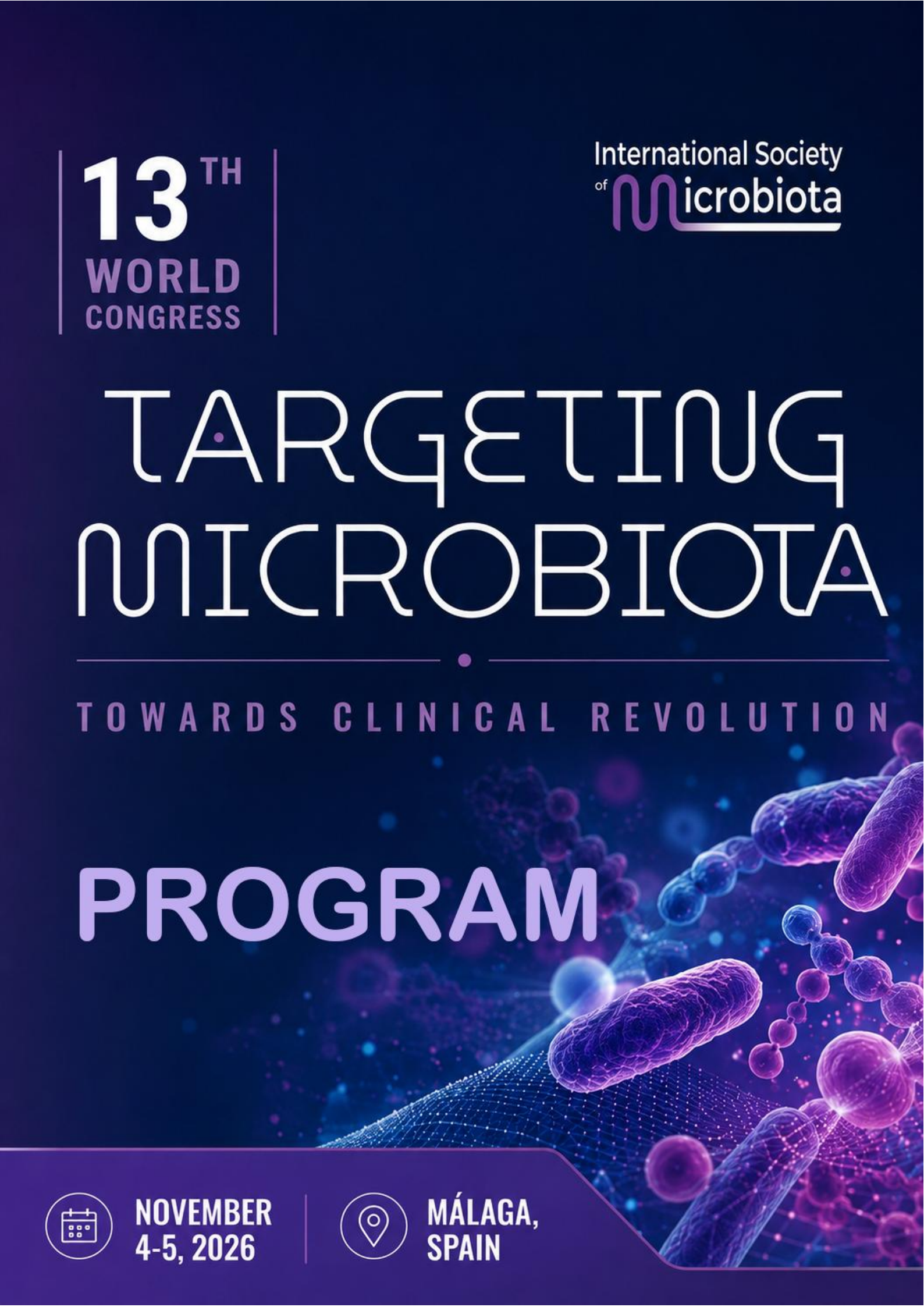
13TH WORLD CONGRESS

International Society of Microbiota

TARGETING MICROBIOTA

TOWARDS CLINICAL REVOLUTION

PROGRAM



NOVEMBER 4-5, 2026

MÁLAGA, SPAIN

13th World Congress
Targeting Microbiota 2026

November 4 - 5, 2026 – Málaga, Spain

Microbiota Science Is Changing. What Comes Next?

