

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 greyish-blue. Below this, the year '2024' is displayed in a similar font, with '20' in white and '24' in the same greyish-blue. The word 'ROME' is written in a smaller, white, sans-serif font, positioned between the '20' and '24' of the year.

IHMC 2024 ROME

ihmc2024rome.com

An abstract architectural pattern consisting of numerous thin, parallel lines that curve and converge towards a central point, creating a sense of depth and movement. The lines are a light brown or tan color, set against a white background.

10th International Human Microbiome Consortium Congress

June 22-25, 2024
Confindustria Congress Center
Rome, Italy



10th International Human Microbiome
Consortium Congress **Rome 2024**

SCIENTIFIC PROGRAMME

IHMC2024
ROME

www.ihmc2024rome.com

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IHMC2024
ROME

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Chair

Alessio Fasano

*Professor of Pediatrics and Nutrition
Harvard Medical School*

Co-Chair

Maria Vasile

European Commission

Local Organising Committee

Roberto Berni Canani

Lucio Capurso

Livia Emma

Carla Fiorentini

Ruggiero Francavilla

Antonio Gasbarrini

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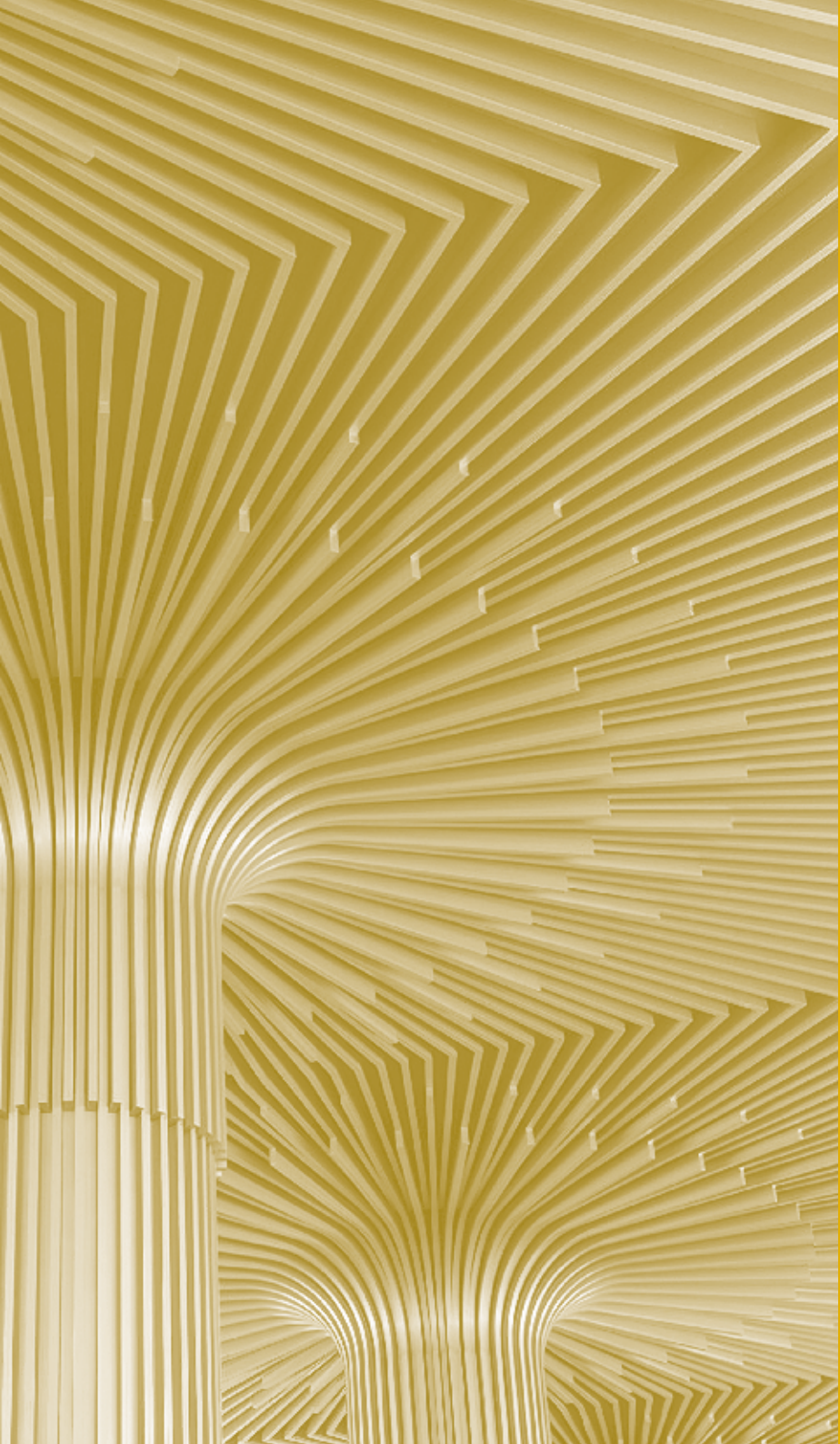
Gianluca Ianaro

Flavia Indrio

Romano Marabelli

Maria Rescigno

Elvira Verduci



Programme at a Glance

Saturday June 22nd

	Room GH	Room Pininfarina	Room A
12:00-14:00	E-POSTER SESSION (NO ECM)		
14:00-16:00	PLENARY OPENING SESSION (NO ECM) INPUT FROM FUNDING AGENCIES ON CURRENT AND FUTURE PLANS IN SUPPORTING MICROBIOME RESEARCH PIPELINE		
16:00-16:30	E-POSTER SESSION (NO ECM)		
16:30-18:30	I PARALLEL SESSION (ECM) STANDARDIZATION OF MICROBIOTA STUDIES	II PARALLEL SESSION (ECM) INFLUENCE OF NUTRITION ON HUMAN MICROBIOME	III PARALLEL SESSION (ECM) THE INTERACTION OF THE HUMAN HOLOBIONT WITH OTHER BIONTS-I
	Piazzale Capogrossi		
18:45-20:00	WELCOME COCKTAIL		

Sunday June 23rd

	Room GH	Room Pininfarina	Room A
08:20-09:00	E-POSTER SESSION (NO ECM)		
09:00-11:00	PLENARY SESSION (ECM) ENVIRONMENTAL FACTORS INFLUENCING THE HUMAN HOLOBIONT		
11:00-13:00	I PARALLEL SESSION (ECM) ENGRAFTMENT AND MATURATION OF HUMAN MICROBIOME IN EARLY LIFE	II PARALLEL SESSION (ECM) MICROBIOTA AND DISEASE: GENERAL ASPECTS-I	III PARALLEL SESSION (ECM) MICROBIOTA IN THE CONTEST OF OTHER OMICS
13:00-14:00	SPONSORED SYMPOSIUM (NO ECM) THE GLOBAL GRANTS FOR GUT HEALTH HOW THE GERIATRIC GUT MICROBIOME INFLUENCES HUMAN HEALTH	SPONSORED SYMPOSIUM (NO ECM) CANADIAN INSTITUTES OF HEALTH RESEARCH, INSTITUTE OF INFECTION AND IMMUNITY (CIHR-III) THE CANADIAN MICROBIOME INITIATIVE: A FOCUS ON FUNCTION AND TRANSLATION	13:00-13:30 SPONSORED SYMPOSIUM (NO ECM) MEADJOHNSON - RECKITT CMPA, TOLERANCE AND MICROBIOME IMPLICATION. EXPERT INSIGHT DISCUSSION
			13:30-14:00 SPONSORED SYMPOSIUM (NO ECM) BIO GAIA DECIPHERING MOLECULAR CROSS-TALKS OF CLASSIC AND NEXT-GENERATION PROBIOTICS WITHIN THE HOLOBIONT: THE BEAUTY OF SYNERGY
14:00-14:30	Lunch		
14:30-16:30	I PARALLEL SESSION (ECM) THE INTERACTION OF THE HUMAN HOLOBIONT WITH OTHER BIONTS-II	II PARALLEL SESSION (ECM) MICROBIOME AND GASTRO- ENTEROLOGICAL DISEASES	III PARALLEL SESSION (ECM) MICROBIOME STUDIES IN DEVELOPING COUNTRIES
16:30-18:30	I PARALLEL SESSION (ECM) MICROBIOTA AND DISEASE: GENERAL ASPECTS II	II PARALLEL SESSION (ECM) CONTROVERSIES ON THE ROLE OF THE MICROBIOME IN PEDIATRIC GI DISEASES	16:30-18:10 III PARALLEL SESSION (ECM) MICROBIOME IN OTHER HUMAN ORGAN/SYSTEM

Monday June 24th

	Room GH	Room Pininfarina	Room A
08:00-09:00	E-POSTER SESSION (NO ECM)		
09:00-11:00	PLENARY SESSION (NO ECM) STATE OF THE ART OF INDUSTRY RESEARCH ON MICROBIOME MANIPULATION		
11:00-11:30	E-POSTER SESSION (NO ECM)		
11:30-13:30	I PARALLEL SESSION (NO ECM) MICROBIOME AND ASD: THE GEMMA PROJECT	II PARALLEL SESSION (NO ECM) MICROBIOME AND LIVER DISEASES: MICROB-PREDICT	III PARALLEL SESSION (NO ECM) ONCOBIOME: A NETWORK INTRODUCING GUT MICROBIOTA INTO ONCOLOGY
13:30-14:30	Lunch		
14:30-16:30	I PARALLEL SESSION (ECM) MICROBIOME AND GUT - BRAIN AXIS	II PARALLEL SESSION (ECM) MICROBIOTA AND OTHER DISEASES	III PARALLEL SESSION (ECM) MICROBIOME AND CANCER DEVELOPMENT
16:30-17:00	E-POSTER SESSION (NO ECM)		
17:00-19:00	17:00-18:40 I PARALLEL SESSION (ECM) MANIPULATING THE GUT MICROBIOME TO IMPROVE GASTROINTESTINAL DISORDERS	II PARALLEL SESSION (ECM) MANIPULATING THE GUT MICROBIOME TO IMPROVE NEUROLOGICAL DISEASES	III PARALLEL SESSION (ECM) MANIPULATION OF THE GUT MICROBIOME TO PREVENT AND TREAT NON-COMMUNICABLE DISEASES

Tuesday June 25th

	Room GH	Room Pininfarina	Room A
08:30- 09:30	E-POSTER SESSION (NO ECM)		
09:30-12:30	PLENARY CLOSING SESSION (ECM) ARTIFICIAL INTELLIGENCE AND ITS USE IN MICROBIOME AND OTHER OMICS STUDIES		



Scientific Programme

SATURDAY JUNE 22ND**Room GH**

14.00-16.00

NO ECM

PLENARY OPENING SESSION

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

Roberto Flores-Munguia, *USA*
 Charu Kauschic, *Canada*
 Hiroshi Ohno, *Japan*
 Angelo Marino, *European Commission*

I PARALLEL SESSION

16.30-18.30

ECM

STANDARDIZATION OF MICROBIOTA STUDIES

Chairs: Joël Doré, *France* - Emmanuelle Maguin, *France*

- 16.30 Standardization of the studies on human microbiome (including collection storage, sequencing methodologies, analysis, metadata) to translate basic science to clinical applicability
 Alessio Fasano, *USA*
- 16.50 Data production and sharing; inequality in the availability of microbiome data worldwide
 Nicola Segata, *Italy*
- 17.10 Establishing what constitutes a healthy human gut microbiome: state of the science, regulatory considerations, and future directions
 Paul Ross, *Ireland*
- 17.30 Evolution of the regulatory context and its incidence on microbiome science and translation
 Céline Druart, *France*
- 17.50 OU - Structuration of microbiome research and innovation across geographies towards the World Microbiome Partnership
 Joël Doré, *France*
- 18.10 **Round table discussion on previous topics**
 Discussants: Joël Doré, *France* - Emmanuelle Maguin, *France*

SATURDAY JUNE 22ND

Room Pininfarina

II PARALLEL SESSION

16.30-18.30

ECM

INFLUENCE OF NUTRITION ON HUMAN MICROBIOME

Chairs: Roberto Berni Canani, *Italy* - Maria Carmen Collado, *Spain*

- 16.30 Pregnancy on the developing microbiome
Omry Koren, *Israel*
- 16.50 How breast feeding shapes the infant microbiome and health outcomes
Meghan Azad, *Canada*
- 17.10 Healthy diet and microbiome - a food system perspective
Fanette Fontaine, *Italy*
- 17.30 Microbiome and ultraprocessed foods
Benoit Chassaing, *France*

Oral Communications

- 17.50 EFFECT OF A LIFESTYLE INTERVENTION ON GLUCOSE, DIET, AND GUT MICROBIAL COMPOSITION IN POSTMENOPAUSAL WOMEN WITH PREVIOUS BREAST CANCER
Alessia Bartolacci, *Italy*
- 18.00 UNRAVELLING METABOLIC DRIVERS, CROSS-FEEDING NETWORKS, AND TEMPORAL DYNAMICS INDUCED BY PREBIOTIC SUPPLEMENTATION IN THE INFANT GUT MICROBIOME
Markus Schwalbe, *The Netherlands*
- 18.10 **Round table discussion on previous topics**
Discussants: Roberto Berni Canani, *Italy* - Maria Carmen Collado, *Spain*

SATURDAY JUNE 22ND

Room A

III PARALLEL SESSION

16.30-18.30

ECM

THE INTERACTION OF THE HUMAN HOLOBIONT WITH OTHER BIONTS-I

Chairs: Hellas Cena, *Italy* - Romano Marabelli, *France*

- 16.30 One-health approach: behind human and animal medicine, microbiome research in agriculture and bioeconomy
Stefano Morabito, *Italy*
- 16.50 Microbiome in the One-Health perspective
Antonia Ricci, *Italy*
- 17.10 Environmental stressors on the gut microbiota
Claudia Cortimiglia, *Italy*
- 17.30 Evolutionary perspective of human microbiome (the ancestral microbiome)
Duccio Cavalieri, *Italy*

Oral Communications

- 17.50 IMPACT OF PLASTICIZER EXPOSURE ON GUT MICROBIAL COMPOSITION AND CHILDHOOD OBESITY
Ana Lopez Moreno, *Spain*
- 18.00 PROVING THE BENEFICIAL ROLE OF THERMAL-MINERAL WATER ON HUMAN MICROBIOME EMPLOYING ENVIRONMENTAL-OMICS TECHNOLOGIES, AIMING AT PERSONALIZED MEDICINE APPROACHES
Federica Carraturo, *Italy*
- 18.10 **Round table discussion on previous topics**
Discussants: Hellas Cena, *Italy* - Romano Marabelli, *France*

SUNDAY JUNE 23RD

Room GH

PLENARY SESSION

09.00-11.00

ECM

ENVIRONMENTAL FACTORS INFLUENCING THE HUMAN HOLOBIONT

Chairs: Carla Fiorentini, *Italy* - Marc-André Selosse, *France*

- 09.00 Commemorative address in memorial for George Weinstock
Liping Zhao, *USA*
- 09.05 Plant microbiomes and human health
Birgit Wassermann, *Austria*
- 09.25 The impact of conflict and forced displacement on human microbiome
and clinical outcomes
Muhammad Hamid Zaman, *USA*
- 09.45 Microbiome rewilding thought the recovery of beneficial interactions
with the natural microbiomes
Marco Candela, *Italy*
- 10.05 Microbiome and food processes and additives
Giuseppe Grosso, *Italy*

Oral Communications

- 10.25 THE GLOBAL LANDSCAPE OF HORIZONTAL GENE TRANSFER
Chan Yeong Kim, *Germany*
- 10.35 PERTURBATION OF THE GUT MICROBIOME AND RESISTOME
THROUGHOUT PRE-PANDEMIC TRAVEL AND THE COVID-19 PANDEMIC
Ye Peng, *China*
- 10.45 **Round table discussion on previous topics**
Discussants: Carla Fiorentini, *Italy* - Marc-André Selosse, *France*

SUNDAY JUNE 23RD

I PARALLEL SESSION

11.00-13.00

ECM

ENGRAFTMENT AND MATURATION OF HUMAN MICROBIOME IN EARLY LIFE

Chairs: Ener Cagri Dinleyici, *Turkey* - Flavia Indrio, *Italy*

- 11.00 Microbiome and gender: how the microgenderome impact on the woman health
Francesco De Seta, *Italy*
- 11.20 The first 1000 days of life: from pregnancy to infancy in health and disease
Christopher Stewart, *UK*
- 11.40 The impact of a maternal diet during pregnancy on the developing microbiome
Marie-Claire Arrieta, *Canada*
- 12.00 Human milk microbiome and bifidogenic effect of breast feeding
Meghan Azad, *Canada*

Oral Communications

- 12.20 THE DEVELOPMENT OF THE INFANTS ORAL MICROBIOME: DECIPHERING THE ROLE ARCHAEA AND OBLIGATE ANEROBES
Charlotte Neumann, *Austria*
- 12.30 GUT MICROBIAL IGA BINDING IN OLD ORDER MENNONITE INFANTS AT LOW RISK FOR ALLERGIC DISEASES
Jose Clemente, *USA*
- 12.40 **Round table discussion on previous topics**
Discussants: Ener Cagri Dinleyici, *Turkey* - Flavia Indrio, *Italy*

