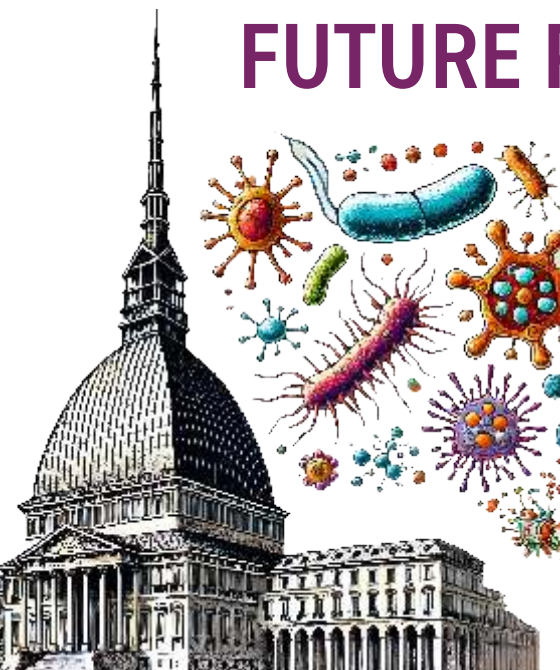


WITH THE PATRONAGE OF



STATE OF THE ART IN THE ERA OF MICROBIOME STUDY: CURRENT APPROACH AND FUTURE PERSPECTIVES



TURIN
MAY, 5-6
2025

AC Hotel Torino
Via Bisalta 11
Turin, Italy

BACKGROUND

The microbiome is the term for the collection of microbes living symbiotically on and within the human body. Advances in next-generation sequencing and computational biology have revolutionized our ability to explore the diversity, composition, and functionality of the microbiome, shedding light on its profound influence on health and disease. From gastrointestinal and metabolic disorders to neurological and autoimmune conditions, the microbiome is increasingly recognized as a key mediator of human physiology and a potential therapeutic target.

Future directions include the integration of multi-omics data to develop systems-level understanding, the refinement of diagnostic biomarkers, and the standardization of therapeutic approaches. Ethical considerations, including equitable access and the ecological implications of microbiome interventions, will also play a crucial role in shaping the future of microbiome science. Our course, organized by ESGHAMI (ESCMID study group for host and and microbiota interactions) in collaboration with ESGNTA (ESCMID study group for non-traditional antibacterial therapy), covers several important topics in microbiome research, articulating the challenges of the field and considering the latest research trends and future perspective.

AIM

This course will provide plentiful opportunities for participants to learn about and to connect to important developments in studying the human microbioma.

LEARNING OBJECTIVES

- Understand current knowledge on microbiome studies
- Apply microbiome research in clinical settings
- Evaluate the role of new techniques targeting the microbiome and their future development
- How to develop a hospital Center for Microbiome Analysis and Therapeutics
- Probiotics & prebiotics
- Future applications of Phage therapy
- FMT to treat and prevent infectious diseases
- MDRO colonization and infections
- Gut microbiome signature for precision medicine
- Virome, mycobiome and one health approach



REGISTRATION FEES

ESCMID Members: € 400

Non-ESCMID Members: € 600

ESCMID Young Scientist Members (< 35 yrs) - limited tickets: € 300

ESCMID LMIC Members - limited tickets: € 200

Registration fees include full access to the course. **Accommodation not included.**

HOW TO REGISTER

You can register for the course using the following link:

<https://www.escmid.org/event-detail/state-of-the-art-in-the-era-of-microbiome-study-current-approach-and-future-perspectives/>

ECM ITALIAN CREDITS

The course will obtain 10 ECM credits for the following professions: **Medical Doctors** (*Allergology and Clinical Immunology; Clinical Biochemistry; Clinical Pathology; Dermatology; Endocrinology; Gastroenterology; Diabetology; Gynecology; Infectious Diseases; Internal Medicine; Microbiology and Virology; Neonatology; Oncology; Pediatrics; Pharmacology and Toxicology; Pneumology; Rheumatology*), **Chemists, Dietologists, Hospital Pharmacists, Veterinarians.**

ECM credits will be assigned to all those who have attended for a minimum of 90% of the educational hours.

Italian participants will need to sign in every day, at the entrance and at the exit for ECM credits and must remember to hand in the personal information sheet, the evaluation form and the written test at the end of the meeting at the registration desk.