Dear Colleagues and Friends,

It is a great pleasure to welcome you to the 13th World Congress on Targeting Microbiota, taking place in Málaga, Spain, on November 4–5, 2026. Over the past decade, microbiota research has made remarkable progress. We have learned a great deal about the microorganisms living in and on our bodies and their associations with health and disease.

But many important questions remain.

We know that the microbiota matters. What we still need to understand is how it works, which microbial signals truly influence human biology, and how we can turn these discoveries into meaningful clinical applications. Can we distinguish correlation from causality? Can microbial metabolites help us understand disease mechanisms? Will microbiome biomarkers become reliable tools for diagnosis and prevention? And how far can we go in developing personalised nutrition, precision medicine and new therapeutic strategies?

This year's scientific programme follows three closely connected directions: **FUNCTION - CAUSALITY - TRANSLATION**

We will begin by exploring how microbial ecosystems interact with the host, influence immunity and metabolism, and contribute to human health. We will then examine one of the greatest challenges in microbiota research:
moving beyond associations to understand mechanisms and establish causality.

Finally, we will focus on clinical translation, including healthy ageing, inflammatory diseases, cancer, precision medicine and emerging therapeutic approaches. Our Innovation Session will also introduce technologies and experimental models that may help bridge the gap between microbiome research and clinical practice. Above all, this congress is an opportunity to exchange ideas, question established assumptions, learn from one another and build new collaborations.

We will close with a question that I believe deserves our collective attention:
How will microbiota science change medicine in the next five years?

I hope these two days will help us identify not only the opportunities ahead, but also the scientific evidence we still need.

Thank you to our invited speakers, participants, scientific committee, partners and young researchers for contributing to this meeting.
I look forward to welcoming you in Málaga and sharing two days of stimulating science and discussion.

Prof. Alain Stintzi
President, International Society of Microbiota
University of Ottawa, Canada

International Society of Microbiota

Day 1 – Understanding Microbial Ecosystems and Human Biology

Wednesday, November 4, 2026

8h20 Welcoming of attendees & Badge Distribution

9h00 **Opening Remarks & ISM Leadership Introduction**

Marvin Edeas, *Université de Paris, France*

Introducing the New ISM Leadership

President: Alain Stintzi, University of Ottawa, Canada

Vice-President: Soheil Saeedi, University of Zurich, Switzerland

Scientific vision, complementary expertise, and future priorities for the International Society of Microbiota.

9h15 **Presidential Keynote**

Shaping the Future of Microbiota Medicine: From Mechanisms to Prevention

Alain Stintzi, *University of Ottawa, Canada*

Session 1 – Function

What Is the Functional Microbiome?

From Microbial Ecosystems to Host Regulation

Chairs: Hiroshi Ohno, Alain Stintzi

9h45 **Smoking, Microbiota and Immunity: Solving a 40-Year Clinical Paradox**

Hiroshi Ohno, *RIKEN Center for Integrative Medical Sciences, Japan*

10h15 **Beyond the Gut: Microbiota-Derived Bile Acids in Tissue Immunity and Inflammation**

Tomasz Wypych, *Nencki Institute of Experimental Biology PAS, Poland*

10h45 Coffee Break, Networking and Poster Sessions

11h30 **Uncovering the Roles of Gut Fungi using Shotgun Sequencing Data**

Virginia Pedicord, *University of Cambridge, United Kingdom*

12h00 **From Gut to Gametes: Microbial Metabolites Shaping Male Fertility**

Cristian O'Flaherty, *McGill University, Canada*

12h30 Lunch Break, Networking, Group Photo

Session 2 – Causality

Can We Move from Correlation to Causality?