14.00 Lunch

SUNDAY JUNE 23RD

14.30-16.30

ECM

THE INTERACTION OF THE HUMAN HOLOBIONT WITH OTHER BIONTS-II

Chairs: Frederic D. Bushman, *USA* - Lorenza Putignani, *Italy*

- 14.30 The epigenetic influence of the microbiome in human health
Curtis Huttenhower, *USA*
- 14.50 The forgotten members of the microbiome – mycobionte, virome, archaeome, parasitome
Frederic D. Bushman, *USA*
- 15.10 Direct impacts of other microbiomes on the human microbiome
Paola Roncada, *Italy*
- 15.30 Health in relation to antimicrobial resistance, pathogenicity, emerging pathogens
Lorenza Putignani, *Italy*

Oral Communications

- 15.50 METHANOBREVIBACTER SMITHII AND CAND. M. INTESTINI-SIMILAR BUT DIFFERENT
Victoria Weinberger, *Austria*
- 16.00 LONGITUDINAL MULTI-OMICS ANALYSIS REVEALS THE INVOLVEMENT OF GUT MICROBIOTA IN DEPRESSION THROUGH DISRUPTION OF IMMUNE SYSTEM AND GUT-DERIVED NEUROTRANSMITTERS
Hein Tun, *Hong Kong*
- 16.10 **Round table discussion on previous topics**
Discussants: Frederic D. Bushman, *USA* - Lorenza Putignani, *Italy*

SUNDAY JUNE 23RD

16.30-18.30

ECM

MICROBIOTA AND DISEASE: GENERAL ASPECTS IIChairs: Gianluca Ianaro, *Italy* - Stanislav Dusko Ehrlich, *UK*

- 16.30 Microbiome testings in clinical practice
Gianluca Ianaro, *Italy*
- 16.50 The host microbiome in diagnosis, prevention and therapy
Maurizio Sanguinetti, *Italy*
- 17.10 Impact of non-bacterial microbiome in health and disease
Francisco Guarner Aguilar, *Spain*
- 17.30 Microbiome therapeutics: mechanism of action
Harry Sokol, *France*

Oral Communications

- 17.50 THE WOMAN 4 HEALTH COHORT: A MULTI-OMICS APPROACH TO UNDERSTAND THE ROLE OF MICROBIOME IN WOMEN'S CARDIO-METABOLISM
Serena Sanna, *Italy*
- 18.00 THE HUMAN VIROME IN HEALTH AND DISEASE
Frederic D. Bushman, *USA*
- 18.10 **Round table discussion on previous topics**
Discussants: Gianluca Ianaro, *Italy* - Stanislav Dusko Ehrlich, *UK*

SUNDAY JUNE 23RD

Room Pininfarina

II PARALLEL SESSION

11.00-13.00

ECM

MICROBIOTA AND DISEASE: GENERAL ASPECTS-I

Chairs: Robert Knight, *USA* - Maria Rescigno, *Italy*

- 11.00 Microbiome and gut-lung axes
Moumen Alhasan, *Germany*
- 11.20 Microbiome and gut-liver axes
Maria Rescigno, *Italy*
- 11.40 The endoscopists view on microbiome: where, when, what?
Reiner Wiest, *Switzerland*
- 12.00 Microbiome, mucus and diet
Mahesh Desai, *Luxembourg*

Oral Communications

- 12.20 STUDY ON THE MECHANISM OF BACTERIAL VAGINOSIS
Qiongqiong Zhang, *China*
- 12.30 ASTHMA DIAGNOSIS, LUNG FUNCTION AND ORAL MICROBIOTA:
ADOLESCENTS IN THE GENERATION R STUDY
Francien Veenman, *The Netherlands*
- 12.40 **Round table discussion on previous topics**
Discussants: Robert Knight, *USA* - Maria Rescigno, *Italy*

14.00 Lunch

14.30 - 16.30

ECM

MICROBIOME AND GASTROENTEROLOGICAL DISEASES

Chairs: Livia Emma, *Italy* - Antonio Gasbarrini, *Italy*

- 14.30 Inflammatory Bowel Diseases
Harry Sokol, *France*
- 14.50 Celiac disease
Davide Ribaldone, *Italy*
- 15.10 Liver diseases
Francesca Romana Ponziani, *Italy*

SUNDAY JUNE 23RD

15.30 Irritable Bowel Syndrome
Giovanni Barbara, *Italy*

Oral Communications

15.50 QUANTIFYING HOST RESPONSE AND MICROBIAL GENETIC ADAPTATION IN IBD
Chiara Mazzoni, *Israel*

16.00 PROTECTIVE EFFECT OF PROBIOTIC POTENTIAL LIMOSILACTOBACILLUS
FERMENTUM STRAINS ON INTESTINAL COLITIS VIA REGULATING GUT
MICROBIOME IN MICE
Jin Hwan Kim, *South Korea*

16.10 **Round table discussion on previous topics**
Discussants: Livia Emma, *Italy* - Antonio Gasbarrini, *Italy*

16.30 - 18.30

ECM

**CONTROVERSIES ON THE ROLE OF THE MICROBIOME IN PEDIATRIC
GI DISEASES**

Chairs: Ruggiero Francavilla, *Italy* - Alfredo Guarino, *Italy*

16.30 Necrotizing enterocolitis
Ener Cagri Dinleyici, *Turkey*

16.50 Controversies in the use of probiotics in allergies
Alessandro Fiocchi, *Italy*

17.10 Gastroenteritis
Andrea Lo Vecchio, *Italy*

17.30 Direct and indirect effects of microbiome in diarrhea
Marco Poeta, *Italy*

Oral Communications

17.50 ASSOCIATION BETWEEN GUT MICROBIOME AND RISK OF CHILDHOOD
OBESITY - FINDINGS FROM A PILOT STUDY IN LOS ANGELES, CALIFORNIA
Cecille Marie Basilio, *USA*

18.00 I'VE GUT FEELING: EFFECTS OF SEX AND GASTROINTESTINAL LOCATION
ON MICROBIOME - INDUCED ANXIETY IN AN EARLY-LIFE STRESS MODEL
Melanie Ortiz Alvarez de la Campa, *USA*

18.10 **Round table discussion on previous topics**
Discussants: Ruggiero Francavilla, *Italy* - Alfredo Guarino, *Italy*

SUNDAY JUNE 23RD

Room A

III PARALLEL SESSION

11.00-13.00

ECM

MICROBIOTA IN THE CONTEST OF OTHER OMICS

Chairs: Curtis Huttenhower, *USA* - Nicola Segata, *Italy*

- 11.00 From integrated omics to systems ecology of the human microbiome
Paul Wilmes, *Luxembourg*
- 11.20 Large-scale data integration of metagenomics data to link the gut microbiome with diet and cardiometabolic health
Francesco Asnicar, *Italy*
- 11.40 Pre-clinical models, their challenges, and the translation gap
Omry Koren, *Israel*
- 12.00 Accelerating human microbiome interventions – regulatory/safety issues and production challenges with novel (non-QPS) organisms
Julie Rodriguez, *France*

Oral Communications

- 12.20 FLOW CYTOMETRY AS A TOOL TO CHARACTERIZE THE MICROBIOTA COMPOSITION AND CELL SORT BACTERIAL SPECIES OF INTEREST
Daillère Romain, *France*
- 12.30 ANALYZING GENOMIC CONTEXTS OF GENES IN METAGENOMIC BACTERIAL COMMUNITIES USING DE NOVO ASSEMBLY
Netta Barak, *Israel*
- 12.40 **Round table discussion on previous topics**
Discussants: Curtis Huttenhower, *USA* - Nicola Segata, *Italy*

14.00 Lunch

SUNDAY JUNE 23RD

14.30-16.30

ECM

MICROBIOME STUDIES IN DEVELOPING COUNTRIESChair: Gianluca Ianiro, *Italy*

- 14.30 Ethics of microbiome research in Africa
Ovokeraye Oduaran, *South Africa*
- 14.50 Insight into the microbiome of Indian population
Vineet Kumar Sharma, *India*
- 15.10 Gut microbiome in life-style changes and urbanization
Tarini Shankar Ghosh, *India*
- 15.30 Environmental enteropathy
Pascale Vonaesch, *Switzerland*

Oral Communications

- 15.50 A COMBINED GENOMIC AND PHYSIOLOGICAL INVESTIGATION INTO THE PROBIOTIC FEATURES OF LACTIPLANTIBACILLUS PLANTARUM ILSF15 ISOLATED FROM THE GUT OF INDIAN TRIBES
Arjun OK, *India*
- 16.00 TYPING OF THE GUT MICROBIOTA COMMUNITY IN ZHEJIANG PROVINCE SUBJECTS
Runan Wey, *India*
- 16.10 **Round table discussion on previous topics**
Discussant: Gianluca Ianiro, *Italy*

16.30-18.10

ECM

MICROBIOME IN OTHER HUMAN ORGAN/SYSTEMChairs: Lucio Capurso, *Italy* - Maurizio Koch, *Italy*

- 16.30 Genito-urinary tract microbiome
Franco Vicariotto, *Italy*
- 16.50 Microbiome, the muscoskeletal system and physical performance
Antonio Paoli, *Italy*
- 17.10 The potential role of pre/pro/post-biotics in managing obesity
Yolanda Sanz, *Spain*

SUNDAY JUNE 23RD

Oral Communications

- 17.30 EFFECT OF PROLONGED AZITHROMYCIN TREATMENT ON THE FECAL AND RESPIRATORY MICROBIOME OF PATIENTS WITH SEVERE COPD
Paula Camps-Massa, *Spain*
- 17.40 BASELINE GUT MICROBIOME PREDICTS THE EFFICACY OF RANDOMIZED ORAL ANTIHYPERTENSIVES
Lianmin Chaen, *China*
- 17.50 **Round table discussion on previous topics**
Discussants: Lucio Capurso, *Italy* - Maurizio Koch, *Italy*

MONDAY JUNE 24TH

Room GH

PLENARY SESSION

09.00-11.00

NO ECM

STATE OF THE ART OF INDUSTRY RESEARCH ON MICROBIOME MANIPULATION

Chair: Francisco Guarner Aguilar, *Spain*

- 09.00 Microbiome therapeutic opportunities and challenges a decade after the HMP/Metal HIT
Matthew Henn, *USA*
- 09.30 Development of drugs based on defined bacterial consortia
Greg Medlock, *USA*
- 10.00 The first non-antibiotic for the treatment of *Clostridioides difficile* infection
Juan Bastera Cossío, *Spain*
- 10.30 **Round table discussion on previous topics**
Discussant: Francisco Guarner Aguilar, *Spain*

I PARALLEL SESSION

11.30-13.30

NO ECM

MICROBIOME AND ASD: THE GEMMA PROJECT

Chairs: Alessio Fasano, *USA* - Aletta Kraneveld, *The Netherlands*

- 11.30 Introduction Horizon 2020 EU GEMMA project – Genome, Environment, Microbiome & Metabolome in Autism Multi-Omics Research in Autism
Alessio Fasano, *USA*
- 11.50 Synopsis preclinical studies GEMMA
Aletta Kraneveld, *The Netherlands*
- 12.10 Overview observational & interventional clinical trials GEMMA
Geraldine Leader, *Ireland*
- 12.30 Multi-omics analyses in GEMMA
Karolina Salenius, *Finland*
- 12.50 AI for modeling GEMMA
Corrado Vecchi, *Italy*

MONDAY JUNE 24TH

Oral Communications

- 13.10 A GLIMPSE ON GUT MICROBIOTA IN AUTISM SPECTRUM DISORDER: PROOF-OF-CONCEPT METAGENOMIC ANALYSIS OF A ASD CASE COMPARED TO HIS AT RISK INFANT SISTER
Martina Piacente, *Italy*
- 13.20 DEVELOPMENT OF A DATA MINING MODEL TO EXTRAPOLATE INFORMATION AND STANDARDIZE THE SELECTION OF CLINICAL METADATA FOR MICROBIOME-BASED CLINICAL STUDIES
Corrado Vecchi, *Italy*

13.30 Lunch

14.30-16.30

ECM

MICROBIOME AND GUT- BRAIN AXIS

Chairs: Gerard Clarke, *Ireland* - Elvira Verduci, *Italy*

- 14.30 Microbiota gut-brain axis
Jane Foster, *USA*
- 14.50 Microbiome and brain development
Rochellys Diaz Heijtz, *Sweden*
- 15.10 Microbiome and neurodegenerative diseases (Parkinson, Alzheimer)
Filip Scheperjans, *Finland*
- 15.30 Gut-Brain-Immune Axis in cerebrovascular disease
Vikramjeet Singh, *Germany*

Oral Communications

- 15.50 AGGRESSION: A GUT REACTION? THE EFFECTS OF THE GUT MICROBIOME ON AGGRESSION
Sondra Turjeman, *Israel*
- 16.00 GUT BACTERIAL AND IMMUNE COMMUNITIES' ROLE ON DEPRESSION
Eva M. Medina-Rodriguez, *Spain*
- 16.10 **Round table discussion on previous topics**
Discussants: Gerard Clarke, *Ireland* - Elvira Verduci, *Italy*

MONDAY JUNE 24TH

17.00-18.40

ECM

MANIPULATING THE GUT MICROBIOME TO IMPROVE GASTROINTESTINAL DISORDERS

Chairs: Roberto Berni Canani, *Italy* - Jon Arvid Vanderhoof, *USA*

- 17.00 Probiogenomics of bifidobacteria: insights into the biology of a key microbial group of early life gut microbiota
Marco Ventura, *Italy*
- 17.20 Metabolomics and microbiomics in necrotizing enterocolitis
Vassilios Fanos, *Italy*
- 17.40 Measuring dose effects by living microorganisms in the intestine: an unresolved issue
Francesco Di Piero, *Italy*

Oral Communications

- 18.00 SAFETY AND EFFICACY OF FAECAL MICROBIOTA TRANSPLANTATION: FIRST- YEAR SINGLE CENTER EXPERIENCE
Orazio Palmieri, *Italy*
- 18.10 EFFECT OF PALMITOYLETHANOLAMIDE (PEA) COMPARED TO A PLACEBO IN THE GUT MICROBIOME IN AN ADULT POPULATION
Amanda Rao, *Australia*
- 18.20 **Round table discussion on previous topics**
Discussants: Roberto Berni Canani, *Italy* - Jon Arvid Vanderhoof, *USA*

MONDAY JUNE 24TH

Room Pininfarina

II PARALLEL SESSION

11.30-13.30

NO ECM

MICROBIOME AND LIVER DISEASES: MICROB-PREDICT

Chairs: Peer Bork, *Germany* - Jonel Trebicka, *Germany*

- 11.30 Overall description of the project and its goals
Jonel Trebicka, *Germany*
- 11.45 Stool microbiome analysis and its impact on progression and decompensation of liver cirrhosis
Peer Bork, *Germany*
- 12.00 Duodenal mucosa microbiome analysis and blood microbiome analysis and its impact on progression and decompensation of liver cirrhosis
Benjamin Lelouvier, *France*
- 12.15 Saliva microbiome analysis and its impact on progression and decompensation of liver cirrhosis
Saeed Shoaie, *UK*
- 12.30 AI modeling to establish a link between the microbiome and the decompensation of liver cirrhosis
Manimizhiyan Arumugam, *Denmark*
- 12.45 Asset to the scientific community provided by MICROB-PREDICT
Wim Laleman, *Ireland*
- 13.00 **Round table discussion on previous topics**
Discussants: Peer Bork, *Germany* - Jonel Trebicka, *Germany*

13.30 Lunch

MONDAY JUNE 24TH

14.30-16.30

ECM

MICROBIOTA AND OTHER DISEASESChairs: Marika Maria Caterina Falcone, *Italy* - Gianluca Ianaro, *Italy*

- 14.30 Microbiome and autoimmune diseases
Tommi Vatanen, *Finland*
- 14.50 Microbiome and obesity/metabolic disorders
Luca Miele, *Italy*
- 15.10 The microbiome in infectious diseases: a key player
Nicholas Benech, *France*
- 15.30 Microbiome and pouchitis
Franco Scaldaferri, *Italy*

Oral Communications

- 15.50 THE ROLE OF TUMOR-RESIDENT MICROBIOME IN CANCER PROGRESSION AND RESPONSE TO THERAPY
Rachel Purcell, *New Zealand*
- 16.00 A RANDOMIZER PLACEBO-CONTROLLED TRIAL OF AN IMMUNOMODULATORY PROBIOTIC INTERVENTION FOR VETERANS WITH PTSD
Lisa Brenner, *USA*
- 16.10 **Round table discussion on previous topics**
Discussants: Marika Maria Caterina Falcone, *Italy* - Gianluca Ianaro, *Italy*

17.00-19.00

ECM

MANIPULATING THE GUT MICROBIOME TO IMPROVE NEUROLOGICAL DISEASESChairs: Clara Belzer, *The Netherlands* - Sarkis Mazmanian, *USA*

