

# TARGETING MICROBIOTA

SEPT. 24 > 25 2026 > TOKYO

International Society  
of **m**icrobiota

**R**IKEN

2<sup>ND</sup>  
CONJOINT  
MEETING

PROGRAM

# Second Conjoint Meeting ISM and RIKEN Targeting Microbiota 2026

September 24 - 25, 2026 – The University of Tokyo, Japan

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Dear Colleagues,

Following the success of the first RIKEN–ISM meeting in Tokyo, the International Society of Microbiota and RIKEN are pleased to welcome the international microbiome community to the Second RIKEN–ISM Conjoint Meeting, taking place on September 24–25, 2026, at the University of Tokyo, Japan.

The originality of this meeting lies in its clear scientific fingerprint. Tokyo Microbiota 2026 is not designed as a general microbiota congress, but as a focused international forum to understand how microbial ecosystems communicate with the host, how they influence health and disease, and how they may be measured, reprogrammed and translated into future interventions.

The 2026 program is organized around a simple progression:

**Day 1** will focus on understanding and measuring the microbiome: host–microbiota dialogue across barriers, microbial metabolites as host signaling molecules, and single-cell and strain-level microbiome resolution.

**Day 2** will move toward intervention and translation: the microbiota–mitochondria axis in aging and resilience, precision microbiome medicine and innovation.

This structure reflects the evolution of microbiota science. The field is moving beyond description toward causality, precision diagnostics, therapeutic modulation, biodelivery, AI-powered tools, and real-world health applications. Particular attention will be given to microbial metabolites, immune control, mitochondrial function, chronic disease, cancer immunotherapy, healthy aging, and emerging technologies.

RIKEN and ISM aim to make this second Tokyo edition scientifically rich, original and forward-looking. We look forward to welcoming you to Tokyo for this unique international exchange.

We hope to see you all in Tokyo next September

On behalf of the Meeting Organizers,

Prof. Hiroshi Ohno

RIKEN Center for Integrative Medical Sciences, Japan

President of Tokyo RIKEN–ISM Targeting Microbiota 2026 Meeting

Prof. Marvin Edeas

Institut Cochin, INSERM U1016, Université Paris Cité, France

Chairman of the ISM Scientific Board

*This meeting is part of the RIKEN Symposium Series.*



# Day 1 – From Host Dialogue to Microbiome Resolution

Thursday, September 24, 2026

8h00 Welcoming of attendees & Badge Distribution

8h50 Opening Remarks by Hiroshi Ohno, President, Tokyo RIKEN-ISM Targeting Microbiota 2026 meeting & Marvin Edeas, Chairman of the ISM Scientific Board

9h00 **Keynote Speech**



**Can IgA Reprogram the Human Gut Microbiota in Inflammatory Bowel Disease?**

**Reiko Shinkura**, *The University of Tokyo, Japan*

## Session 1 – Host–Microbiota Dialogue Across Barriers



9h30 **Oral-to-Gut Bacterial Translocation in Cardiovascular Diseases**

**Yoshikazu Nakaoka**, *National Cerebral and Cardiovascular Center Research Institute, Japan*



9h55 **When Synapses Shape the Microbiome: Decoding the Gut–Brain Axis in Autism**

**Elisa Hill-Yardin**, *RMIT University, Australia*

**10h20 Coffee Break, Networking and Poster Sessions**



11h00 **From Quorum-Sensing-Driven Pathogenesis to Microbiome - Targeted Therapies in Atopic Dermatitis**

**Yumi Matsuoka**, *The University of Osaka, Japan*

11h25 Short Oral presentations (5 Slots)

**12h15 Lunch Break, Networking, Group Photo**

## Session 2 – Microbial Metabolites as Host Signaling Molecules



13h40 **Microbial Metabolites as Drivers of Gastric Mucosal Defense**  
*Naoko Satoh-Takayama, RIKEN Center for Integrative Medical Sciences (IMS), Japan*



14h05 **Microbiota-Metabolite Control of Cardiac Injury and Repair**  
*Patrick C.H. Hsieh, Institute of Biomedical Sciences, Academia Sinica, Taiwan*



14h30 **The Microbiota–Muscle Axis in Aging:  
How TMAO Remodels Mitochondria and Promotes Sarcopenia**  
*Ippei Shimizu, National Cerebral and Cardiovascular Center Research Institute, Japan*

14h55 Short Oral presentations (3 Slots)

15h25 Coffee Break, Networking, Poster Presentation

## Session 3 – Single-Cell and Strain-Level Microbiome Resolution



16h00 **Single-Cell Visualization and Australia's Human Microbiome Biobank:  
New Tools for Strain-Level Microbiome Science**  
*Gene Tyson, Queensland University of Technology, Australia*



16h25 **From Strain Diversity to Mobile Element Dynamics in Human Microbiomes with Single-Cell Genomics**  
*Masahito Hosokawa, Waseda University, Japan*



16h50 **Rapid, Single-Cell-Precision Profiling for Probiotic Quality and Source-Tracking**  
*Jian Xu, Qingdao Institute of BioEnergy and Bioprocess Technology, China*

17h15 Short Oral presentations (6 Slots)

18h00 **End of Day 1**

19h30 **Gala Dinner**

## Day 2 – From Microbiota Function to Precision Intervention

Friday, September 25, 2026

9h20 Welcoming of attendees

### Session 4 – The Microbiota–Mitochondria Axis in Aging and Resilience



9h30 **Living Probiotics, Microbial Metabolites, and Mitochondrial Resilience: A Pathway to Healthy Aging**

*Dongryeol Ryu, Gwangju Institute of Science and Technology (GIST), Korea*



9h55 **The Mitochondria–Microbiota Dialogue: Impact on Health**

*Yuma Yamada, Hokkaido University, Japan*

10h20 Coffee Break, Networking, Poster Presentation



11h15 **Carotenoid Metabolism Regulates the Microbiota–Mitochondria Axis: From Diet to Single-Cell Heterogeneity**

*Dingbo Lin, Oklahoma State University, USA*

11h25 Short Oral presentations (5 Slots)

12h15 Lunch Break, Networking and Poster

### Session 5 – Reprogramming Human Health Through the Microbiome From Precision Diagnostics to Next-Generation Therapies



13h40 **Strain- and Function-Resolved Metagenomics to Identify Microbial Drivers of Chronic Disease**

*Wataru Suda, RIKEN Center for Integrative Medical Sciences (IMS), Japan*



14h05 **Precision Microbiome Therapeutics to Enhance Cancer Immunotherapy**

*Sin-Hyeog Im, Pohang University of Science and Technology (POSTECH), Korea*



14h30 **Development of Smart Biodelivery Systems for Personalized Disease Treatment Based on the Gut Microbiome**

*GwangPyo Ko, Seoul National University, Korea*

11h25 Short Oral presentations (3 Slots)

15h25 Coffee Break, Networking, Poster Presentation

### Session 6: Microbiome Innovation Showcase: From Discovery to Impact

Exploring breakthrough technologies, diagnostics, therapeutics, AI-powered solutions and emerging innovations that are transforming microbiome research into real-world health applications.

17h15 **Concluding Remarks**

17h30 **End of Tokyo Targeting Microbiota 2026**

For more information, please visit: [www.tokyo.microbiota-ism.com](http://www.tokyo.microbiota-ism.com)

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WORLD  
CONGRESS

International Society  
of **m**icrobiota

# TARGETING MICROBIOTA

TOWARDS CLINICAL REVOLUTION

# PROGRAM



NOVEMBER  
4-5, 2026



MÁLAGA,  
SPAIN