

The logo for IHMC 2024 Rome. It features the letters 'IHMC' in a bold, sans-serif font, with 'I', 'H', and 'M' in white and 'C' in a dark blue-grey. Below this, the year '2024' is displayed in a similar font, with '20' in white and '24' in the same dark blue-grey. The word 'ROME' is written in a smaller, white, sans-serif font, centered between the two '2's of '2024'.

IHMC 2024 ROME

ihmc2024rome.com

A large, abstract architectural pattern consisting of numerous thin, parallel lines that curve and converge towards the center, creating a sense of depth and movement. The lines are a light beige or tan color, set against a white background.

10th International Human Microbiome Consortium Congress

June 22-25, 2024

Auditorium della Tecnica - Rome, Italy

COMMITTEES



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*Professor of Pediatrics and Nutrition
Harvard Medical School*

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Maria Vasile

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Gianluca Ianaro

Flavia Indrio

Romano Marabelli

Maria Rescigno

Gian Vincenzo Zuccotti

SATURDAY JUNE 22ND

Auditorium

14.00-16:00

PLENARY OPENING SESSION

GREETINGS - OPENING SESSION
INPUT FROM FUNDING AGENCIES ON CURRENT AND FUTURE PLANS
IN SUPPORTING MICROBIOME RESEARCH PIPELINE
Chairs: Alessio Fasano, Maria Vasile

TBD

Charu Kauschic - CANADA

TBD

Angelo Marino - EUROPEAN COMMISSION

16:00-16:30 Poster Break

16.30-18.30

I PARALLEL SESSION

STANDARDIZATION OF MICROBIOTA STUDIES

Chairs: Joël Doré, Emmanuelle Maguin

- Standardization of the studies on human microbiome (including collection, storage, sequencing methodologies, analysis, metadata) to translate basic science to clinical applicability
Alessio Fasano
- Data production and sharing; inequality in the availability of microbiome data worldwide
Nicola Segata
- Establishing what constitutes a healthy human gut microbiome: state of the science, regulatory considerations, and future directions
TBD
- Evolution of the regulatory context and its incidence on microbiome science and translation
TBD
- OU- Structuration of microbiome research and innovation across geographies towards the World Microbiome Partnership
Joël Doré

▷ Round table at the end

SATURDAY JUNE 22ND

Room A. Pininfarina

16.30-18.30

II PARALLEL SESSION

INFLUENCE OF NUTRITION ON HUMAN MICROBIOME

Chairs: Roberto Berni Canani, Maria Carmen Collado

- Pregnancy on the developing microbiome
Omry Koren
- How breast feeding shapes the infant microbiome and health outcomes
Meghan Azad
- Healthy diet and microbiome - a food system perspective
Fanette Fontaine
- Microbiome and ultraprocessed foods
Benoit Chassaing

▷ **Oral Communications**

▷ **Round table at the end**

SATURDAY JUNE 22ND

Room GH

16.30-18.30

III PARALLEL SESSION

THE INTERACTION OF THE HUMAN HOLOBIONT WITH OTHER BIONTS-I

Chairs: Hellas Cena, Romano Marabelli

- One-health approach: behind human and animal medicine, microbiome research in agriculture and bioeconomy
TBD
- Microbiome in the One-Health perspective
Antonia Ricci
- Environmental stressors on the gut microbiota
TBD
- Evolutionary perspective of human microbiome (the ancestral microbiome)
TBD

▷ **Oral Communications**

▷ **Round table at the end**

SUNDAY JUNE 23RD

Auditorium

09.00-11.00

PLENARY SESSION

ENVIRONMENTAL FACTORS INFLUENCING THE HUMAN HOLOBIONT

Chairs: Carla Fiorentini, Marc André Selsosse

- Environmental microbiota and human health (including soil or water microbiota in agriculture)
TBD
- Environmental pollution and its impact on human microbiome changes dictating the balance between health and disease
TBD
- How macro-scale events (including wars, displacement and migration, refugee camps, pandemics) may impact human microbiome and clinical outcomes
TBD
- Microbiome rewilding thought the recovery of beneficial interactions with the natural microbiomes
Marco Candela
- Microbiome and food processes and additives
Giuseppe Grosso

▷ **Round table at the end**

11.00-11.30 **Poster Break**

11.30 – 13.30

I PARALLEL SESSION

ENGRAFTMENT AND MATURATION OF HUMAN MICROBIOME IN EARLY LIFE

Chairs: Ener Cagri Dinleyici, Flavia Indrio

- The first 1000 days of life: from pregnancy to infancy in health and disease
TBD
- The impact of a maternal diet during pregnancy on the developing microbiome
Marie Claire Arrietta
- Human milk microbiome and bifidogenic effect of breast feeding
Meghan Azad

SUNDAY JUNE 23RD

▷ **Oral Communications**

▷ **Round table at the end**

13.30-14.30 **Break - Satellite Symposium**

14.30-16.30

THE INTERACTION OF THE HUMAN HOLOBIONT WITH OTHER BIONTS-III

Chairs: Lorenza Putignani

- The epigenetic influence of the microbiome in human health
TBD
- The forgotten members of the microbiome – mycobiome, virome, archaeome, parasitome
TBD
- Direct impacts of other microbiomes on the human microbiome
TBD
- Health in relation to antimicrobial resistance, pathogenicity, emerging pathogens
TBD