- 17.00 Investigating the influence of gut microbial metabolism on neurodevelopment, neurological dysfunction and neurodegeneration
Jonathan Swann, *UK*
- 17.20 Pre - and perinatal metabolic risk factors, and possible protective factors, for neurodevelopmental and psychiatric disorders in scope of probiotics and the microbiome
Rochellys Diaz Heijtz, *Sweden*

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- 17.40 Gut microbiome-brain axis as an explanation for the risk of poor neurodevelopment outcome in preterm infants
Josef Neu, *USA*
- 18.00 IBS as a Brain-Gut Disorder
Wouter J. de Jonge, *The Netherlands*

Oral Communications

- 18.20 BRAIN HEALTH & THE MICROBIOME: A PROOF-OF-CONCEPT STUDY IN PATIENTS WITH MILD COGNITIVE IMPAIRMENT
Leigh Frame, *USA*
- 18.30 FECAL MICROBIOME OF PATIENTS WITH ANOREXIA NERVOSA DIFFERS COMPOSITIONALLY AND FUNCTIONALLY FROM THAT OF AGE-MATCHED HEALTHY CONTROLS
Nadia Andrea Andreani, *Germany*
- 18.40 **Round table discussion on previous topics**
Discussants: Clara Belzer, *The Netherlands* - Sarkis Mazmanian, *USA*

MONDAY JUNE 24TH

Room A

III PARALLEL SESSION

11.30-13.30

NO ECM

ONCOBIOME: A NETWORK INTRODUCING GUT MICROBIOTA INTO ONCOLOGY

Chairs: Patrizia Brigidi, *Italy* - Laurence Zitvogel, *France*

- 11.30 What is ONCOBIOME and its net achievements?
Laurence Zitvogel, *France*
- 11.45 Defining gut dysbiosis for immune-oncology
Lisa Derosa, *France*
- 12.00 Efficacy of fecal microbial transplantation in melanoma and lung cancer patients
Arielle Elkrief, *Canada*
- 12.15 Impact of gut microbiota on the efficacy of neoadjuvant therapies in triple negative breast cancers
Carsten Denkert, *Germany*
- 12.30 How can microbiota and metabolism impact on DC based-cancer vaccines in melanoma
Kaliijn Bol, *The Netherlands*
- 12.45 Microbiota evolution with colorectal cancer staging
Gianmarco Piccinno, *Italy*
- 13.00 **Round table discussion on previous topics**
Discussants: Patrizia Brigidi, *Italy* - Laurence Zitvogel, *France*

13.30 Lunch

14.30-16.30

ECM

MICROBIOME AND CANCER DEVELOPMENT

Chair: Jennifer Wargo, *USA*

- 14.30 Multi-omic analysis
Lisa Derosa *France*
- 14.50 AI modeling for microbiome signatures associated to occurrence, prognosis, progression and therapeutic response
Luigi Nezi, *Italy*
- 15.10 Microbiome in prognosis
Lauren Elizabeth Colbert, *USA*
- 15.30 Microbiome in cancer progression
Nadim Ajami, *USA*

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Oral Communications

- 15.50 ENDOMETRIAL CANCER: A PILOT STUDY OF THE TISSUE MICROBIOTA
Claudia Leoni, *Italy*
- 16.00 THE GUT MICROBIOTA AND ITS IMPACT ON THE CLINICAL RESPONSE TO SYSTEMIC THERAPY IN HEPATOCELLULAR CARCINOMA
Liyun Fu, *China*
- 16.10 **Round table discussion on previous topics**
Discussant: Jennifer Wargo, *USA*

17.00-19.00

ECM

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

Chair: Simone Domenico Guglielmetti, *Italy*

- 17.00 Purposeful suppression of GI microbiota by oral antibiotic
Reetta Satokari, *Finland*
- 17.20 FMT
Giovanni Cammarota, *Italy*
- 17.40 Harnessing the gut microbial metabolome for disease prevention
Elena Comelli, *Canada*
- 18.00 Phage therapy and other specific treatments
Tiffany Weir, *USA*

Oral Communications

- 18.20 BACTERIAL DNA INVERSION REGIONS AS PREDICTORS OF RESPONSE TO MELANOMA IMMUNOTHERAPY AND PRESENTING A WAY TO MANIPULATE THE MICROBIOTA TO INCREASE RESPONSE TO THERAPY
Roni Keshet-David, *Israel*
- 18.30 EFFECTIVENESS OF DIFFERENT POST-BIOTIC PREPARATION AGAINST OXIDATIVE STRESS INDUCED BY SPIKE PROTEIN OF SARS-COV-2 IN HUMAN ENTEROCYTES
Marco Poeta, *Italy*
- 18.40 **Round table discussion on previous topics**
Discussant: Simone Domenico Guglielmetti, *Italy*

TUESDAY JUNE 25TH

Room GH

PLENARY CLOSING SESSION

09.30-12.30

ECM

ARTIFICIAL INTELLIGENCE AND ITS USE IN MICROBIOME AND OTHER OMICS STUDIES

Chairs: Alessio Fasano, *USA* - Maria Vasile, *Belgium*

09.30 One Health

Roser Domènech Amadó, *European Commission*

09.40 The summary of the COST Action ML4Microbiome

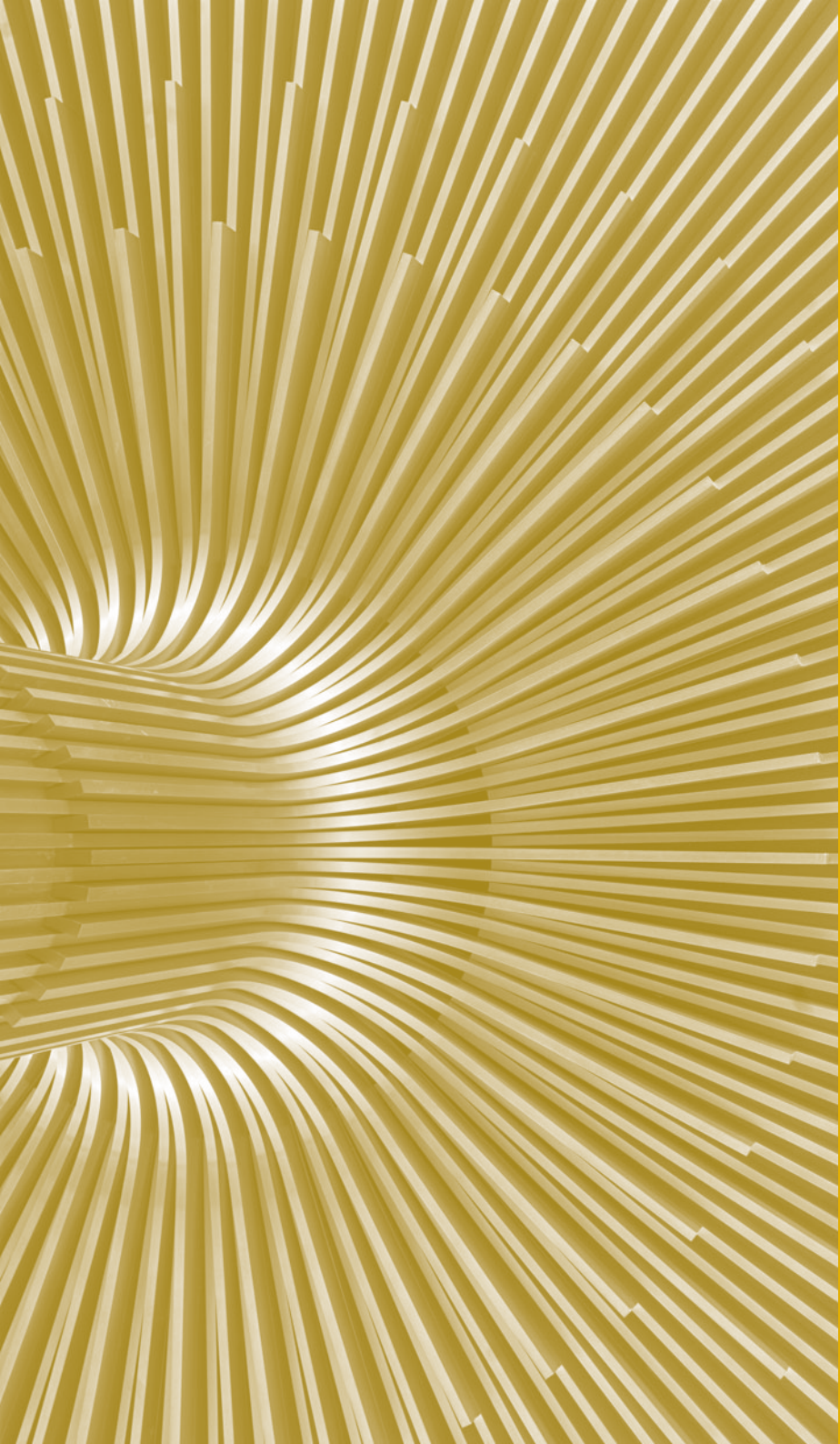
Marcus Claesson, *Ireland*

10.00 Abstracts Award Ceremony

10.30 Exploring the frontiers of microbiome science: Experts Vs Artificial Intelligence

Massimo Barberi, *Italy*

11.30 Closing Remarks on the Congress



E-Poster

SATURDAY JUNE 22ND

E-Poster Session

12.00-14.00

Chair: Alessio Fasano, *USA*

Poster Area 1

Topic 1: IMPROVING METHODS AND PROTOCOLS OF MICROBIOTA STUDIES
30 e-poster

Chair: Gianluca Ianiro, *Italy*

Poster Area 2

Topic 1: IMPROVING METHODS AND PROTOCOLS OF MICROBIOTA STUDIES
25 e-poster

Chair: Carla Fiorentini, *Italy*

Poster Area 3

Topic 5: MANIPULATING THE GUT MICROBIOME TO IMPROVE HEALTH
30 e-poster

Chair: Maria Vasile, *Belgium*

Poster Area 4

Topic 5: MANIPULATING THE GUT MICROBIOME TO IMPROVE HEALTH
21 e-poster

Topic 0: THE INTERACTION OF THE HUMAN HOLOBIONT WITH OTHER BIONTS
10 e-poster

16.00-16.30

Chair: Roberto Berni Canani, *Italy*

Poster Area 1

Topic 2: ENGRAFTMENT AND MATURATION OF HUMAN MICROBIOME IN EARLY LIFE
9 e-poster

Chair: Livia Emma, *Italy*

Poster Area 2

Topic 2: ENGRAFTMENT AND MATURATION OF HUMAN MICROBIOME IN EARLY LIFE
9 e-poster

Chair: Maria Rescigno, *Italy*

Poster Area 3

Topic 2: ENGRAFTMENT AND MATURATION OF HUMAN MICROBIOME IN EARLY LIFE
9 e-poster

Chair: Romano Marabelli, *France*

Poster Area 4

Topic 2: ENGRAFTMENT AND MATURATION OF HUMAN MICROBIOME IN EARLY LIFE
9 e-poster

SUNDAY JUNE 23RD

E-Poster Session

08:20 – 09:00

Chair: Carla Fiorentini, *Italy*

Poster Area 1

Topic 3: INFLUENCE OF NUTRITION ON HUMAN MICROBIOME

12 e-poster

Chair: Roberto Berni Canani, *Italy*

Poster Area 2

Topic 3: INFLUENCE OF NUTRITION ON HUMAN MICROBIOME

12 e-poster

Chair: Ruggiero Francavilla, *Italy*

Poster Area 3

Topic 3: INFLUENCE OF NUTRITION ON HUMAN MICROBIOME

12 e-poster

Chair: Antonio Gasbarrini, *Italy*

Poster Area 4

Topic 3: INFLUENCE OF NUTRITION ON HUMAN MICROBIOME

12 e-poster

MONDAY JUNE 24TH

E-Poster Session

08:00 – 09:00

Chair: Alfredo Guarino, *Italy*

Poster Area 1

Topic 4: MICROBIOTA & DISEASES
18 e-poster

Chair: Maria Vasile, *Belgium*

Poster Area 2

Topic 4: MICROBIOTA & DISEASES
18 e-poster

Chair: Maria Rescigno, *Italy*

Poster Area 3

Topic 4: MICROBIOTA & DISEASES
18 e-poster

Chair: Alessio Fasano, *USA*

Poster Area 4

Topic 4: MICROBIOTA & DISEASES
19 e-poster

11:00 – 11:30

Chair: Antonio Gasbarrini, *Italy*

Poster Area 1

Topic 4: MICROBIOTA & DISEASES
11 e-poster

Chair: Gianluca Ianaro, *Italy*

Poster Area 2

Topic 4: MICROBIOTA & DISEASES
11 e-poster

Chair: Roberto Berni Canani, *Italy*

Poster Area 3

Topic 4: MICROBIOTA & DISEASES
10 e-poster

Chair: Maria Rescigno, *Italy*

Poster Area 4

Topic 4: MICROBIOTA & DISEASES
10 e-poster

16:30 – 17:00

Chair: : Ruggiero Francavilla, *Italy*

Poster Area 1

Topic 4: MICROBIOTA & DISEASES

11 e-poster

Chair: : Alfredo Guarino, *Italy*

Poster Area 2

Topic 4: MICROBIOTA & DISEASES

11 e-poster

Chair: Carla Fiorentini, *Italy*

Poster Area 3

Topic 4: MICROBIOTA & DISEASES

10 e-poster

Chair: Livia Emma, *Italy*

Poster Area 4

Topic 4: MICROBIOTA & DISEASES

10 e-poster

TUESDAY JUNE 25TH**E-Poster Session****08:30 – 09:30**Chair: Alessio Fasano, *USA***Poster Area 1****Topic 4: MICROBIOTA & DISEASES**

20 e-poster

Chair: Livia Emma, *Italy***Poster Area 2****Topic 4: MICROBIOTA & DISEASES**

20 e-poster

Chair: Carla Fiorentini, *Italy***Poster Area 3****Topic 4: MICROBIOTA & DISEASES**

20 e-poster

Chair: Maria Vasile, *Belgium***Poster Area 4****Topic 4: MICROBIOTA & DISEASES**

20 e-poster

SATURDAY JUNE 22ND

E-Poster Session

12:00 – 14:00

Poster Area 1

Chair: Alessio Fasano, *USA***Topic 1: IMPROVING METHODS AND PROTOCOLS OF MICROBIOTA STUDIES**

- 9** USING A NOVEL IN VITRO MEDIUM TO STUDY MICROBIAL DYSBIOSIS ASSOCIATED WITH THE CYSTIC FIBROSIS INTESTINE
Kaitlyn Barrack, *USA*
- 20** MACHINE LEARNING FRAMEWORK FOR CLASSIFICATION OF ADENOCARCINOMA AND SQUAMOUS CELL CARCINOMA USING LUNG MICROBIOME DATASET FOR THEIR EARLY DIAGNOSIS
Pragya Kashyap, *India*
- 46** HIGH-THROUGHPUT ANAEROBIC SCREENING FOR IDENTIFYING COMPOUNDS ACTING AGAINST GUT BACTERIA IN MONOCULTURES OR COMMUNITIES
Patrick Müller, *Germany*
- 66** IMPROVED AUTOMATED HIGH-THROUGHPUT PURIFICATION OF METAGENOMIC SAMPLES
Caroline Janitz, *Australia*
- 93** IDENTIFYING PHASE VARIABLE GENES WITHIN DIFFERENT SUB-POPULATIONS OF ADMIXED *HELICOBACTER PYLORI*
Ebony Cave, *UK*
- 99** COMPARISON OF DIFFERENT ML ALGORITHMS FOR CLASSIFICATION OF IBD FROM AMPLICON SEQUENCING
Julia Eckenberger, *Germany*
- 108** FORMALISING MEASURES OF FUNCTIONAL REDUNDANCY OF MICROBIOME COMMUNITY MODELS VIA RELATIVE ENTROPY
Daniel Fässler, *Germany*
- 115** COMBINED ANALYSIS OF DUAL 16S RRNA AMPLICON SEQUENCES THROUGH CONCATENATION OF PAIR-END READS ENHANCED MICROBIOME DIVERSITY AND FUNCTIONAL PROFILING
Kyoung Su Kim, *South Korea*
- 119** MBQTL: AN R/BIOCONDUCTOR PACKAGE FOR MICROBIAL QUANTITATIVE TRAIT LOCI (QTL) ESTIMATION
Mercedeh Movassagh, *USA*