Mechanisms, Prediction and Systems Biology

Chairs: Paul Wilmes, Cristina Menni

14h00 **Can the Gut Microbiome Reveal the Transition from Health to Disease? Insights from a Population-Based Study in Japan**

Shigefumi Okamoto, *University of Osaka Graduate School of Medicine, Japan*

14h30 **Human Microbiome in Parkinson's Disease: Identifying Causal Molecules for Early Diagnostics and Targeted Interventions**

Paul Wilmes, *University of Luxembourg, Luxembourg*

15h00 **From Population Science to Personalised Nutrition: Microbial Metabolites as the Functional Link Between Diet, the Gut Microbiome and Health**

Cristina Menni, *King's College London, UK & University of Milan, Italy*

15h30 Coffee Break, Networking and Poster Sessions

16h15 **Advancing Next-Generation Microbiome Sequencing from Research Assays to Clinical Diagnostic Tests**
***Ashley Rooney**, University of Zurich, Switzerland*

16h45 **Can a Microbial Metabolite Extend Health and Lifespan? The Butyrate–Mitochondria Connection**
***Enrique Gabandé Rodríguez**, CBM Severo Ochoa, Spain*

Short Oral Presentations (10 Minutes)

17h15 **Temporal Microbial Cooperation in Inulin Utilization by Gut Microbiota**
***Weihao Zhang,** Hong Kong Baptist University, Hong Kong*

17h25 **Composite Health Scoring Links Oral Microbiome and Immune Signatures to Optimal Health in Japanese Adults**
***David Ortega-Reyes,** RIKEN Center for Integrative Medical Sciences, Japan*

17h35 **Stable, Omics-Specific Immune and Microbiota Traits in Healthy Adults: A One-Year Multi-Omics Cohort Study**
***Louison Toris,** Université Libre de Bruxelles (ULB), Belgium*

17h45 **Manipulation of Intestinal Microbiota and Potential Effect on Experimental Atherosclerosis**
***Oliver Heaney**, University of Sheffield, United Kingdom*

17h55 **Role of the Gut Microbiota in Modulating LBMAA-Induced ALS-Like Neurodegeneration**
***Reem Debian**, American University of Beirut, Lebanon*

18h05 End of Day 1

20h00 **Speakers' Dinner - Reserved for invited speakers & ticket holders only**
Register for dinner

Day 2 – Translating Microbiota Science into Medicine

Thursday, November 5, 2026

8h30 Welcoming of attendees

9h00 **Vice-President's Keynote**

The Next Frontier in GeroMedicine: Programming the Microbiome for Healthy Longevity
***Soheil Saeedi**, University of Zurich, Switzerland*

Session 3 – Translation
Can We Translate Microbiota Science into Precision Medicine?

From Prevention and Healthy Longevity to Therapeutic Intervention

Chairs: Soheil Saeedi, Michael Scharl

9h30 **Early-Life Microbiota: Shaping Immunity, Lifelong Health and Disease Risk**
***Mercedes Gomez de Agüero Tamargo**, Universität Würzburg, Germany*

10h00 **Maternal-Infant Microbiome Profiling and Precision Medicine: From Biomarker Discovery to Clinical Translation**
***Souhaila Al Khodor**, Sidra Medicine, Qatar*

10h30 Coffee Break, Networking, Poster Presentation

11h15 **Harnessing the Gut Microbiome to Unlock Anti-Tumor Immunity**
***Ze'ev Ronai**, Cedars-Sinai Health Sciences University, USA*

Short Oral Presentations (10 Minutes)

11h45 **Microbiota-Dependent and Context-Specific Effects of Iron Supplementation on Colorectal Tumorigenesis**
***Manuela M Santos**, University of Montreal, Canada*

11h55 **Intranasal Cannabidiol Reveals a Pharmacologically Plastic Intratumoral Microbiome in Experimental Glioblastoma**
***Babak Baban**, Augusta University, USA*

12h05 **Longitudinal Characterisation of LBP MB310 Engraftment following Administration in Patients with Ulcerative Colitis**
***Iulia Balas,** Microbiotica, United Kingdom*

12h15 Discussions

12h30 Lunch, Networking & Poster

Chairs: Cristian O'Flaherty, Ze'ev Ronai

14h00 **From Mucosal Inflammation to Malignancy: Deciphering the Microbiome at the Crossroads of IBD and Colorectal Cancer**
***Michael Scharl**, University of Zurich, Switzerland*

