

International Society  
of **Microbiota**

# TARGETING MICROBIOTA

Towards Clinical  
Revolution

**11<sup>TH</sup>**  
WORLD  
CONGRESS

OCT. 14>15, 2024

**MALTA**

**Program**

## Agenda of **Targeting Microbiota 2024**

October 14 - 15, 2024 – Corinthia Palace, Malta

Day 1 - Monday, October 14, 2024

8h00 **Materials Distribution & Welcome Coffee**

8h50 **Welcome Note of Targeting Microbiota 2024**



### **Keynote Speech**

9h00 – **Phage Therapy: A New Era of “Old” Concept for “Microbiome” Health**

**Mzia Kutateladze**, *Eliava Institute of Bacteriophage, Georgia*

## **Session 1: Microbiota in Health & Disease: Advancements & Perspectives**

*Presentations duration: 20 minutes. Questions will be addressed during the panel discussion.*

Chairpersons: Maria Cecilia Giron, Marvin Edeas



9h30 – **Bacteriophages Redesigned – Tiny Killers and Detectives to Support Infectious Disease Therapy**

**Martin Loessner**, *ETH Zurich, Switzerland*



9h50 – **Mythbusting Our Microbiome**

**Alan Walker**, *University of Aberdeen, United Kingdom*

10h10 **Panel Discussion**

10h20 **Short Oral Presentations & Innovations (2 slots)**

*Presentations Duration: 7 minutes + 3 minutes for discussion*

**Addressing Risk Factors May Lead to Broader Use of Phage Therapeutics**

*Tea Glonti, Queen Astrid Military Hospital, Belgium*

**Fecal Microbiota Analysis as a Predictive Tool for Cholestatic Diseases**

*Kihyun Ryu, Konyang University Hospital, South Korea*

10h40 – 11h15 *Coffee Break, Poster & Exhibition Session*

Chairpersons: Koen Venema, Justus Reunanen



**11h15 – Gut Microbiome, Obesity & Diabetes: What's Next**  
*Hiroshi Ohno, RIKEN Center for Integrative Medical Sciences, Japan*



**11h35 – Gut Microbiome Signatures in Irritable Bowel Syndrome**  
*Simone Domenico Guglielmetti, Università degli Studi di Milano-Bicocca, Italy*



**11h55 – Gut Bacteria and Heart Healing: The Hidden Players in Post-Infarction Resilience**  
*Patrick C. H. Hsieh, Academia Sinica, Taiwan*

### 12h15 Panel Discussion

*12h30 – 14h00 Lunch Break, Poster & Exhibition Session*

Chairperson: Andreas Schwartz



**14h00 – Microbiota-Derived Extracellular Vesicles: Bridging Mother and Fetus**  
*Justus Reunanen, University of Oulu, Finland*



**14h20 – Deciphering the role of the Oral-Placental and Vaginal-Placental Microbiome Axes in Preterm Birth**  
*Souhaila Al Khodor, Sidra Medicine, Qatar*



**14h40 – Using Roseoflavin, a Natural Riboflavin Analogue, to Modify the Human Microbiota**  
*Markus Egert, Furtwangen University, Germany*

### 15h00 Panel Discussion

*15h10 – 15h50 Coffee Break, Poster & Exhibition Session*

Chairpersons: Mzia Kutateladze, Markus Egert



**15h50 – Culturing the Complexity of Intestinal Microbiota *in vitro* in Gut3Gel**  
*Daniela Pacheco, CTO and founder of Bac3Gel, Portugal*



**16h10 – From Microbiomes and (Meta)genomes to the Lab and Back - Identification, Production and Application of Bacteriocins**  
*Christian Riedel, University of Ulm, Germany*