- 128** OPTIMISATION OF OXFORD NANOPORE TECHNOLOGIES IN THE OF STUDY MICROBIAL CELL-FREE DNA
Arielle Kae Sulit, *New Zealand*
- 133** IMPACT OF REFERENCE DATABASE VERSIONS AND ANALYSIS PARAMETERS ON TAXONOMIC CLASSIFICATION OF METAGENOMIC DATA
Car Reen Kok, *USA*
- 139** GUT BACTERIAL PROTEOME ANALYSIS USING INDIVIDUAL-SPECIFIC PROTEIN CATALOG BASED ON METAGENOME AND METATRANSCRIPTOME ANALYSIS
Tomo Kakihara, *Japan*
- 143** MRGM: AN ENHANCED CATALOG OF MOUSE GUT MICROBIAL GENOMES EXPANDING TAXONOMIC AND FUNCTIONAL LANDSCAPES
Nayeon Kim, *South Korea*
- 178** A MULTIDISCIPLINARY DELPHI CONSENSUS ON THE STATE OF THE ART AND HOW TO SHAPE THE FUTURE OF MICROBIOME-BASED BIOMARKERS
Rodriguez Julie, *France*
- 193** MANOCCA, A NOVEL COVARIANCE-BASED TEST IDENTIFIES LINKS BETWEEN GUT MICROBIOME CO-ABUNDANCE NETWORK AND AGE, SEX, SMOKING STATUS AND BODY MASS INDEX
Christophe Boetto, *France*
- 199** MICROME: A STANDARDIZED AND STREAMLINED R PACKAGE TO INVESTIGATE THE MICROBIOME METABOLOME INTERACTION
Tong Wu, *China*
- 218** EXPERIMENTAL TESTS STRONGLY QUESTION THE EVIDENCE OF A HEALTHY HUMAN BLOOD MICROBIOME
Sara Bertorello, *Italy*
- 250** MULTI-TASK GAUSSIAN PROCESS-BASED ACTIVE LEARNING FOR ENHANCED TRAVELER'S DIARRHEA PREDICTION USING MICROBIOME DATA
Boya Zhang, *USA*
- 255** COMPUTATIONAL FRAMEWORK FOR PREDICTING MICROBIAL FUNCTIONS VIA PERSONALIZED MICROBIOTA IN-SILICO MODELS
Riccardo Auceello, *Italy*
- 258** ALPHA-DIVERSITIES IN MICROBIOMES – A SEEMINGLY SIMPLE CONCEPT COMES WITH MANY PITFALLS OF MEASUREMENT AND CALCULATION
Klaus Neuhaus, *Germany*
- 267** TAXONOMIC CLASSIFICATION OF METAGENOME-ASSEMBLED GENOMES WITH KMETASHOT
Giuseppe Defazio, *Italy*

- 282** TRANSLATIONAL POTENTIAL OF SPECIFIC PATHOGEN-FREE GUINEA PIGS' AIRWAY PHYSIOLOGY AND ITS RELEVANCE FOR MODELLING OF RESPIRATORY PATHOLOGIES
Tomas Buday, *Slovakia*
- 283** ANTIBIOTIC TREATMENT DECREASES COUGH REACTIVITY IN CONVENTIONALLY BRED GUINEA PIG ANIMAL MODEL
Janka Jakusova, *Slovakia*
- 293** AN OPEN-ACCESS, CLOUD-BASED PLATFORM FOR A COMPREHENSIVE ANALYSIS OF METAGENOMIC DATA
Dora Tortarolo, *Italy*
- 294** TAKE CARE OF THE FUNDAMENTALS – UNBIASED DNA EXTRACTION FOR REPRESENTATIVE MICROBIOME INSIGHTS
Lisa Mahler de Sanchez, *Germany*
- 308** REVISED ENTEROTYPING REFLECTS DYSBIOSIS IN GLOBAL FECAL METAGENOMES
Marisa Isabell Keller, *Germany*
- 316** DONOR SCREENING FOR FECAL MICROBIOTA TRANSPLANTATION WITH A DIRECT STOOL TESTING-BASED STRATEGY: A PROSPECTIVE COHORT STUDY
Debora Rondinella, *Italy*
- 330** GENOMIC LANGUAGE MODELS FOR UNDERSTANDING THE MICROBIOME
Balázs Ligeti, *Hungary*
- 344** DISTRIBUTION CHARACTERISTICS OF TEN DOMINANT GUT MICROBIOTA IN HEPATIC PATIENTS UNDER DIFFERENT STAGING SCORING SYSTEMS
Pengcheng Lou, *China*
- 346** LONG-READ METAGENOMICS OF THE HUMAN SKIN MICROBIOME USING IMPROVED MICROBIAL DNA EXTRACTION METHODS
Rina Kurokawa, *Japan*

12:00 – 14:00

Poster Area 2

Chair: Gianluca Ianiro, *Italy***Topic 1: IMPROVING METHODS AND PROTOCOLS OF MICROBIOTA STUDIES**

- 348** METEOR2: ACCURATE TAXONOMIC PROFILING OF HOST-ASSOCIATED MICROBIAL COMMUNITIES FOR SHOTGUN METAGENOMICS
Amine Ghozlane, *France*
- 387** RECENT ADVANCES IN HIGH PERFORMANCE METAPROTEOMICS FOR INTERROGATING THE DYNAMIC METABOLIC ACTIVITIES OF THE HUMAN GUT MICROBIOME
Robert Hettich, *USA*
- 390** DEEP EMBEDDINGS FOR REPRESENTING GUT MICROBIOME SAMPLES WITH VISION AND HIERARCHICAL MODELS
Camilo Valdes, *USA*
- 391** EXPANDING THE CULTURED DIVERSITY OF THE HUMAN GUT MICROBIOME USING A NOVEL HIGH-THROUGHPUT ANAEROBIC CULTIVATION PLATFORM
James Volmer, *Australia*
- 395** CHASING LOW BIOMASS: BUILDING EFFECTIVE AND OPTIMIZED END-TO-END WORKFLOWS FOR SKIN AND ENVIRONMENTAL SAMPLES
Brice Le Francois, *Canada*
- 398** EVALUATION OF NANOPORE SEQUENCING FOR HIGH-RESOLUTION HUMAN GUT MICROBIOME PROFILING BY NEAR FULL-LENGTH 16S RRNA GENE AMPLICON SEQUENCING
Dieter Tourlousse, *Japan*
- 411** CHARACTERISTICS AND CLINICAL IMPLICATIONS OF THE GUT MICROBIOTA IN DIFFUSE LARGE B-CELL LYMPHOMA – THE MICHELIN STUDY
Christiane S. Staxen, *Denmark*
- 413** COMPREHENSIVE ANALYSIS OF OTU RELATIONSHIPS USING TIME-SERIES DATA OF A MICROBIOME CONTAINING MANY ZEROS
Rie Masukawa, *Japan*
- 419** AN OPTIMIZED FLOW CYTOMETRY SORTING-SEQUENCING PIPELINE TO GET INSIGHTS INTO THE FUNCTIONALITY AND ACTIVITY OF MICROBIAL ECOSYSTEMS
Valerie Goethals, *Belgium*
- 424** RAPID IDENTIFICATION AND QUANTIFICATION OF PROBIOTICS WITH PAN-GENOME ANALYSIS-BASED REAL-TIME PCR
Joon-gi Kwon, *South Korea*

- 494** ASSESSING THE GENERALIZATION OF AI MODELS FOR UNSEEN MICROBIOME STUDY DATA
Andre Goncalves, *USA*
- 497** STRAINER2 QUANTITATIVE SEQUENCE-BASED STRAIN TRACKING OF VE707, A DEFINED BACTERIAL CONSORTIUM FOR MULTIDRUG-RESISTANT ORGANISM (MDRO) DECOLONIZATION
Andrea Watson, *USA*
- 527** SHORT READS VS LONG READS FOR WHOLE GENOME SHOTGUN METAGENOMIC APPLICATION
Elisabetta Notario, *Italy*
- 531** CROCODEEL : AUTOMATED DETECTION OF WELL-TO-WELL CONTAMINATION IN METAGENOMIC DATA
Goulet Lindsay, *France*
- 532** GENOME-WIDE ASSOCIATION STUDY OF THE GUT MICROBIOME
Raphaël Malak, *France*
- 543** EXPLORING SPATIAL HOST-MICROBIOME INTERACTIONS IN THE MURINE INTESTINE
Ece Kartal, *Germany*
- 547** COMPREHENSIVE LARGE-SCALE SURVEY OF PLASMIDS IN THE AUSTRALIAN HUMAN GUT MICROBIOME
Alex Chklovski, *Australia*
- 553** DEVELOPMENT OF A SINGLE-STAGE BIOREACTOR FOR THE STUDY OF THE GUT MICROBIAL ECOLOGY IN THE ASCENDING COLON
David Felipe Garcia Mendez, *Australia*
- 554** A COMPUTATIONAL METATRANSCRIPTOMIC PIPELINE TO INVESTIGATE HOST-MICROBE INTERACTIONS IN LOW MICROBIAL BIOMASS SAMPLES
Icaro Maia Santos de Castro, *Brazil*
- 564** MORE METAGENOMIC PROTEIN ASSIGNMENTS, FASTER, USING UNIREF AND CLUSTERED NR
Anupam Gautam, *Germany*
- 567** DOO DOTS: A DRIED FECAL SPOT (DFS)-BASED BIOANALYTICAL PLATFORM FOR FECAL METABOLITE QUANTITATION
Thomas Horvath, *USA*
- 592** TOWARDS A FULLY AUTOMATED LABORATORY FOR HIGHLY REPRODUCIBLE MICROBIOME RESEARCH
Moreno Zolfo, *Japan*

- 635** PREDOMICSAPP: A WEB APPLICATION FOR INTERPRETABLE AND ACCURATE CLASSIFICATION OF OMICS COMMENSURABLE DATA
Gaspar Roy, *France*
- 660** INTEGRATION OF MULTI-OMICS DATA IDENTIFIED NOVEL METABOLIC PATHWAY REGULATION IN CARDIOMETABOLIC DISEASES
Kunkai Su, *China*
- 663** A NOVEL IN VITRO APPROACH TO IDENTIFY MICROBIAL AND CELLULAR SIGNATURES OF SHORT BOWEL SYNDROME (SBS)
Ludovica Marinelli, *Italy*

12:00 – 14:00

Poster Area 3

Chair: Carla Fiorentini, *Italy***Topic 5: MANIPULATING THE GUT MICROBIOME TO IMPROVE HEALTH**

- 33** THE EFFECT OF OXYTOCIN ON THE GUT MICROBIOME AND BEHAVIOR IN AUTISTIC CHILDREN WITH INTELLECTUAL DISABILITY: A STUDY PROTOCOL
Elise Tuerlinckx, *Belgium*
- 131** VEILLONELLA MHL0042 REDUCES THE SEVERITY OF EAE BY MODULATING THE CECUM MICROBIOME
Joon-Young Park, *South Korea*
- 135** CARROT POLYSACCHARIDE RHAMNOGALACTURONAN-I AMELIORATES STRESS-INDUCED INTESTINAL PERMEABILITY IN AN HUMAN EX VIVO COLONIC MODEL
Evangelia N. Kerezoudi, *Sweden*
- 140** STRUCTURE-DEPENDENT DEGRADATION OF MILK OLIGOSACCHARIDES BY NEWLY ISOLATED INTESTINAL COMMENSAL BACTERIAL STRAINS FROM SUCKLING PIGLETS AND RABBITS
Mathilde Rumeau, *France*
- 155** THE SIGNATURE OF HOST AGING IN PERSONALIZED GUT MICROBIOME FLUXOME DATA
Ameneh Mehrjerd, *Iran*
- 161** GEMMA PROJECT: THE ROLE OF THE MICROBIOME IN AUTISM SPECTRUM DISORDER
Dario Siniscalco, *Italy*
- 181** THE GUT MICROBIOME ACROSS THE COLORECTAL ADENOMA-CARCINOMA SEQUENCE: A STUDY NESTED IN THE TURIN-PIEDMONT COLORECTAL CANCER SCREENING PROGRAM
Semi Zouiouich, *USA*

- 195** ENGINEERING GUT MICROBIOME STRAINS THAT STABLY ENGRAFT IN PATIENTS USING A BARCODED DNA ASSEMBLY STRATEGY
Constantin Ruprecht, *Germany*
- 214** SYNBIOTIC WITH GAC FRUIT EXTRACT SUPPLEMENTATION AS A NOVEL STRATEGY TO REDUCE SERUM TMAO IN CKD: A RAT MODEL STUDY
Thasinas Dissayabuttra, *Thailand*
- 224** INDICATION SPECIFIC PROBIOTICS FOR HUMAN HEALTH: WHICH STRAINS FOR CHRONIC WOUNDS AND WHICH FOR BETTER SLEEP
Ingeborg Klymiuk, *Austria*
- 236** PROBIOTICS IN THE CORRECTION OF LIPID METABOLISM
Vasilisa Dudurich, *Russia*
- 241** ASSOCIATION OF LEISURE TIME PHYSICAL ACTIVITY WITH GUT MICROBIOTA COMPOSITION IN EARLY ADULTHOOD
Hanna-Mari Boelius, *Finland*
- 257** ENGRAFTMENT OF VIABLE MICROBIOTA AFTER FECAL TRANSPLANTATION DRIVES CLOSTRIDIODES DIFFICILE INHIBITION
Jose Clemente, *USA*
- 273** THE ROLE OF VSL#3 IN THE TREATMENT OF FATIGUE AND OTHER SYMPTOMS IN LONG COVID-19 SYNDROME: A RANDOMIZED, DOUBLE-BLIND, PLACEBO-CONTROLLED PILOT STUDY (DELONG#3)
Alessandra De Gianì, *Italy*
- 278** EFFICACY OF VAGINAL SEEDING IN RESTORING BACTERIAL LOAD AND VIABILITY IN A CLINICAL TRIAL OF C-SECTION NEWBORNS AT RISK OF DEVELOPING FOOD ALLERGIES
Jose Clemente, *USA*
- 281** ANTIDEPRESSANTS AND THE COMPOSITION OF THE GASTROINTESTINAL MICROBIOME IN WOMEN LIVING WITH FIBROMYALGIA
Joanna Harnett, *Australia*
- 303** DYNAMICS OF ESBL E. COLI INTRODUCTION AND DISPLACEMENT IN THE GUT: A CLINICAL STUDY
Leaid Laganenka, *Swiss*
- 320** LACTIPLANTIBACILLUS DSM 33464 (SMARTGUARDTM), A PROBIOTIC SUPPORTING THE GUT MICROBIOTA NATURAL PROCESS OF LIMITING DAILY LEAD ABSORPTION: RESULTS FROM A CLINICAL STUDY IN YOUNG WOMEN IN MEXICO
Delphine M. A. Saulnier, *France*
- 323** IDENTIFICATION OF EXOPOLYSACCHARIDE PRODUCED BY LACTICASEIBACILLUS RHAMNOSUS IR06 IN MILK-BASED MEDIA AND ITS PROTECTIVE EFFECTS ON UVB-IRRADIATION-INDUCED SKIN DAMAGE
Jin Hwan Kim, *South Korea*

- 331** A MICROBIOME TESTING-BASED PRECISION MEDICINE APPROACH TO TREAT POST-INFECTIOUS IRRITABLE BOWEL SYNDROME: A PILOT STUDY
William Fusco, *Italy*
- 332** FAECAL MICROBIOTA TRANSPLANTATION REDUCES ANTIMICROBIAL RESISTANCE: BY INDUCING BACTERIOPHAGE NETWORK REMODELLING AND ENTERIC PATHOGEN REDUCTION, ENHANCING INTESTINAL BARRIER FUNCTION AND IMMUNITY
Lindsey Ann Edwards, *UK*
- 350** TETRASTIGMA HEMSLEYANUM ALTERING THE FIRMICUTES TO BACTEROIDETES (F/B) RATIO OF GUT MICROBIOTA AND EFFECT ON INFLAMMATION OF THE LIVER AND GALLBLADDER
Tiangong Wang, *China*
- 359** THE KEY OF POLYGONATUM ODORATUM TO ALLEVIATING THE SYMPTOMS OF TYPE 2 DIABETES: GUT MICROBIOTA
Xuewei Ye, *China*
- 363** BENEFICIAL EFFECTS OF MULTI-MINERAL SUPPLEMENTS ON THE INTESTINAL BARRIER
Garance Coquant, *France*
- 368** THE INFLUENCE OF GUT MICROBIOTA COMPOSITION ON DNA METHYLATION IN PEDIATRIC QATARI CHILDREN DIAGNOSED WITH TYPE 1 DIABETES MELLITUS
Arun Prasath Lakshmanan, *Qatar*
- 379** THE IMPACTS OF FECAL MICROBIOTA TRANSPLANTATION (FMT) ON THE LONG-TERM SURVIVAL AND QUALITY OF LIFE OF PATIENTS WITH RECURRENT HEPATIC ENCEPHALOPATHY
Gao Hainv Gao, *China*
- 383** REAL LIFE CLINICAL EXPERIENCE ON FECAL MICROBIOTA TRASPLANTATION IN RECURRENT CLOSTRIDIUM DIFFICILE INFECTION: SAFETY, EFFICACY AND INTESTINAL MICROBIOTA MODULATION
Marialuisa Novi, *Italy*
- 405** ARE PROBIOTICS ASSOCIATED WITH AN INCREASED DETECTION OF ANTIMICROBIAL RESISTANT GENES - RESULTS OF AN OBSERVATIONAL STUDY
Joanna Harnett, *Australia*
- 409** IMPROVED PROTECTIVE EFFECT OF ENGINEERED HIGH ACETATE-PRODUCING SACCHAROMYCES CEREVISIAE VAR. BOULARDII IN DSS-INDUCED COLITIS
Sara Deleu, *Belgium*
- 410** RIGOROUS DONOR SELECTION FOR FAECAL MICROBIOTA TRANSPLANTATION IN ACTIVE ULCERATIVE COLITIS: KEY INSIGHTS FROM A RANDOMIZED CONTROLLED TRIAL HALTED FOR FUTILITY
Sara Deleu, *Belgium*