▷ **Oral Communications**

▷ **Round table at the end**

16.30-18.30

MICROBIOTA AND DISEASE: GENERAL ASPECTS II

Chairs: TBD

- Microbiome testings in clinical practice
Gianluca Ianaro
- The host microbiome in diagnosis, prevention and therapy
TBD
- Virome, mycobiome, archeome and parasitome in health and diseases
TBD
- Common intracellular pathways involved in ion transport effects, cell growth and inflammation induced by probiotics
TBD

▷ **Oral Communications**

▷ **Round table at the end**

SUNDAY JUNE 23RD

Room A. Pininfarina

11.30-13.30

II PARALLEL SESSION

MICROBIOTA AND DISEASE: GENERAL ASPECTS-I

Chair: Robert Knight, Maria Rescigno

- Microbiome and gut-lung axes
TBD
- Microbiome and gut-liver axes
Maria Rescigno
- Microbiome and its temporal evolution as pathogenic driver of GI and extra-GI diseases
TBD
- Dysbiosis, antigen trafficking and inflammation
TBD

▷ **Oral Communications**

▷ **Round table at the end**

13.30-14.30 **Break - Satellite Symposium**

14.30 - 16.30

MICROBIOME AND GASTROENTEROLOGICAL DISEASES

Chairs: Livia Emma, Antonio Gasbarrini

- Inflammatory Bowel Diseases
Harry Sokol
- Celiac disease
TBD
- Liver diseases
TBD
- Irritable bowel syndrome
TBD

▷ **Oral Communications**

▷ **Round table at the end**

SUNDAY JUNE 23RD

16.30 - 18.30

CONTROVERSIES ON THE ROLE OF THE MICROBIOME IN PEDIATRIC GI DISEASES

Chairs: Ruggiero Francavilla, Alfredo Guarino

- Necrotizing Enterocolitis
TBD
- Controversies in the use of probiotics in allergies
TBD
- Gastroenteritis
TBD
- Role of the gut microbiome on efficacy of oral mucosal vaccines
TBD

▷ **Oral Communications**

▷ **Round table at the end**

Room GH

11.30-13.30

III PARALLEL SESSION

MICROBIOTA IN THE CONTEST OF OTHER OMICS

Chairs: Curtis Huttenhower, Nicola Segata

- From integrated omics to systems ecology of the human microbiome
Paul Wilmes
- Large-scale data integration of metagenomics data to link the gut microbiome with diet and cardiometabolic health
Francesco Asnicar
- Pre-clinical models, their challenges, and the translation gap
TBD
- Accelerating human microbiome interventions – regulatory/safety issues and production challenges with novel (non-QPS) organisms
TBD

▷ **Oral Communications**

▷ **Round table at the end**

SUNDAY JUNE 23RD

13.30-14.30 Break - Satellite Symposium

14.30-16.30

MICROBIOME STUDIES IN DEVELOPING COUNTRIES

Chairs: Stella Smith

- Ethics of Microbiome research in Africa
TBD
- Dysbiosis
TBD
- Gut Microbiome in a developing country
TBD
- Environmental enteropathy
TBD

▷ **Oral Communications**

▷ **Round table at the end**

16.30-18.30

MICROBIOME IN OTHER HUMAN ORGAN/SYSTEM

Chairs: Lucio Capurso, Maurizio Koch

- Genito-urinary tract microbiome
TBD
- Oral microbiome
TBD
- The ocular microbiome
TBD
- The skin microbiome
TBD

▷ **Oral Communications**

▷ **Round table at the end**

MONDAY JUNE 24th

Auditorium

09.00-11.00

PLENARY SESSION

STATE OF THE ART OF INDUSTRY RESEARCH ON MICROBIOME MANIPULATION

Chairs: Francisco Guarner Aguilar, George Paraskevakos

Regulatory

North America

Europe

Asia Pacific

Industry call for abstracts

11.00-11.30 Poster Break

11.30-13.30

I PARALLEL SESSION

MICROBIOME AND ASD: THE GEMMA PROJECT

Chairs: Alessio Fasano, Aletta Kraneveld

- Introduction Horizon 2020 EU GEMMA project – Genome, Environment, Microbiome & Metabolome in Autism Multi-Omics Research in Autism
Alessio Fasano
- Synopsis preclinical studies GEMMA
Aletta Kraneveld
- Overview observational & interventional clinical trials GEMMA
TBD
- Multi-omics Analyses in GEMMA
TBD
- AI for modeling GEMMA
TBD
- Abstract 1
- Abstract 2

MONDAY JUNE 24th

13.30-14.30 Break - Satellite Symposium

14.30-16.00

MICROBIOME AND GUT BRAIN AXIS

Chairs: Gerard Clarke, Gian Vincenzo Zuccotti

- Microbiota gut brain axis
TBD
- Microbiome and brain development
TBD
- Microbiome and neurodegenerative diseases (Parkinson, Alzheimer)
Filip Scheperjans
- The impact of microbiota on aging, neurological diseases and mental health
TBD

