab.)  
"Mechanisms Regulating Histone H3 Expression During the Cellular Awakening from Dormancy"
- ✓ Sosuke Kubota (M1, Bannai Lab.)  
"Establishment of a Mitochondrial Transport Inhibition System via Actr10 Knockdown"

18:00 Closing Address

**Prof. Toru Asahi** (Dean of Graduate School of Advanced Science and Engineering, Waseda)