Chair: Maria Vasile, *Belgium*

Topic 5: MANIPULATING THE GUT MICROBIOME TO IMPROVE HEALTH

- 465** FECAL MICROBIOTA TRANSPLANTATION AS RESCUE THERAPY FOR RECURRENT CLOSTRIDIODES DIFFICILE INFECTION IN PATIENTS WITH INFLAMMATORY BOWEL DISEASE
Noemi Bertetti, *Italy*
- 466** A PROBIOTIC MIXTURE STANDARDIZED WITH MALTODEXTRIN AMELIORATES INTESTINAL DYSMOTILITY AND GUT INFLAMMATION IN A SPONTANEOUS MODEL OF ACCELERATE SENESCENCE
Giulia Valdiserra, *Italy*
- 478** COMPARATIVE GENOMIC AND PHENOTYPIC INVESTIGATION OF CLINICALLY PROVEN PROBIOTICS TO SUPPORT A HEALTHY GUT MICROBIOME AT ALL LIFE STAGES
Leonie Kiely, *Ireland*
- 484** COMPARATIVE ANALYSIS OF CELL-FREE SUPERNATANTS (CFS) FROM AKKERMANSIA MUCINIPHILA AND FAECALIBACTERIUM PRAUSNITZII: POTENTIAL POSTBIOTIC THERAPY FOR GUT HEALTH
Edyta Juszczyk-Kubiak, *Poland*
- 487** DETECTING MICROBIAL ENGRAFTMENT AFTER FMT USING PLACEBO SEQUENCING AND CULTURE-ENRICHED METAGENOMICS
Shahrokh Shekarriz, *Canada*
- 506** PROMOTION OF FAECALIBACTERIUM GROWTH IN THE HUMAN GUT THROUGH BACTERIAL CROSS-FEEDING BY GLUCONIC ACID-CONTAINING OLIGOSACCHARIDES
Hiroki Negishi, *Japan*
- 509** ACTIVATION OF ANTIVIRAL IMMUNITY AND MODULATION OF GUT MICROBIOME BY LACTOBACILLUS SALIVARIUS HHUMIN-U
Sanguine Byun, *South Korea*
- 534** CHANGES IN MICROBIAL DIVERSITY ASSOCIATED WITH FAECAL MICROBIOTA TRANSPLANTATION IN RECURRENT CLOSTRIDIODES DIFFICILE INFECTIONS
Daiana Guevara Nuñez, *Spain*
- 539** INVESTIGATING HUMAN MILK OLIGOSACCHARIDE UTILISATION BY MULTIPLE PROBIOTIC SPECIES USING GENOTYPE/PHENOTYPE STRATEGIES
Leonie Kiely, *Ireland*

- 584** POOLING OF FAECAL MATERIAL RESULTS IN STANDARDIZED AND HIGH TAXONOMIC AND FUNCTIONAL RICHNESS MICROBIOTHERAPY PRODUCTS
Aurore Duquenoy, *France*
- 585** STRUCTURE-DEPENDENT STIMULATION OF GUT BACTERIA BY ARABINOXYLO-OLIGOSACCHARIDES (AXOS): A REVIEW
Kai P. Leschonski, *The Netherlands*
- 590** TEMPERATURE-SENSITIVE ESCHERICHIA COLI FOR DEPRESSION THERAPY VIA SPATIOTEMPORAL MANIPULATION BY MAGNETIC FIELD
Xuejun Wang, *China*
- 598** DEVELOPMENT OF A SYNBIOTIC MIXTURE TO DECREASE INTESTINAL NEUROINFLAMMATION AND RESTORE SHORT-CHAIN FATTY ACID PRODUCTION IN PARKINSON'S DISEASE PATIENTS
Charlotte De Rudder, *Luxembourg*
- 608** EVOLUTIONARY TRAJECTORIES OF GUT BACTERIA DETERMINE INTESTINAL COLONIZATION RESISTANCE
Simon Woelfel, *Germany*
- 616** DIVERGENT ECOLOGICAL TRAJECTORIES OF FECAL MICROBIOTA TRANSPLANTATION IN IGA DEFICIENT MICE VERSUS WILDTYPE MICE
Djelika Traore, *France*
- 625** MATERNAL LIFE-STYLE INTERVENTIONS DURING PREGNANCY MODULATE THE MATERNAL-INFANT MICROBIOTA AND HEALTH OUTCOMES
Maria Carmen Collado, *Spain*
- 634** LONG-TERM IMPACT: BACTERIOPHAGE-DRIVEN DNA INVERSIONS SHAPE BACTEROIDES FRAGILIS FUNCTIONALITY
Shaqed Carasso, *Israel*
- 646** SEX-SPECIFIC EFFECTS OF BOVINE COLOSTRUM ON MICROBIOTA-GUT-BRAIN AXIS INTERACTIONS IN ZONULIN TRANSGENIC AND WILD-TYPE MICE
Birna Asbjornsdottir, *Iceland*
- 656** A RELATIONSHIP BETWEEN THE GUT MICROBIOME AND FECAL MINERAL CONTENT IN CHRONIC KIDNEY DISEASE PATIENTS UNDERGOING A RESISTANT STARCH DIETARY INTERVENTION
Fabiana Andrea Hoffmann Sarda, *Brazil*
- 664** ACINETOBACTER IN THE GASTROINTESTINAL TRACT DRIVES INFLAMMATION
Melinda A. Engevik, *USA*
- 665** PHYLOGENETICALLY DIVERSE BACTERIAL SPECIES PRODUCE HISTAMINE WHICH ACTIVATE HRH1 RECEPTORS IN THE GUT EPITHELIUM
Kristen A. Engevik, *USA*

Topic 0: THE INTERACTION OF THE HUMAN HOLOBIONT WITH OTHER BIONTS

- 39** GUT MYCOBIOTA COMPOSITION IN AUTISM SPECTRUM DISORDER AND ITS RELATIONSHIP WITH GASTROINTESTINAL SYMPTOMS
Maria Andrea Castillo, *Venezuela*
- 54** INNOVATIVE USE OF WASTEWATER INFLUENT MICROBIOME AS A MONITORING TOOL FOR COMMUNITY-LEVEL HUMAN GUT HEALTH AND BEYOND
Emma Lancaster, *USA*
- 110** LARGE-SCALE INTEGRATIVE ANALYSIS OF FECAL SAMPLES SEQUENCING DATA SUPPORTS NOVEL MIRNA-MEDIATED HOST-MICROBIOTA INTERACTIONS
Giulio Ferrero, *Italy*
- 156** ASSOCIATION BETWEEN GUT MICROBIOTA DEVELOPMENT AND ALLERGY IN INFANTS BORN DURING PANDEMIC-RELATED SOCIAL DISTANCING RESTRICTIONS
Katri Korpela, *Finland*
- 187** ONE-HEALTH APPROACH: COPPER AND ANTIBIOTIC RESISTANCES IN ESCHERICHIA COLI FROM PORTUGUESE PIGLETS FAECES
Olga Cardoso, *Portugal*
- 190** SUSCEPTIBILITY TO COPPER AND ANTIBIOTICS OF ENTEROCOCCI FROM PORTUGUESE PIGLETS FAECES, AS MICROBIOTA BIOMARKERS - IMPLICATIONS FOR 'ONE HEALTH'
Maria Manuel Donato, *Portugal*
- 312** ELUCIDATING THE ROLE OF ARCHAEA IN THE HUMAN GUT MICROBIOME
Shohei Asami, *Japan*
- 475** INTERLINKING ENVIRONMENTAL MICROBIOTA AND POTENTIAL HEALTH IMPACT: A ONE-HEALTH PERSPECTIVE ON URBAN RECREATIONAL WATER WITH CYANOBACTERIA BLOOMS
Kendall Byrd, *USA*
- 624** WATER MICROBIOME, RESISTOME, AND SOURCES OF FECAL CONTAMINATION IN A GUINEA WORM ENDEMIC COUNTRY
Jonathan Leopold, *USA*
- 655** CYANOTOXIN INHALATION CAN TRIGGER IMMUNE RESPONSES IN LUNG AND GUT MICROBIOME DYSBIOSIS VIA LUNG-GUT AXIS
Jiyoung Lee, *USA*

16:00 – 16:30

Poster Area 1

Chair: Roberto Berni Canani, *Italy***Topic 2: ENGRAFTMENT AND MATURATION OF HUMAN MICROBIOME IN EARLY LIFE**

- 43** MATERNAL TRANSFER OF ANTIBIOTIC RESISTANCE GENES TO INFANTS REVEALED BY LONGITUDINAL METAGENOMIC ANALYSIS
Samat Kozhakhmetov, *Kazakhstan*
- 77** PERINATAL BISPHENOL A IMPAIRS THE GUT MICROBIOTA ESTABLISHMENT AND MATURATION IN OFFSPRING
Ana López Moreno, *Spain*
- 88** EXPLORING THE ROLE OF BIFIDOBACTERIUM LONGUM SUBSP. INFANTIS M-63 IN SHAPING HEALTHY GUT MICROBIOTA AND ANTI-INFLAMMATION IN INFANTS
Chendong Xu, *Japan*
- 98** ECZEMA AND DYNAMICS OF EARLY-LIFE STOOL MICROBIOME IN CHINESE PRESCHOOL CHILDREN
Ting Fan Leung, *Hong Kong*
- 116** CHARACTERIZATION OF LACTO-N-TETRAOSE TRANSPORTER VARIANTS OF BIFIDOBACTERIUM AND THEIR RELEVANCE FOR ESTABLISHMENT OF THE GUT MICROBIOME DURING INFANCY
Mikiyasu Sakanaka, *Japan*
- 144** THE ROLE OF RESIDENTIAL GREEN ENVIRONMENT IN THE DEVELOPMENT OF GUT MICROBIOTA IN INFANCY – THE STEPS STUDY
Minka Ovaska, *Finland*
- 147** PREBIOTIC POTENTIAL OF VAGINAL LIMOSILACTOBACILLUS VAGINALIS BC17 DERIVATIVES
Barbara Giordani, *Italy*
- 164** HOST PROTEINS DRIVING GUT MICROBIOME MATURATION IN EARLY LIFE
Niels Van Best, *The Netherlands*
- 185** JOURNEY TO ADULTHOOD: INFANT GUT MICROBIOTA AND DIET CROSS PATHS IN THE BREAKDOWN OF DIETARY FIBRE
Evgenia Dikareva, *Finland*

Chair : Livia Emma, *Italy*

Topic 2: ENGRAFTMENT AND MATURATION OF HUMAN MICROBIOME IN EARLY LIFE

- 198** WHY DO BABIES CRY? EXPLORING THE ROLE OF THE GUT MICROBIOTA AND OTHER BIOPSYCHOSOCIAL FACTORS IN COLIC AND OTHER FUNCTIONAL GASTROINTESTINAL SYMPTOMS IN THE KOALA BIRTH COHORT STUDY
David Barnett, *The Netherlands*
- 221** HUMAN MILK METABOLITES ASSOCIATION WITH INFANT GUT MICROBIOME AND METABOLOME DEVELOPMENT
Heidi Isokääntä, *Finland*
- 248** THE INFLUENCE OF THE ENVIRONMENT ON HUMAN BREASTMILK AND INFANT GUT MICROBIOME COMPOSITION: A COHORT STUDY IN THE URBAN AMAZON, BRAZIL
Minseung Kim, *USA*
- 262** STOOL CONSISTENCY AND GUT MICROBIOME AND METABOLOME IN YOUNG CHILDREN: FINNBRAIN STUDY
Anna Aatsinki, *Finland*
- 263** THE INFANT MICROBIOTA HOPSCOTCHES BETWEEN COMMUNITY STATES TOWARDS MATURATION
Monika Schaubeck, *Germany*
- 289** DYNAMICS OF NORMAL AND POTENTIALLY PATHOGENIC GUT MICROBIOTA OF HEALTHY NEWBORNS
Asya Asenova, *Bulgaria*
- 291** GUT MICROBIOTA WELLBEING INDEX PREDICTS OVERALL HEALTH IN A COHORT OF 1000 INFANTS
Brandon Hickman, *Finland*
- 304** EARLY INFANT ORAL MICROBIOME COLONIZATION AND MATURATION IN DIVERSE SOCIOECONOMIC SETTINGS IN THE URBAN AMAZON, BRAZIL
Marina Quintas dos Santos, *Brazil*
- 396** ELUCIDATING THE ROLE OF PROBIOTICS IN SHAPING THE FUNCTIONAL LANDSCAPE OF THE GUT MICROBIOTA IN PRETERM INFANTS
Ali R. Zomorodi, *USA*

16:00 – 16:30

Poster Area 3

Chair: Maria Rescigno, *Italy***Topic 2: ENGRAFTMENT AND MATURATION OF HUMAN MICROBIOME IN EARLY LIFE**

- 412** SYSTEMS BIOLOGY ANALYSIS OF HOST-GUT MICROBIOME CO-METABOLISM IN EARLY LIFE
Almut Heinken, *France*
- 434** CONTINUOUS ANTIBIOTIC PROPHYLAXIS HAS LONG-LASTING EFFECTS ON THE GUT MICROBIOME STRUCTURE AND FUNCTIONALITY IN INFANTS WITH VESICoureTERAL REFLUX
Federica D'Amico, *Italy*
- 448** MATERNAL CELIAC DISEASE INFLUENCES EARLY-LIFE MICROBIAL COLONIZATION IN THE INFANT GUT VIA BREAST MILK MICROBIOME AND METABOLOME
Ali R. Zomorodi, *USA*
- 471** THE ORAL PLACENTA INFANT MICROBIOME STUDY (OPIUM): PERINATAL FACTORS AFFECT EARLY LIFE MICROBIOME ESTABLISHMENT
Kevin Linehan, *Ireland*
- 477** PRIORITY EFFECTS, NUTRITION AND HMO-METABOLISM DRIVE BIFIDOBACTERIUM LONGUM SUBSPECIES DYNAMICS IN THE INFANT GUT MICROBIOME
Nicholas Pucci, *The Netherlands*
- 480** EFFECTS OF PRENATAL AND PERINATAL PROBIOTICS ON P. GINGIVALIS-CHALLENGED MICE
Michel Messori, *Brazil*
- 498** IMPACT OF PRENATAL PREBIOTIC INTERVENTION ON HUMORAL IMMUNITY TO MATERNAL AND INFANT GUT MICROBIOTA DURING PREGNANCY AND EARLY LIFE
Dhilly Elise, *France*
- 502** INTEGRATED ANALYSIS OF COLOSTRUM BIOACTIVES: UNRAVELING THE IMPACT OF MATERNAL OBESITY ON CYTOKINES, METABOLITES, AND MICROBIOTA
July S. Gámez Valdez, *Mexico*
- 519** THE EFFECT OF MATERNAL PREBIOTIC SUPPLEMENTATION ON THE BREASTMILK MICROBIOME
Alicia Y. J. Tan, *Singapore*

16:00 – 16:30

Poster Area 4

Chair: : Romano Marabelli, *France***Topic 2: ENGRAFTMENT AND MATURATION OF HUMAN MICROBIOME IN EARLY LIFE**

- 525** SPECIES-LEVEL ANALYSIS OF BREAST MILK MICROBIOME USING CPN60-BASED SEQUENCING
Zahra Pakzad, *Canada*
- 545** RESTORATION OF GUT MICROBIOTA WITH A SPECIFIC SYNBIOTIC-CONTAINING INFANT FORMULA IN HEALTHY CHINESE INFANTS BORN BY CAESAREAN SECTION
Guus Roeselers, *The Netherlands*
- 576** ORAL AND FECAL MICROBIOME FROM PRETERM BABIES BORN FROM HYPERTENSIVE MOTHERS ARE CONTROLLED BY TIME IN NICU
Carla Taddei, *Brazil*
- 578** A METATAXONOMIC AND METABOLOMIC APPROACH REVEALS THE IMPACT OF MATERNAL MICROBIAL SUCCESSION ON INFANT MICROBIOME DEVELOPMENT
Mitali Inamdar, *India*
- 618** PHYLOGENETIC MIXED MODEL ANALYSIS OF INFANT GUT MICROBIAL SPECIES AGAINST A BROAD RANGE OF MATERNAL AND INFANT PHENOTYPES
Alexander Kurilshikov, *Russia*
- 642** EARLY INTESTINAL COLONIZATION, PERINATAL FACTORS, AND NEUROCOGNITIVE PROFILE IN A LONGITUDINAL COHORT OF CHILDREN
María Carmen Collado, *Spain*
- 643** IMPACT OF ANTIMICROBIAL USAGE ON GUT RESISTOME DEVELOPMENT FROM SIX WEEKS TO TWO YEARS OF AGE IN ZAMBIAN INFANTS, A PROSPECTIVE COHORT STUDY
Gonçalo J. Piedade, *The Netherlands*
- 648** PARALLELING EPIGENETIC PROFILES AND EARLY LIFE MICROBIAL COLONIZATION IN ASD PATIENTS AND IN AN ANIMAL MODEL OF ANTIBIOTIC-INDUCED BACTERIAL DEPLETION
Francesca Lembo, *Italy*