14h30 **Can the Microbiome Become a Standard Component of Precision Oncology?**
***Meriem Messaoudene**, University of Montreal, Canada*

Short Oral Presentations (10 Minutes)

15h00 **The Microbiome of the Eye: Understanding Bacterial Dysbiosis and Its Role in Dry Eye Disease**
Kotakonda Arunasri, *LV Prasad Eye Institute, India*

15h10 **Oral Consumption of Tualang Honey Protects Mice against Ultraviolet Radiation Through Modulation of the Gut Microbiome**
Nabiha Yusuf, *University of Alabama at Birmingham, USA*

15h20 – 16h20 **Microbiota Innovations 2026**

15h20 **Modeling Microbiota – Host Interactions Using Anaerobic Gut-on-Chip System**
Arturs Abols, *Cellboxlab LTD, Latvia*

15h30 **Beyond Microbiome Discovery: Quantitative Profiling for Biomarkers, Diagnostics and Clinical Development**
Monika Petkovic, *Bio-Me, Norway*

15h40 **Can We Predict Drug responses by Recreating the Human Microbiome in the Laboratory?**
Natalia Suárez, *Bac3Gel, Portugal*

15h50 **Programmable Bacterial Biosensors: A Living Platform for Gut Metabolite Monitoring**
Ana Zuniga, *INSERM, France*

16h00 **Crohn³Gel: A Disease-Calibrated Mucus Model Stable Enough to Attribute Barrier Change to the Microorganism**
Abdul Mateen, *Bac3Gel, Portugal*

16h10 **Recombinant *Lactococcus Lactis* Delivering Copper-Chelating Peptidyl SOD Mimics Attenuates Inflammation in Intestinal Epithelial Cells**
Yaqine Ben Hadj Hammouda, *École Normale Supérieure (ENS-PSL), France*

16h20 – 16h40 **Closing Strategic Discussion:**
Moderator: Marvin Edeas, Université de Paris, France

How Will Microbiota Science Change Medicine in the Next Five Years?
What Clinical Application Could Emerge in the Next Five Years, and What is the Biggest Scientific Obstacle?

Open Discussion with the ISM President, Vice-President, Invited Speakers and Participants

16h40 – 16h50 **Concluding Remarks by Soheil Saeedi,** Vice-President, International Society of Microbiota

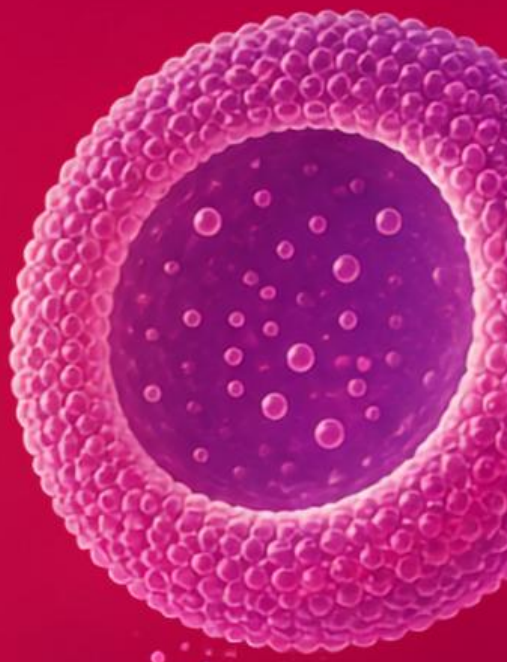
16h50 – 17h10 **Scientific Awards**

17h10 – 17h40 **Networking, Drinks and Appetizers**

AGENDA

3rd World Congress

TARGETING EXTRACELLULAR VESICLES



MITOCHONDRIA

EXTRACELLULAR VESICLES:

Bridging Mitochondria, Microbiota and Precision Medicine

MICROBIOTA

NOVEMBER
12-13, 2026

PORTO,
PORTUGAL

International Society of Microbiota

World Mitochondria Society