▷ **Oral Communications**

▷ **Round table at the end**

16.00-16.30 Poster Break

16.30-18.00

MANIPULATING THE GUT MICROBIOME TO IMPROVE GASTROINTESTINAL DISORDERS

Chair: Stefano Guandalini, Jon A. Vanderhoof

- FMT and beyond (live biotherapeutics)
TBD
- Common pathways involved in antidiarrheal effects by different probiotics
TBD
- Microbiomics and Metabolomics in NEC
Vassilios Fanos
- Measuring dose effects by living microorganisms in the intestine: an unresolved issue
Francesco Di Pierro

▷ **Round table at the end**

MONDAY JUNE 24th

Room A. Pininfarina

11.30-13.30

II PARALLEL SESSION

MICROBIOME AND LIVER DISEASES: MICROB-PREDICT

Chairs: Peer Bork, Jonel Trebicka

- Overall description of the project and its goals
Jonel Trebicka
- Stool microbiome analysis and its impact on progression and decompensation of liver cirrhosis
Peer Bork
- Duodenal mucosa microbiome analysis and blood microbiome analysis and its impact on progression and decompensation of liver cirrhosis
TBD
- Saliva microbiome analysis and its impact on progression and decompensation of liver cirrhosis
TBD
- AI modeling to establish a link between the microbiome and the decompensation of liver cirrhosis
TBD
- Asset to the scientific community provided by MICROB-PREDICT
Wim Laleman

▷ **Oral Communications**

▷ **Round table at the end**

13.30-14.30 **Break - Satellite Symposium**

MONDAY JUNE 24th

14.30-16.00

MICROBIOTA AND OTHER DISEASES

Chairs: Marika Falcone, Gianluca Ianiro

- Microbiome and autoimmune diseases
Tommi Vatanen
- Microbiome and obesity/metabolic disorders
Antonio Molinaro
- Relationship of microbiome and infections diseases/drug resistant microbes
TBD
- Microbiome and pouchitis
Franco Scaldaferri

▷ **Oral Communications**

▷ **Round table at the end**

16.00-16.30 Poster Break

16.30-18.00

MANIPULATING THE GUT MICROBIOME TO IMPROVE NEUROLOGICAL DISEASES

Chairs: Clara Belzer, Sarkis Marzmanian

- Pre- and perinatal metabolic risk factors, and possible protective factors, for neurodevelopmental and psychiatric disorders in scope of probiotics and the microbiome
TBD
- Gut microbiome-brain axis as an explanation for the risk of poor neurodevelopment outcome in preterm Infants
TBD
- Investigating the influence of gut microbial metabolism on neurodevelopment, neurological dysfunction, and neurodegeneration
Jonathan Swann
- IBS as a Brain-Gut Disorder
TBD

▷ **Round table at the end**

MONDAY JUNE 24th

Room GH

11.30-13.30

III PARALLEL SESSION

MICROBIOME AND CANCER: ONCOBIOME

Chairs: Patrizia Brigidi , Laurence Zitvogel

- Overall description of the project and its goals
TBD
- Update on microbiome and colon cancer
TBD
- Update on microbiome and melanoma
TBD
- Update on microbiome and lung cancer
TBD
- Update on microbiome and breast cancer
TBD
- Discussion
TBD

13.30-14.30 Break - Satellite Symposium

14.30-16.00

MICROBIOME AND CANCER DEVELOPMENT

Chairs: Jennifer Wargo, TBD

- Multi-omic analysis
TBD
- AI modeling for microbiome signatures associated to occurrence, prognosis, progression, and therapeutic response
TBD
- Microbiome in prognosis
TBD
- Microbiome in cancer progression
TBD

▷ **Oral Communications**

▷ **Round table at the end**

MONDAY JUNE 24th

16.00-16.30 Poster Break

16.30-18.00

MANIPULATION OF THE GUT MICROBIOME TO PREVENT AND TREAT NON-COMMUNICABLE DISEASES

Chairs: Simone Domenico Guglielmetti

- Antibiotics, Prebiotics, probiotics, symbiotic, postbiotics
TBD
- FMT
TBD
- Microbial metabolomics (postbiotics)
TBD
- Phage therapy and other specific treatments
TBD
- Synthetic biology
TBD

▷ **Round table at the end**

TUESDAY JUNE 25th

Auditorium

09.00-12.15

PLENARY CLOSING SESSION

ARTIFICIAL INTELLIGENCE AND ITS USE IN MICROBIOME
AND OTHER OMICS STUDIES

Chairs: Alessio Fasano, Maria Vasile

09.00-10.00

One Health

Roser Domenech Amado

10.00-10.30

Where we go from here: roadmap to translate research in clinical applications and
policies' guidelines

Marcus Claesson

10.30-11.00

ABSTRACT AWARD CEREMONY

11.00-12.00

MEETING SYNOPSIS: EXPLORING CHAT GPT INTERVIEWED

Exploring chat gpt interviewed

TBD

12.00-12.15

CLOSING REMARKS