### 16h30 Panel Discussion

**16h40 Short Oral Presentations & Innovations (10 slots)**

*Presentations Duration: 7 minutes + 3 minutes for discussion*

**Assessment of Skinosal, a Synbiotic Supplement, in Reducing Allergy Symptoms in Ragweed-Sensitized Mice**

*Olivier Raimond, Bellavie, Belgium*

**Resident Microbiota Promote the Acquisition and Pathogenesis of EBV and HIV**

*J. Victor Garcia Martinez, University of Alabama at Birmingham, USA*

**Resident Microbiota Regulates HIV Infection in the Central Nervous System**

*Angela Wahl, University of Alabama at Birmingham, USA*

**The Gut Microbiota Modulates Anastomotic Healing in Patients with Colorectal Cancer Undergoing Surgery**

*Manuela M Santos, Université de Montréal, Canada*

**The Host Genotype Actively Shapes its Microbiome across Generations**

*Stefan Janssen, Justus Liebig University Giessen, Germany*

**Impact of Omega-3-Rich Fish Consumption on Faecal Short Chain Fatty Acid and Gut Microbiota Profiles**

*Ainara Cano, AZTI Foundation, Spain*

**Interplay Between Host Genetics and Gut Microbiome Composition in the Japanese Population**

*David Ortega Reyes, RIKEN, Japan*

**Air Pollution, Nasal Microbiota, and Bronchiolitis: Understanding their Interplay through a Multilevel Approach**

*Luca Ferrari, University of Milan, Italy*

**A Novel *in vitro* Approach to Identify Microbial and Cellular Signatures of Short Bowel Syndrome (SBS)**

*Ludovica Marinelli, Ghent University, Belgium*

**Exploring Connections between the Autonomic Nervous System, Microbiota-Gut-Brain Axis and Respiratory System: A Scoping Review**

*Karina Noelia Otero, Arturo Jauretche National University, Argentina*

**18h10 – 18h45**

**Questions & Discussion with all Speakers**

*Maria Cecilia Giron, Marvin Edeas, Mzia Kutateladze, Martin Loessner, Alan Walker, Hiroshi Ohno, Simone Domenico Guglielmetti, Patrick C. H. Hsieh, Justus Reunanen, Markus Egert, Daniela Pacheco, Christian Riedel, Carmelo Scarpignato, Koen Venema, Andreas Schwartz, Rochellys Diaz Heijtz, José Manuel Fernández-Real, Ellen Blaak, Pascale Vonaesch, Bina Joe and Cristian O'Flaherty*

All questions will be designed to focus on the most significant and impactful issues.

**18h50 End of Congress Day 1**

**20h30 Meet the Speakers Dinner (Reserved for ticket holders only)**

## Day 2 - Tuesday, October 15, 2024

8h25 Registration & Welcoming of Attendees

8h25 Opening of Day 2



### Keynote Speech

8h30 – **The Mystery of the Microbiome Genome: The Potential of 2 to 20 Million Microbial Genes to Transform Our Health**

**Marvin Edeas**, Institut Cochin, INSERM U1016, Université de Paris, France

## Session 2: Microbiome Medicine: Major Advances Towards Clinical Applications

*Presentations length: 20 minutes. Questions will be addressed during the panel discussion.*

Chairpersons: Bina Joe, José Manuel Fernández-Real



9h00 – **Drug Effects of Gut Microbiota in Humans: Clinical Consequences**

**Carmelo Scarpignato**, Chinese University of Hong Kong, China



9h20 – **Targeting the Microbiota by Medical Professionals: Where are We Now?**

**Koen Venema**, Maastricht University, Netherlands



9h45 – **Probiotics & Health: How to Select the Right Strain?**

**Andreas Schwiertz**, Institute of Microecology, Germany

10h05 **Panel Discussion**

10h20 **Short Oral Presentations & Innovations (2 slots)**

*Presentations Duration: 7 minutes + 3 minutes for discussion*

**Gut3Gel: Innovative *in vitro* Platform for Evaluating Microbiome-Modulating Molecules**

*Victoria Navas, Bac3Gel, Portugal*

**Investigating whether Postbiotic-Rich Sourdough Bread Has the Potential to Confer Similar Health Benefits to Consumers with Different Gut Microbiota Profiles**