SUNDAY JUNE 23RD

E-Poster Session

08:20 – 09:00

Poster Area 1

Chair: Carla Fiorentini, *Italy***Topic 3: INFLUENCE OF NUTRITION ON HUMAN MICROBIOME**

- 36** CHOLESTEROL-LOWERING ACTIVITIES OF LACTOCOCCUS LACTIS JJLC-140 AND 167 AND THEIR INFLUENCES ON THE GUT MICROBIOME IN MICE
Jihye Yang, *South Korea*
- 44** LONG-TERM HABITUAL DIETARY FIBER INTAKE SINCE INFANCY AND GUT MICROBIOTA COMPOSITION IN YOUNG ADULTHOOD
Marja Heiskanen, *Finland*
- 49** RURAL GUT MICROBIOME MOSAICS: UNDERSTANDING THEIR IMPACT ON HEALTH STRUCTURES
Almagul Kushugulova, *Kazakhstan*
- 75** DIURNAL RHYTHMICITY OF FECAL MICROBIOTA AND METABOLITE PROFILES IN THE FIRST YEAR OF LIFE
Michael Vig Merino, *Germany*
- 82** EFFECT ON THE HUMAN GUT MICROBIOME OF ARONIA BERRY EXTRACT AND ISOLATED POLYPHENOL-RICH FRACTIONS IN AN IN VITRO COLON MODEL
María Ruiz-Rico, *Ireland*
- 87** REVEALING NUTRITIONAL COMPETITION OF BIFIDOBACTERIA IN THE HUMAN GUT: INSIGHTS FROM MICROSCOPIC LOCALIZATION AND DIETARY INTERVENTION
Yusuke Nagara, *Japan*
- 91** GUT ENVIRONMENTAL FACTORS EXPLAIN INTER- AND INTRA-INDIVIDUAL VARIATIONS IN THE GUT MICROBIOME COMPOSITION AND METABOLISM
Nicola Procházková, *Czech Republic*
- 102** EFFECT OF A POLYPHENOL-RICH DIETARY PATTERN ON OLDER SUBJECTS WITH HIGHER LEVELS OF INFLAMMATORY MARKERS
Giorgio Gargari, *Italy*
- 153** ELUCIDATION OF BIFIDOBACTERIAL GROWTH MECHANISMS IN ACACIA SEYAL GUM ARABIC: INSIGHTS FROM A NOVEL FUNCTIONAL GLYCOSYL HYDROLASE
Yuki Sasaki, *Japan*

- 200** INFANT AND TODDLER PRODUCTS SUPPLEMENTED WITH 5-HMOS FED FROM BIRTH TO 15 MONTHS MODULATE GUT-MICROBIOME MATURATION ASSOCIATED WITH REDUCED ANTIBIOTICS USAGE AND RESPIRATORY TRACT INFECTIONS
Shaillay Kumar Dogra, *Swiss*
- 206** THE PRESENCE OF ENTEROCOCCUS FAECIUM IN THE MICROBIOME OF FERMENTED OCTOPUS AND ITS GENOMIC CHARACTERIZATION
Yejin Choi, *South Korea*
- 208** LACTIPLANTIBACILLUS PLANTARUM ORIGINATED FROM THE KOREAN FERMENTED FOOD MICROBIOME AS A POTENTIAL CANDIDATE FOR ENHANCING FEMALE REPRODUCTIVE TRACT HEALTH
Juyoun Kang, *South Korea*

08:20 – 09:00

Poster Area 2

Chair: Roberto Berni Canani, *Italy***Topic 3: INFLUENCE OF NUTRITION ON HUMAN MICROBIOME**

- 225** EXTRA VIRGIN OLIVE OIL EFFECT ON HEALTH AND ITS IMPACT ON METABOLISM, INFLAMMATION AND MICROBIOTA
Marta Correia, *Portugal*
- 226** CHRONODIET: A RANDOMISED CONTROLLED TRIAL TO EVALUATE THE EFFECTS OF A CHRONOTYPE-ADAPTED DIET ON GUT MICROBIOTA COMPOSITION AND FUNCTION IN OVERWEIGHT/OBESE SUBJECTS
Simone Baldi, *Italy*
- 230** A YOUNG CHILD FORMULA SUPPLEMENTED WITH L. REUTERI AND GALACTO-OLIGOSACCHARIDES MODULATES THE COMPOSITION AND FUNCTION OF THE GUT MICROBIOTA SUPPORTING BONE AND MUSCLE DEVELOPMENT IN TODDLERS
Paula Rodriguez-Garcia, *Denmark*
- 231** CAN CAPRIC ACID-RICH MEDIUM-LONG-MEDIUM CHAIN TYPE STRUCTURED LIPIDS TO MODULATE THE MICROBIOTA AND METABOLIC ALTERATIONS INDUCED BY A HIGH-FAT DIET FED MICE?
Angie Vanessa Caicedo Paz, *Colombia*
- 240** ORAL IRON SUPPLEMENTATION PROMOTES TUMORIGENESIS IN APCMIN/+ MICE RECEIVING FECAL MICROBIOTA TRANSPLANTATION FROM PATIENTS WITH COLORECTAL CANCER
Manuela Santos M., *Canada*
- 272** ALSO LOW DOSAGES OF PREBIOTIC GALACTO-OLIGOSACCHARIDES SUPPORT GUT MICROBIOTA COMPOSITION IN HEALTHY WOMEN
Ellen Looijesteijn, *The Netherlands*

- 274** COFFEE INTAKE IS RELATED TO GUT METAGENOMICS AND BLOOD METABOLOMICS IN OVER 44,000 HUMAN SAMPLES
Paolo Manghi, *Italy*
- 285** ECOLOGICAL DETERMINANTS OF INDIVIDUALIZED EFFECTS OF DIETARY FIBER ON THE HUMAN GUT MICROBIOME
Daria Nikolaeva, *Russia*
- 355** INTERACTION EFFECT BETWEEN NAFLD SEVERITY AND HIGH CARBOHYDRATE DIET ON GUT MICROBIOME ALTERATION AND HEPATIC DE NOVO LIPOGENESIS
Hyena Kang, *South Korea*
- 356** PREBIOTIC AND ANTI-OBESITY EFFECTS OF PASTINACA SATIVA THROUGH REDUCTION OF METABOLIC ENDOTOXEMIA
Ho-Young Park, *South Korea*
- 449** EFFECT OF SEA BUCKTHORN BERRY POMACE ON CHANGES IN THE COMPOSITION OF THE GUT MICROBIOTA IN THE SIMULATOR OF THE HUMAN INTESTINAL MICROBIAL ECOSYSTEM (SHIME®)
Aušra Šipailienė, *Lithuania*
- 468** BEYOND THE BENEFITS OF FECAL MICROBIOTA TRANSPLANTATION FOR TREATMENT OF RECURRENT CLOSTRIDIODES DIFFICILE INFECTION: RESTORATION OF DYSBIOSIS IN PATIENT WITH ARTIFICIAL ENTERAL NUTRITION BY PEG
Marialuisa Novi, *Italy*

08:20 – 09:00

Poster Area 3

Chair: : Ruggiero Francavilla, *Italy***Topic 3: INFLUENCE OF NUTRITION ON HUMAN MICROBIOME**

- 483** PROTEASE DISTRIBUTION IN BACTEROIDES SPECIES: IMPLICATIONS FOR GENOME-SCALE METABOLIC MODEL APPROACH
Emmanuelle Maguin, *France*
- 485** NUTRITIONAL ASSESSMENT OF PREGNANT WOMEN WITH GESTATIONAL DIABETES AND ITS ASSOCIATION WITH FUSOBACTERIUM SPP PRESENCE IN IN ORAL AND FAECAL SAMPLES
Moises Ramos-Solano, *Mexico*
- 500** ASSOCIATIONS AMONG HIGH-COCOA CHOCOLATE CONSUMPTION, GUT MICROBIOTA AND LIFESTYLE DISEASE USING A LARGE JAPANESE COHORT
Shin Fujiwara, *Japan*
- 508** EFFECT OF MATERNAL TOXIC SUBSTANCES CONSUMPTION ON THE BREAST MILK MICROBIOTA
Jesús Alonso Amezcua López, *Mexico*

- 544** METAPROTEOMICS REVEAL ALTERED GUT MICROBIOME FUNCTION AND DIFFERENTIAL RESPONSES TO DIET IN CROHN'S DISEASE PATIENTS ACCORDING TO DISEASE LOCATION
Stefano Levi Mortera, *Italy*
- 546** TRACING GUT MICROBIOME TRAITS ASSOCIATED WITH THE MEDITERRANEAN DIET BACK TO ROMAN TIMES
Simone Rampelli, *Italy*
- 552** EFFECT OF THE MEDITERRANEAN DIET ON THE FECAL MICROBIAL COMPOSITION IN THE FIRST TRIMESTERS OF A COHORT OF PREGNANT WOMEN: THE BIEMOOD STUDY
David Felipe Garcia Mendez, *Australia*
- 558** EFFECT OF LOW-CALORIE SWEETENERS ON BACTERIAL QUORUM SENSING: REPERCUSSIONS ON THE GUT MICROBIOME
Fabiana Hoffmann Sarda, *Brazil*
- 568** IMPACT OF HUMAN MILK OLIGOSACCHARIDES IN INFANT GUT MICROBIOTA USING SYNTHETIC MICROBIAL CONSORTIA AND GUT MICROPHYSIOLOGICAL SYSTEMS
Jianbo Zhang, *The Netherlands*
- 575** TAILORING SENIOR DIETS: USING AN IN VITRO FECAL FERMENTATION MODEL FOR AN ADAPTED INSTANT SOUP/PURÉE DESIGN – THE DIET65+ PROJECT
Ana Sofia Salsinha, *Portugal*
- 583** DUAL-STUDY EXPLORATION: IMPACT OF EXTRACTION METHODS ON BIOAVAILABILITY, HEALTH-RELATED PROPERTIES, AND MATRIX VARIATIONS
Marta Coelho, *Portugal*
- 587** A RANDOMIZED, DOUBLE-BLIND, PLACEBO-CONTROLLED TRIAL: EFFICACY OF OPUNTIA FICUS-INDICA PREBIOTIC SUPPLEMENTATION IN SUBJECTS WITH GUT DYSBIOSIS
Marta Mellai, *Italy*

08:20 – 09:00

Poster Area 4

Chair : Antonio Gasbarrini, *Italy***Topic 3: INFLUENCE OF NUTRITION ON HUMAN MICROBIOME**

- 588** EXPLORING CAROTENOID-INTESTINAL MICROBIOTA INTERPLAY: IN VITRO INSIGHTS INTO GASTROINTESTINAL INTERACTIONS AND HEALTH-ENRICHING EFFECTS
Helena R. Rocha, *Portugal*
- 602** LACTICASEIBACILLUS PARACASEI-DERIVED POSTBIOTICS COMPONENTS ARE ABLE TO MODULATE IMMUNE RESPONSE AND EPITHELIAL PERMEABILITY IN HUMAN ENTEROCYTES
Marica Cozzolino, *Italy*
- 607** POSTBIOTIC EFFECTS ELICITED BY HEAT-INACTIVATED LACTICASEIBACILLUS RHAMNOSUS GG AGAINST COW'S MILK ALLERGY IN HUMAN CELLS
Marica Cozzolino, *Italy*
- 621** THE IMPACT OF UNNECESSARY GLUTEN-FREE DIET ON GUT MICROBIOTA
Anna Costanzini, *Italy*
- 623** CONTROLLED LOW FIBER DIET PROMOTES MUCIN-DEGRADING ACTIVITY IN HEALTHY HUMANS
Erica T. Grant, *Luxembourg*
- 631** MATERNAL DIET SHAPES INFANT MICROBIOTA AND DEFENSIVE CAPACITY AGAINST INFECTIONS IN EARLY LIFE VIA DIFFERENTIAL BREAST MILK COMPOSITION
María Carmen Collado, *Spain*
- 637** IMPACT OF GASTROINTESTINAL TRACT ON MUSHROOM BIOMASS: DECIPHERING THEIR POTENTIAL ON GUT MICROBIOTA MODULATION
Helena Araújo-Rodrigues, *Portugal*
- 640** DIET ALTERS GUT MICROBE-HOST INTERACTIONS
Noa Mandelbaum, *Israel*
- 644** THE MIND DIET IS ASSOCIATED WITH ANTI-INFLAMMATORY GUT MICROBIAL PATTERNS IN A PARKINSON'S DISEASE COHORT
Avril Metcalfe-Roach, *Canada*
- 653** GUT MICROBIOME, ITS ASSOCIATION WITH DEPRESSION AND THE ROLE OF THE MEDITERRANEAN DIET
Maria Angeli, *Greece*

- 657** GUT MICROBIOME LIPOPOLYSACCHARIDE BIOSYNTHESIS DIFFERENCES IN OMNIVORES AND VEGANS, AND THEIR IMPACT ON CARDIOMETABOLIC HEALTH
Daniel Barreto de Melo, *Brazil*

- 666** INDIAN HUMAN MICROBIOME INITIATIVE (IHMI) TO STUDY INTERKINGDOM MICROBIOME INTERACTIONS WITH DIET OF HEALTHY ADULTS FROM SELECT TRIBAL AND NON-TRIBAL COMMUNITIES
Dhiraj Dhotre, *India*

MONDAY JUNE 24TH

E-Poster Session

08:00 – 09:00

Poster Area 1

Chair : Alfredo Guarino, *Italy***Topic 4: MICROBIOTA & DISEASES**

- 6** GUT MICROBIOTA DETERMINES WHETHER PREDIABETES CAN BENEFIT FROM DIETARY FIBER INTERVENTION
Chenhong Zhang, *China*
- 13** ORAL MICROBIOTA IN AUTISTIC CHILDREN: DIAGNOSIS-RELATED DIFFERENCES AND ASSOCIATIONS WITH CLINICAL CHARACTERISTICS
Margaux Evenepoel, *Belgium*
- 15** METAGENOMIC MICROBIAL INTERACTOME IN PANCREATIC DISEASES COMPARED TO HEALTHY INDIVIDUALS
Laura Vilà-Quintana, *Spain*
- 21** MICROBIOTA AND TUMOR LOCATION IN COLORECTAL CANCER
Sofia Elena Tesolato, *Spain*
- 22** MICROBIOTA BIOMARKERS WITH POTENTIAL CLINICAL USEFULNESS IN THE DIAGNOSIS OF COLORECTAL CANCER
Juan Vicente-Valor, *Spain*
- 30** ANTIDEPRESSANTS AND THE COMPOSITION AND FUNCTION OF THE GASTROINTESTINAL MICROBIOME IN WOMEN LIVING WITH FIBROMYALGIA
Joanna Harnett, *Australia*
- 32** MULTIOMICS PROFILING FOR A COMPREHENSIVE UNDERSTANDING OF IMMUNE AND MICROBIAL SIGNATURES IN PEDIATRIC INFLAMMATORY BOWEL DISEASE
Souhaila Al Khodor, *USA*
- 35** DYSBIOTIC MICROBIOME IMPAIRS HEART FUNCTION BY DISRUPTING CIRCADIAB RHYTHM AND MAGNESIUM HOMEOSTASIS IN INFLAMMATORY BOWEL DISEASE
Qingjie Li, *USA*
- 37** THE LINKS BETWEEN GUT MICROBIOTA, CIRCULATING CYTOKINES, AND ALZHEIMER'S DISEASE
Sholpan Askarova, *Kazakhstan*