INTERNATIONAL CME ACCREDITATION

An application will be submitted to the European Accreditation Council for Continuing Medical Education (EACCME®).

INTENDED AUDIENCE FOR INTERNATIONAL CME ACCREDITATION

Infectious Diseases, Internal Medicine, Clinical Microbiologist, Bioinformatics, Molecular Biologists. Specialists, Residents and Fellows are welcome, PhD students with a focus on microbiome are also welcome.

ECM ITALIAN PROVIDER AND ORGANIZING SECRETARIAT



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COURSE DIRECTORS

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FACULTY MEMBERS

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Joffrey van Prehn, Department of Clinical Microbiology, Leiden University Center for Infectious Diseases, Leiden University Medical Center, Leiden, Netherlands.

SCIENTIFIC PROGRAM

Day 1 – May 5, 2025

9:00 Registration

10:00 Opening and welcome (**E.J. Kuijper, N. Benech, S. Corcione, G. Di Perri**)

INTRODUCTION TO MICROBIOME

Chair: F.G. De Rosa, E.J. Kuijper

10:10 How Microbiome Science Can Efficiently Contribute to the Food System: From Environment to Human Health (**I. Ferrocino**)

10:30 How to develop a hospital Center for Microbiome Analysis and Therapeutics (**J. Henderickx**)

10:50 Translating Microbiome Research from and to the clinic (**H. Sokol**)

11:10 Discussion (**all speakers**)

11:20 *Coffee break*

HOW TO TARGET MICROBIOME IN CLINICAL PRACTICE PART 1

Chair: S. Corcione, B. Merrick

11:50 Probiotics & prebiotics, LBP in 2025 (**N. Benech**)

12:10 Future applications of Phage therapy (**L. Chaffringeon**)

12:30 How to build an FMT program: from *C. difficile* to non-communicable disorder, from endoscopy to oral (**G. Ianiro**)

12:50 Discussion (**all speakers**)

13:10 *Lunch*

HOW TO TARGET MICROBIOME IN CLINICAL PRACTICE PART 2

Chair: N. Benech, S. Corcione

14:00 Level of evidence and unmet needs in microbiome literature (**B. Davido**)

14:20 Successful and unsuccessful story: IBD (**D.G. Ribaldone**)

14:40 FMT to treat and prevent infectious diseases other than CDI (**R. Ghani**)

15:00 MDRO colonization and infections (**B. Merrick**)

15:20 Pharmacomicrobiomics in immunocompromised host (**S. Turroni**)

15:40 Gut microbiome signature for precision medicine (**F. Asnicar**)

16:00 Closing remarks

16:30 End Day 1

Day 2 – May 6, 2025

THE FUTURE: LET'S THINK OUTSIDE THE GUT

Chair: **G. Di Perri, E.J. Kuijper**

- 9:00 Brain gut axis (**J. van Prehn**)
- 9:20 Gut and Lung Microbiome Dynamics in Severe Infections (**B. Haak**)
- 9:40 Urinary microbiome (**T. Graells**)
- 10:00 Skin microbiome (**S. Mornese Pinna**)
- 10:20 Host-diet-microbiome interactions at protein level (**A. Leshsem**)
- 10:40 Discussion (**all speakers**)
- 11:00 *Coffee break*

THE FUTURE: VIROME, MYCOBIOME AND ONE HEALTH APPROACH

Chair: **C. Costa, S. Bo**

- 11:20 Virome in lung transplant patients (**S. Corcione**)
- 11:40 Mycobiome and Asthma (**S. Imbert**)
- 12:00 Microbiome interventions to improve the outcome of cancer treatment (**M. Rescigno**)
- 12:20 European regulation of FMT and LBP (**E. Corcione**)
- 12:40 Upcoming therapeutic intervention of the gut microbiome (**L. Biehl**)
- 13:00 Discussion (**all speakers**)
- 13:20 Final remarks & conclusions (**E.J. Kuijper, S. Corcione, N. Benech**)
- 13:30 *Lunch*



WITH THE NON-CONDITIONING CONTRIBUTION OF

PHARMAELLE 
GRUPPO NUTRISENS


ZERIA GROUP **TILLOTTS PHARMA**

**ECM ITALIAN PROVIDER AND
ORGANIZING SECRETARIAT**

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