*Emma Scott, UGent, Belgium*

10h40 – 11h10 Coffee Break, Poster & Networking Session

Chairpersons: Alan Walker, Ellen Blaak



**11h10 – Gut Microbiota in Early Life: Impact on Neurodevelopmental Outcomes**

*Rochellys Diaz Heijtz, Karolinska Institutet, Sweden*



**11h30 – Gut Brain Axis & Depression: Strategic Role of Dietary Proline Exposed**

*José Manuel Fernández-Real, Institut d'Investigació Biomèdica de Girona, University of Girona, Spain*



**11h50 – Does the Microbiome Control Cravings and Addictive Behavior of their Host: A New Prospective and Hope for Treating Addiction**

*Steven R. Gundry, The Centers for Restorative Medicine, USA*

**12h10 Panel Discussion**

**12h20 Short Oral Presentations & Innovations (2 slots)**

*Presentations Duration: 7 minutes + 3 minutes for discussion*

**Gene-Environment Interactions Relevant to Autism and Immune Impairment Cause Gut Microbial Dysbiosis in a Mouse Model of Colitis**

*Elisa Hill-Yardin, Royal Melbourne Institute of Technology, Australia*

***In silico* Assessment of Diet's Effect on Gut Microbiota Interactions with Autism Spectrum Disorder Symptoms Using Machine Learning Derived Predictors**

*Juan Manuel Olaguez-Gonzalez, Tecnológico de Monterrey, Mexico*

*12h40 – 13h40 Lunch Break, Networking, & Poster Session*

Chairpersons: Pascale Vonaesch, Hiroshi Ohno



**13h40 – Microbial Phenotypes in Obesity: Implications for Precision Nutrition**

*Ellen Blaak, Maastricht University, Netherlands*



**14h00 – Targeting Small Intestinal Microbiota: Impact on Metabolism**

*Pascale Vonaesch, Department of Fundamental Microbiology, University of Lausanne, Switzerland*



**14h20 – Prospects for Leveraging the Microbiota as Medicine for Hypertension**

*Bina Joe, University of Toledo, USA*



**14h40 – Male Fertility and Gut Microbiota: Current Knowledge and Future Directions**

*Cristian O'Flaherty, McGill University, Canada*

**15h00 Panel Discussion**

**15h15 Short Oral Presentations & Innovations**

*Presentations Duration: 7 minutes + 3 minutes for discussion*

**Radio-Chemotherapy Treatment Exacerbates Intestinal Dysbiosis in Cervical Cancer Patients from Western Mexico: Pioneering Study Characterizing Microbiota and NK Cell Exhaustion**

*Ksenia Klimov-Kravtchenko, Universidad de Guadalajara, Mexico*

**Optimizing Gut-on-a-Chip Technology with Probiotics to Decrease the Gap between Preclinical and Clinical Data**

*Mari Lilith Lund, Novonosis, Human Health Biosolutions, Denmark*

**Uncovering the Potential of Nutritional Interventions to Rebuild Gut Health Post-Antibiotics**

*Azadeh Safarchi, MOSH-Future Science Platform, CSIRO, Australia*

**In vivo Synergistic Effects of *Lactocaseibacillus paracasei* 11w and Galactooligosaccharide on Psychobiotic and Antidiabetic Efficacy in Female Mice**

*Ashwinipriyadarshini Megur, Vilnius University, Lithuania*

**The Known Unknowns - The Mystery of Extracellular Vesicles of *Bifidobacterium* in Allergy Development**

*Sabina Gorska, Polish Academy of Sciences, Poland*

**Microbial and Metabolic Shape of Remission and Exacerbation in Ulcerative Colitis Patients**

*Oliwia Zakerska-Banaszak, Institute of Human Genetics Polish Academy of Sciences, Poland*

**Why Settle for One? Combine 16S and mcrA Sequencing**

*David Novak, Masaryk University, Czech Republic*

**Modeling Microbiomes as (Approximately) the Sum of their Parts**

*Anthony Duncan, Quadram Institute, United Kingdom*

**16h35 Targeting Microbiota 2024 Concluding Remarks, Best Short Oral & Best Poster Awards**

*By Maria Cecilia Giron, President of ISM*

*Marvin Edeas, Chairmen of the ISM Scientific Board*

**16h50 Drinks, Coffee and Snacks: Getting Together Networking**

**End of Targeting Microbiota 2024**

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