- 42** DYSBIOSIS OF THE GUT MICROBIOME IS RELEVANT TO ORAL MICROBIOME PROFILE IN PATIENTS WITH PERIODONTITIS
Kazuhiya Yamazaki, *Japan*
- 45** GUT MICROBIOME-SERUM METABOLOME INTERPLAY IN INDIVIDUALS WITH RHEUMATOID ARTHRITIS
Madiyar Nurgaziyev, *Kazakhstan*
- 47** CROSSTALK BETWEEN GUT MICROBIOME AND CYTOKINES IN RHEUMATOID ARTHRITIS
Argul Issilbayeva, *Kazakhstan*
- 48** GUT MICROBIOME AT THE SCOPE OF PROBIOTIC THERAPY IN RHEUMATOID ARTHRITIS PATIENTS
Assel Meiramova, *Kazakhstan*
- 52** VIROME, INFLAMMATION, AND METABOLISM- DERIVED MOLECULES FOR THE STRATIFICATION OF AMYOTROPHIC LATERAL SCLEROSIS PATIENTS
Elena Niccolai, *Italy*
- 53** UPDATE ON THE HUMAN ORAL MICROBIOME AND RISK OF COLORECTAL CANCER (CRC) FROM THREE PROSPECTIVE COHORT STUDIES
Rashmi Sinha, *USA*
- 55** GUT MICROBIOME'S ROLE IN CHRONIC HEART FAILURE DEVELOPMENT
Zharkyn Jarmukhanov, *Kazakhstan*
- 56** ANTIBIOTIC USE IN THE PAST EIGHT YEARS IS ASSOCIATED WITH THE GUT MICROBIOTA IN A POPULATION-BASED STUDY IN SWEDEN
Gabriel Baldanzi, *Sweden*
- 60** DISCOVERY OF NOVEL CELLULAR MECHANISMS OF VASCULAR ENDOTHELIAL BARRIER ENHANCEMENT IN RESPONSE TO BACTERIAL METABOLITES ORIGINATING FROM HEALTHY GUT MICROBIOTA
Garcia-Weber Diego, *France*

08:00 – 09:00

Poster Area 2

Chair: : Maria Vasile, *Belgium*

Topic 4: MICROBIOTA & DISEASES

- 61** COMPOSITIONAL AND DIVERSITY CHANGES IN RAT INTESTINAL MICROBIOME INDUCED BY $^{31}\text{SiO}_2$ PARTICLE RADIATION
Nurislam Mukhanbetzhanov, *Kazakhstan*
- 62** DISCOVERY OF HUMAN GUT BACTERIA THAT PRODUCE SEROTONIN AND PROMOTE COLONIC INNERVATION
Chiara H. Moretti, *Sweden*

- 63** DATA-DRIVEN APPROACH TO ANTIBIOTIC DISCOVERY
Saar Shoer, *Israel*
- 64** INVESTIGATION INTO THE GUT MICROBIOME IN ACUTE MYOCARDIAL INFARCTION.
Zhanel Mukhanbetzhanova, *Kazakhstan*
- 65** COMPREHENDING THE COMPOSITION OF GUT MICROBIOTA IN CASES OF ACUTE MYOCARDIAL INFARCTION
Shynggys Sergazy, *Kazakhstan*
- 69** THE MICROBIAL COMMUNITIES IN INDIVIDUALS WITH INFLAMMATORY BOWEL DISEASES (IBD) COMPARED TO HEALTHY HOUSEHOLD INDIVIDUALS
Sybat Seidulla, *Kazakhstan*
- 70** IDENTIFICATION OF OXYTOCIN-ANTIGEN MIMETIC PROTEINS IN LACTOBACILLUS SALIVARIUS AND THEIR FUNCTIONAL VALIDATION IN AN ANIMAL MODEL OF AUTISM
Sergueï Fetissov, *France*
- 71** EFFECTS OF ENTEROBACTERIAL CLPB PROTEIN IMMUNIZATION ON FEEDING AND LOCOMOTOR BEHAVIOR AND GUT MICROBIOTA COMPOSITION IN MICE WITH ACTIVITY-BASED ANOREXIA
Sergueï Fetissov, *France*
- 73** THE ROLE OF THE INTESTINAL MICROBIOME IN DEPRESSION AND IMPACT FOR SUICIDE
Alibek Kossumov, *Kazakhstan*
- 78** ATF6 ACTIVATION ALTERS COLONIC LIPID METABOLISM CAUSING TUMOR-ASSOCIATED MICROBIAL ADAPTATION
Alessandra Riva, *Germany*
- 79** IMPLICATION OF A BACTERIAL QUORUM SENSING MOLECULE IN INFLAMMATION AND INTESTINAL BARRIER FUNCTION IN INFLAMMATORY BOWEL DISEASE
Raphaëlle Liquard, *France*
- 80** ALTERED GASTRIC MICROBIOME IN DRUG RESISTANCE HELICOBACTER PYLORI
Astri Dewayani, *Indonesia*
- 83** A PILOT STUDY OF THE ORAL MICROBIOME AND BREAST CANCER RISK IN THE NIH-AARP DIET AND HEALTH STUDY
Emily Vogtmann, *USA*
- 84** THE ROLE OF HOST GENES AND MICROBES IN MECHANISMS OF RESPONSE TO THERAPY IN RECTAL CANCER
Adèle Hegoburu, *New Zealand*

- 89** EXPLORING GUT MICROBIOME DIFFERENCES IN ALOPECIA AREATA WITH AND WITHOUT COEXISTING HASHIMOTO'S THYROIDITIS
Zhussipbek Mukhatayev, *Kazakhstan*
- 90** STUDY OF IMMUNE-TARGETED GUT MICROORGANISMS IN ALOPECIA AREATA
Nurlubek Katkenov, *Kazakhstan*
- 92** HUMAN MICROBIOTA TRANSPLANTATION IN A MOUSE MODEL FOR AUTISM: EFFECT OF A PROBIOTIC INTERVENTION
Lucía N. Peralta Marzal, *The Netherlands*
- 95** EVALUATION OF NUTRITION-MICROBIOME-METABOLOME AXIS IN GUT INFLAMMATION PROCESSES
Indre Aleknaviciene, *Lithuania*

08:00 – 09:00

Poster Area 3

Chair: Maria Rescigno, *Italy***Topic 4: MICROBIOTA & DISEASES**

- 96** PREDICTING RELAPSE IN INFLAMMATORY BOWEL DISEASE USING MULTI-OMICS AND MACHINE LEARNING
Jill O'Sullivan, *Ireland*
- 97** RELATIONSHIP BETWEEN EARLY-ONSET ECZEMA AND SKIN MICROBIAL DIVERSITY AND COMPOSITION IN A CHINESE BIRTH COHORT
Ting Fan Leung, *Hong Kong*
- 101** MICROBIAL NICHES AND MOLECULAR MIMICRY IN THE AETIOLOGY OF TYPE 1 DIABETES
Holly L. Roach, *UK*
- 103** MICROBIOTA-GUT-ORAL AXIS ANALYSIS IN ST-ELEVATION MYOCARDIAL INFARCTION IN MEXICAN PATIENTS
Oscar R. Aguilar Villegas, *Mexico*
- 104** GUT MICROBIOME IN CHILDREN WITH CONGENITAL HEART DISEASE AFTER CARDIOPULMONARY BYPASS SURGERY (GUMIBEAR STUDY)
Fatma Koc, *Ireland*
- 105** CHANGES IN IGA-COATED GUT MICROBIAL STRAINS IN PATIENTS WITH MULTIPLE SCLEROSIS FOLLOWING B CELL DEPLETION THERAPY
Vinod Kumar Gupta, *USA*
- 106** THE GUT MICROBIOTA DICTATES COLONIC HEALING IN COLORECTAL CANCER SURGERY BY MODULATING THE MUCOSAL LEVELS OF PRO-INFLAMMATORY CYTOKINES
Manuela Santos M., *Canada*

- 113** EXPLORE A NOVEL NON-ANTIBIOTIC TREATMENT ON BACTERIAL VAGINOSIS VIA PALAVIGOR CHARMING GEL
Qiongjiong Zhang, *China*
- 118** ROLE OF PATHOGENIC AGENTS IN DEVELOPMENT OF INFECTIOUS HYDROCEPHALUS IN SUB SAHARAN AFRICA
Mercedeh Movassagh, *USA*
- 123** SMALL INTESTINAL MICROBIOME IS AN IMPORTANT DETERMINANT OF DIARRHEA IN A SUBSET OF PATIENTS
Isin Yagmur Comba, *USA*
- 127** DONOR-DERIVED BACTERIAL SPECIES AND PATIENT-DONOR SIMILARITY CONTRIBUTE TO THE EFFICACY OF ANTIBIOTIC FMT IN ULCERATIVE COLITIS
Dai Ishikawa, *Japan*
- 130** AEROBIC BACTERIAL GROUP AS AN EARLY-STAGE BIOMARKER FROM FECAL SAMPLES OF PATIENTS WITH COLORECTAL CANCER WITHOUT DISTANT METASTASIS
Donghyoun Lee, *South Korea*
- 132** META-ANALYSIS OF SHOTGUN METAGENOMES AND METABOLOMIC ANALYSES REVEAL THAT DECREASED FECAL BIOSYNTHESIS OF RIBOFLAVIN AND BIOTIN REDUCE SHORT-CHAIN FATTY ACIDS AND POLYAMINES IN THE GUT IN PARKINSON'S
Hiroshi Nishiwaki, *Japan*
- 136** ANALYSIS OF NASAL MICROBIOME IN CHRONIC RHINOSINUSITIS PATIENTS WITH NASAL POLYPS
Min-Jung Lee, *South Korea*
- 137** THE HUMAN NASAL MICROBIOME: A PERSPECTIVE STUDY DURING SARS-COV-2 PANDEMIC IN MALTA
David Pinzauti, *Malta*
- 142** ORAL FUNGAL COLONIZATION AND ITS ASSOCIATED BACTERIAL COMPOSITION AND HEALTH STATUS IN ELDERLY ADULTS
Mikari Asakawa, *Japan*
- 146** EXPLORING THE GUT MICROBIOME AND MYCOBIOME IN GLIOBLASTOMA PATIENTS
Michaela Herz, *Germany*
- 151** ORAL MICROBIOME PROFILES ACROSS PERIODONTAL HEALTH AND VARIOUS STAGES OF PERIODONTAL DISEASE: A SHOTGUN METAGENOMIC STUDY
Muhammed Manzoor, *Finland*

Chair: Alessio Fasano, USA

Topic 4: MICROBIOTA & DISEASES

- 159** IDENTIFICATION OF POTENTIALLY SHARED AUTOANTIBODIES IN ALOPECIA AREATA AND HASHIMOTO'S THYROIDITIS THROUGH PHIP-SEQ ASSAY
Artur Kovenskiy, *Kazakhstan*
- 160** ANALYSIS OF SEROTYPE, GENOTYPE AND VIRULENCE GENE COMPOSITION OF GBS
Zhen Zeng, *China*
- 162** A PERSONALISED CANCER-ON-CHIP MODEL FOR THE STUDY OF GUT MICROBIOTA IN COLORECTAL CANCER INITIATION AND PROGRESSION
Polina Turbina, *Luxembourg*
- 165** DETECTION OF DYSBIOSIS AND INCREASED GUT PERMEABILITY AND INFLAMMATORY CYTOKINES IN COVID-19 PATIENTS
Larissa S. Souza, *Brazil*
- 166** EXPLORING AMMONIA OXIDIZING ARCHAEA ON HUMAN SKIN: UNVEILING DIVERSITY, FUNCTIONS, AND IMPLICATIONS FOR HEALTH
Alexander Mahnert, *Austria*
- 170** COMBINED ANALYSIS OF GUT MICROECOLOGICAL CHARACTERISTICS IN ENDOMETRIAL CARCINOMA PATIENTS USING 16S RRNA SEQUENCING AND NON-TARGETED METABOLOMICS
Yuhui Sun, *China*
- 171** RESPICAT: RESPIRATORY CATALOG OF METAGENOME-ASSEMBLED GENOMES (MAGS)
Tejus Shinde, *Austria*
- 173** GUT MICROBIOTA AND ENDOMETRIAL CANCER: RESEARCH PROGRESS ON THE PATHOGENESIS AND APPLICATION
Yuhui Sun, *China*
- 175** GLIPTIN INHIBITION HETEROGENEITY ON THE DPP4-LIKE ENZYMES ENCODED IN THE HUMAN INTESTINAL MICROBIOME
Paula Hernández-Calderón, *Spain*
- 176** THE ROLE OF THE INTESTINAL MICROBIOTA DURING TAMOXIFEN THERAPY IN BREAST CANCER PATIENTS
Lars Hillege, *The Netherlands*
- 177** IDENTIFICATION OF MICROBIAL BIOMARKERS FOR RELAPSE PREDICTION IN PAEDIATRIC ULCERATIVE COLITIS
Maria Kulecka, *Ireland*

- 179** RESEARCH STATUS OF INTESTINAL FLORA IN INSULIN RESISTANCE INDUCED ENDOMETRIAL CARCINOMA
Yuhui Sun, *China*
- 182** THE DPP4-LIKE ACTIVITY ENCODED IN THE HUMAN GUT MICROBIOME SUPPORTS THEIR FUNCTIONAL MIMICRY TO CONTROL HOST METABOLISM AND BEHAVIOUS
Alfonso Benitez-Paez, *Spain*
- 183** UNVEILING THE GUT-LUNG AXIS: A NEW ACTION WAY IN MICROBIOME DYNAMICS UNDER NANOPLASTIC EXPOSURE
Elena Niccolai, *Italy*
- 184** THE CONTRIBUTION OF INTERCONTINENTAL TRAVEL ON THE RESILIENCE AND STABILITY OF THE GUT MICROBIOTA
Jiyang Chan, *The Netherlands*
- 188** LACTOBACILLUS AND BIFIDOBACTERIUM DIVERSITY IN GABONESE WOMEN BREASTMILK : PERSPECTIVE FOR ANTIBIOTHERAPY
Lokossou Gatien, *Benin*
- 189** A PREBIOTIC FIBER MIXTURE INCREASED BENEFICIAL GUT BACTERIA IN FECAL SAMPLES FROM COLORECTAL CANCER PATIENTS
Janine Ziemons, *Germany*
- 191** POTENTIAL OF LACTIPLANTIBACILLUS PLANTAURM ISOLATED FROM ORANGE TO COUNTERACT INFECTIOUS DISEASES
Asia Pizzi, *Italy*
- 196** MITOCHONDRIAL PERTURBATION OF THE EPITHELIUM CAUSES MICROBIAL DYSBIOSIS AND UNRESOLVED TISSUE INJURY IN INTESTINAL INFLAMMATION
Doriane Aguanno, *Germany*

11:00 – 11:30

Poster Area 1

Chair: : Antonio Gasbarrini, *Italy***Topic 4: MICROBIOTA & DISEASES**

- 197** EFFECTS OF AKKERMANSIA MUCINIPHILA IN DEPRESSION AND COGNITIVE BEHAVIORS IN RATS
Leclerc Marion, *France*
- 201** EFFECT OF EARLY LIFE GASTROINTESTINAL INFECTION ON GUT MICROBIOTA, NEUROGENESIS AND BEHAVIOUR
Mahebal Tabusi, *Canada*
- 202** EXPLORING MULTI-OMIC CHANGES WITH WEIGHT LOSS TREATMENT IN METABOLIC DYSFUNCTION-ASSOCIATED STEATOHEPATITIS
Sandi Yen, *UK*
- 203** MICROBIOME AND HOST GENE EXPRESSION IN EARLY-ONSET COLORECTAL CANCER
Arielle Kae Sulit, *New Zealand*
- 204** IDENTIFYING NOVEL DRIVER BACTERIA OF CARDIOVASCULAR DISEASE
Christopher L. Gentile, *USA*
- 210** AGE-RELATED DYNAMICS OF METHANOGENIC ARCHAEA IN THE HUMAN GUT MICROBIOME: IMPLICATIONS FOR LONGEVITY AND HEALTH
Rokhsareh Mohammadzadeh, *Austria*
- 211** MICROBIAL MYSTERIES: DECIPHERING METHANOGENIC ARCHAEA'S IMPACT ON GASTROINTESTINAL HEALTH
Christina Kumpitsch, *Austria*
- 212** INTEGRATED METAGENOMIC-METAPROTEOMIC PIPELINE FOR BIOMARKER DISCOVERY IN ACUTE-ON-CHRONIC LIVER FAILURE
Peter Treit, *Hungary*
- 216** DEVELOPMENT OF A GENOME-SCALE METABOLIC MODEL CATALOG FOR THE MURINE GUT MICROBIOME (MCMURGUT)
Torben Kuehnast, *Germany*
- 217** BACTERIOPHAGE TRANSLOCATION ACROSS THE INTESTINAL BARRIER IN CROHN'S DISEASE
Clara Douadi, *France*
- 219** SARS-COV-2 INFECTION AND GUT MICROBIOTA IMPLICATION IN PAEDIATRIC PATIENTS
Elena Franchitti, *Italy*

11:00 – 11:30

Poster Area 2

Chair: Gianluca Ianiro, *Italy***Topic 4: MICROBIOTA & DISEASES**

- 222** MOLECULAR NETWORK ANALYSIS OF THE CROSS-TALK BETWEEN GENETICS, BRAIN GENE ACTIVITY AND GUT MICROBIOTA IN AUTISM SPECTRUM DISORDER
Alessandra Mezzelani, *Italy*
- 223** FIRST EXPLORATION OF THE ALTERED MICROBIAL GUT-LUNG AXIS IN THE PATHOGENESIS OF HUMAN REFRACTORY CHRONIC COUGH
Francesco Cei, *Italy*
- 227** TIMING MATTERS: LATE, BUT NOT EARLY, EXERCISE TRAINING AMELIORATES MAFLD AND PARTLY MODULATES THE GUT-LIVER AXIS
Artemiy Kovynev, *Russia*
- 228** VAGINAL MICROBIOTA CHANGES OF GESTATIONAL DIABETES MELLITUS PREGNANT WOMEN IN DIFFERENT GESTATIONAL WEEKS AND ITS INFLUENCE ON PREGNANCY OUTCOMES: A PROSPECTIVE COHORT STUDY
XINHUI YANG, *China*
- 232** MICROBIOME-METABOLOME ANALYSIS IDENTIFIES DISTINCT PROFILES IN PATIENTS WITH ANOREXIA NERVOSA
José C. Clemente, *USA*
- 233** BIOLOGICALLY RELEVANT FEATURES IN THE DISTINCTLY STABLE GUT OF MELANOMA PATIENTS WITH COMPLETE RESPONSE TO ANTI-PD1 IMMUNOTHERAPY
Angeli Dominique Macandog, *Italy*
- 234** THE HUMAN ORAL MICROBIOME AND CAUSE-SPECIFIC MORTALITY RISK IN THREE PROSPECTIVE COHORT STUDIES
Yukiko Yano, *USA*
- 235** FUNCTIONAL METAGENOMICS REVEALS MICROBIAL GENE PRODUCTS THAT AUGMENT ANTI-PD-1 CANCER IMMUNOTHERAPY
Puspendu Sardar, *UK*
- 238** PEDIATRIC HIGH-RISK ACUTE LYMPHOBLASTIC LEUKEMIA: GUT MICROBIOTA CHARACTERIZATION
Regiane N. Spalanzani, *Brazil*
- 239** THE ROLE OF THE GUT MICROBIOME IN IMMUNOTHERAPY RESPONSE: LESSON OF AN URUGUAYAN COHORT
Florencia Peñalba, *Uruguay*
- 242** EXCLUSIVE ENTERAL NUTRITION INITIATES PROTECTIVE MICROBIOME CHANGES TO INDUCE REMISSION IN PEDIATRIC CROHN'S DISEASE
Deborah Häcker, *Germany*

Chair: Roberto Berni Canani, *Italy*

Topic 4: MICROBIOTA & DISEASES

- 243** ROLE OF BARNESIELLA AS A POSSIBLE MEDIATOR INVOLVED IN INDUCED IDIOSYNCRATIC LIVER DAMAGE CAUSED BY AMOXICILLIN-CLAVULANATE
Alba González-Robles, *Spain*
- 244** TRANSFER OF FECAL MICROBIOTA PROFILES FROM PATIENTS WITH AMOXICILLIN-CLAVULANATE INDUCED HEPATOTOXICITY DETERMINES MICROBIAL PROFILES IN GERM-FREE MICE
Alba González-Robles, *Spain*
- 245** INTERACTION BETWEEN GUT MICROBIOTA AND THE IMMUNE SYSTEM IN AUTISM: HIJACKED IMMUNE SYSTEM INDUCES CHANGES ALONG THE GUT-BRAIN AXIS
Naika Prince, *Swiss*
- 247** THE BLOOD VIROME IN CROHN'S DISEASE
Quentin Lamy-Besnier, *France*
- 249** EFFECT OF FECAL MICROBIOTA TRANSPLANTATION FROM CHILDREN WITH AUTISM IN GERM-FREE MICE: IMPORTANCE OF GENETIC BACKGROUND AND GASTROINTESTINAL SYMPTOMS
Lea Roussin, *France*
- 251** BACTERIAL LIPOPOLYSACCHARIDE ACTIVITY IN PATIENTS WITH COLORECTAL POLYPS
Jessica Permain, *New Zealand*
- 252** BACTERIAL LIPOPOLYSACCHARIDE MODULATES METHYLATION IN COLORECTAL CANCER
Jessica Permain, *New Zealand*
- 253** BACTERIAL LIPOPOLYSACCHARIDE MODULATES IMMUNE CHECKPOINT PROTEIN EXPRESSION IN COLORECTAL CANCER
Jessica Permain, *New Zealand*
- 254** THE MICROBIAL LANDSCAPE OF COLORECTAL POLYPS
Jessica Permain, *New Zealand*
- 259** MICROBIOME ANALYSIS IN ADULT ACUTE APPENDICITIS
Arielle Kae Sulit, *New Zealand*

11:00 – 11:30

Poster Area 4

Chair: Maria Rescigno, *Italy***Topic 4: MICROBIOTA & DISEASES**

- 260** BACTERIAL LIPOPOLYSACCHARIDES INFLUENCE IMMUNE RESPONSES IN THE MICROENVIRONMENT OF COLORECTAL CANCER
Arielle Kae Sulit, *New Zealand*
- 261** THE TUMOUR MICROBIOME AND MOLECULAR MECHANISMS INFLUENCE RESPONSE TO RADIOTHERAPY IN RECTAL CANCER
Arielle Kae Sulit, *New Zealand*
- 266** AMPLICON BASED MICROBIOTA ANALYSES OF AIRWAY SAMPLES IMPROVES DIAGNOSTICS OF PATIENTS WITH NOSOCOMIAL PNEUMONIA IN ICU
Xiaohui Chen Nielsen, *Denmark*
- 268** PREDICTION OF GLYCEMIC RESPONSES BASED ON GUT MICROBIOTA: TOWARDS PRERSONALIZED NUTRITION
Hiroka Sakanaka, *Japan*
- 275** FECAL MICROBIAL LOAD IS A MAJOR DETERMINANT OF GUT MICROBIOME VARIATION AND A CONFOUNDER FOR DISEASE ASSOCIATIONS
Suguru Nishijima, *Germany*
- 276** THE ROLE OF THE GUT MICROBIOTA IN FOOD ALLERGIES
Nofar Asulin, *Israel*
- 277** MICROBIOTA INFLUENCE ON BEHAVIOR: INTEGRATIVE ANALYSIS OF SEROTONIN METABOLISM AND BEHAVIORAL PROFILE IN GERM-FREE MICE
Laurent Naudon, *France*
- 280** IS THE ORAL HEALTH AND ORAL MICROBIOME OF WOMEN LIVING WITH FIBROMYALGIA ASSOCIATED WITH PAIN?
Joanna Harnett, *Australia*
- 284** MICROBIOLOGICAL PROFILE OF GINGIVITIS PATIENTS UNDERGOING PERIODONTAL AND PROBIOTIC THERAPIES
Flavia Furlaneto, *Brazil*
- 290** GARDNERELLA VAGINALIS COLONIZATION OF THE MOUSE VAGINAL TRACT LEADS TO INCREASED HIV-1 AND HSV-2 INFECTION OUTCOMES
Nuzhat Rahman, *Canada*

16:30 – 17:00

Poster Area 1

Chair: Ruggiero Francavilla, *Italy***Topic 4: MICROBIOTA & DISEASES**

- 292** THE ORAL-PLACENTAL AXIS IN PRETERM BIRTH
Marwa Saadaoui, *Tunisia*
- 296** ADDITIVE AND CARRYOVER DRUG EFFECTS ON THE GUT MICROBIOME IN THE ESTONIAN MICROBIOME COHORT
Elin Org, *Estonia*
- 297** DETERMINATION OF ANTIBIOTIC SUSCEPTABILITY OF LACTIC ACID BACTERIA ISOLATED FROM HUMAN BREAST MILK AND INFANT FECES
Iliyana Rasheva, *Bulgaria*
- 298** THE GUT VIROME IN PRODROMAL PARKINSON DISEASE
Natalia Palacios, *USA*
- 299** GUT MICROBIOME MULTI-OMICS IN THE STUDY OF LATINOS- INVESTIGATION OF NEUROCOGNITIVE AGING
Natalia Palacios, *USA*
- 302** RIFAXIMIN TREATMENT LINKS GUT MICROBIOME WITH NEUROINFLAMMATION AND LEARNING IN LIVER-DAMAGED RATS
Lola Giner-Pérez, *Spain*
- 306** IDENTIFICATION OF ORAL BACTERIA SPECIFIC TO IGA NEPHROPATHY PATIENTS BY PERFORMING DEEP SHOTGUN METAGENOMIC ANALYSIS OF SALIVA
Sho Hamaguchi, *Japan*
- 307** CHOLESTEROL-LOWERING EFFECT OF LACTOCOCCUS LACTIS JJLC-140 AND 167 AND THEIR INFLUENCES ON THE GUT MICROBIOME IN MICE
Ju-Hoon Lee, *South Korea*
- 309** LACTOBACILLUS HELVETICUS R0052 IMPROVES CHOLESTASIS BY MODULATING THE GUT MICROBIOTA TO ALLEVIATE LIVER INFLAMMATION AND FIBROSIS
Jiali Ni, *China*
- 310** ANTAGONISTIC ACTIVITY OF LACTIC ACID BACTERIA ISOLATED FROM VAGINAL MICROBIOME OF ARMENIAN DIFFERENT ETHNIC GROUPS AGAINST CLINICAL CANDIDA SPECIES
Inga Bazukyan, *Armenia*
- 313** MICROBIOME CHANGES IN ACUTE DIVERTICULITIS
Rachel Purcell, *New Zealand*

16:30 – 17:00

Poster Area 2

Chair: Alfredo Guarino, *Italy***Topic 4: MICROBIOTA & DISEASES**

- 314** CANDIDA ALBICANS INDUCES HEPATOCARCINOGENESIS VIA PI3K-AKT-MTOR-SREBP1 PATHWAY ACTIVATION IN A CHEMICALLY-INDUCED LIVER CANCER MODEL
Shiman Jiang, *China*
- 317** THE MICROBIOME AFFECTS OBESITY-RELATED METABOLITES IN THE PROCESS OF AGING
Dana Binyamin, *Israel*
- 322** KETOGENIC DIET EXACERBATES ACUTE PANCREATITIS BY DISRUPTING THE INTESTINAL BARRIER AND REVEALS THE THERAPEUTIC EFFECT OF BUTYRIC ACID
He Xia, *China*
- 324** "INTESTINAL TARGETED DUAL-TARGETING ""JANUS"" STRUCTURE NANOCCLAY MICROGEL PROBIOTIC DELIVERY SYSTEM IMPROVES DIARRHEA-PREDOMINANT IRRITABLE BOWEL SYNDROME"
Youhe Wu, *China*
- 326** CAUSALITY OF GUT MICROBIOTA AND IBD A BIDIRECTIONAL MENDELIAN RANDOMIZATION
Qi Zheng, *China*
- 327** NEW METAGENOME-ASSEMBLED GENOMES COLLECTION FROM THE ESTONIAN GUT MICROBIOME SAMPLES: A VALUABLE RESOURCE FOR EXPLORING MICROBIOME-DISEASE ASSOCIATIONS
Kateryna Pantiukh, *Ukraine*
- 329** ASSOCIATION BETWEEN THE GUT MICROBIOME AND SELF-REPORTED ALLERGIC SYMPTOMS AMONG 5700 FINNISH ADULTS
Nitin Bayal, *India*
- 334** STUDY ON ULCERATIVE COLITIS PATIENTS REVEALS SEVERE ANTIBIOTIC RESISTANT ESCHERICHIA COLI INFECTION
Asha Yadav, *India*
- 339** GUT ENTEROTYPES REFLECT PHENOTYPIC MANIFESTATIONS OF POST-ACUTE COVID-19 SYNDROME
Moses Kwok Tung Li, *Hong Kong*
- 342** CARBON UTILIZATION OF SALMONELLA TYPHIMURIUM IN DIFFERENT MOUSE MODELS AND ON THE FAMILY LEVEL OF ENTEROBACTERIACEAE
Christopher Schubert, *Swiss*

- 349** INTESTINAL MICROBIOTA AND INFLAMMATORY PROFILE OF PERI-URBAN FARMERS IN THE MUNICIPALITY OF SÃO PAULO, BRAZIL
Poliana Scarcella Doliveira, *Brazil*

16:30 – 17:00

Poster Area 3

Chair: Carla Fiorentini, *Italy*

Topic 4: MICROBIOTA & DISEASES

- 360** HISTORY OF REPEATED ANTIBIOTIC USAGE LEADS TO MICROBIOTA-DEPENDENT MUCUS DEFECTS
Kertu Liis Krigul, *Estonia*
- 364** VAGINAL MICROBIOME COMPOSITIONAL CHANGES DURING A MENSTRUAL CYCLE: RESULTS FROM THE WOMEN4HEALTH COHORT
Maria Laura Ferrando, *Italy*
- 370** ALTERATIONS IN GUT MICROBIOTA COMPOSITION AS A POTENTIAL RISK FACTOR FOR PARKINSON DISEASE DEVELOPMENT IN GBA1 VARIANT CARRIERS
Elisa Menozzi, *UK*
- 371** HOST GENOME-WIDE ASSOCIATION STUDY OF THE SWEDISH GUT MICROBIOME
Koen Dekkers, *The Netherlands*
- 373** STREPTOCOCCUS ANGINOSUS PROMOTES ADVERSE PREGNANCY OUTCOMES BY REGULATING INFLAMMATORY SIGNALING PATHWAY
Huanrong Li, *China*
- 374** CURCUMIN ALLEVIATES CONCAVALIN A-INDUCED ACUTE LIVER INJURY BY REGULATING MONOCYTE-DERIVED MACROPHAGES AND INTESTINAL MICROFLORA BALANCE
Juan Lu, *China*
- 375** MEDICATION AFFECTS GUT MICROBIOME COMPOSITION AND MICROBIAL SIGNATURES PREDICT THERAPEUTIC OUTCOMES IN PATIENTS WITH ULCERATIVE COLITIS
Jiaying Zheng, *Hong Kong*
- 378** GUT MICROBIOTA VARIATIONS IN PATIENTS WITH JAK2V617F-POSITIVE MYELOPROLIFERATIVE NEOPLASM ACROSS DIVERSE CYTOREDUCTIVE TREATMENTS
Christina Schjellerup Eickhardt-Dalbøge, *Denmark*

- 385** THE ROLE OF GUT MICROBIOTA IN THE ETIOPATHOGENESIS OF MULTIPLE CHRONIC DISEASES
Lara Pires, *Portugal*
- 389** INGESTION OF SUGAR SUBSTITUTES PROMOTES GUT COLONIZATION AND VIRULENCE IN SALMONELLA TYPHIMURIUM
Bidong Nguyen, *Swiss*

16:30 – 17:00

Poster Area 4

Chair: Livia Emma, *Italy***Topic 4: MICROBIOTA & DISEASES**

- 393** MACHINE LEARNING AND BIOENGINEERED PLATFORMS FOR INTEGRATED PREDICTION OF HUMAN HEALTH STATE FROM MICROBIOME FEATURES
Nicholas Be, *USA*
- 397** FAECAL MICROBIOME AS NON-INVASIVE BIOMARKERS FOR INFLAMMATORY BOWEL DISEASE: A CROSS-POPULATION METAGENOMIC ANALYSIS IN SIX COHORTS
Jingwan Zhang, *Hong Kong*
- 402** DECIPHERING THE ROLE OF MATERNAL GUT MICROBIOTA, DIETARY PATTERN DURING PREGNANCY AND PRENATAL CHARACTERISTICS IN INFANTILE ALLERGIC DISEASES
Le Duc Huy Ta, *Singapore*
- 403** ECONOMIC DEVELOPMENT-ASSOCIATED SHIFTS IN GUT MICROBIOME AND THEIR IMPLICATIONS FOR DISEASE RISK
Hiroaki Masuoka, *Japan*
- 406** WHEY PROTEIN FERMENTED WITH LACTOBACILLUS GASSERI IM13 AMELIORATES GUT AND MUSCLE HEALTH IN HINDLIMB-IMMOBILIZED MICE
Jihun Jang, *South Korea*
- 407** THE HUMAN GUT MICROBIOME AND IT'S KEY CONSTITUENTS IN THE CONTEXT OF INFLAMMATORY BOWEL DISEASE: A NETWORK-BASED APPROACH
Theresa Geese, *Germany*
- 414** DO ANTI-LPS ANTIBODIES TO PATIENT MICROBIOTA ASSOCIATE WITH WORSE OUTCOMES IN CROHN'S DISEASE?
Wenkang Feng, *Australia*
- 417** NOVEL COCULTIVATION SYSTEM TO ANALYZE THE RELATIONSHIP BETWEEN CANCER AND BACTERIA AND ITS APPLICATION TO EVALUATE THE EFFECTS OF BACTEROIDES FRAGILIS ON COLORECTAL CANCER CELLS
Matěj Příkryl, *Czech Republic*

- 418** GUT MICROBIOTA AND METABOLOME VARIATIONS IN COLORECTAL TUMORS: THE EFFECT OF OBESITY AND DIET
Marta La Vecchia, *Italy*
- 421** EXPLORING THE GUT MICROBIAL TRYPTOPHAN METABOLISM USING IN VITRO INCUBATION TECHNIQUES AND UHPLC-HRMS
Nathan Vanwinsen, *Belgium*

TUESDAY JUNE 25TH

E-Poster Session

08:30 – 09:30

Poster Area 1

Chair: Alessio Fasano, *USA*

Topic 4: MICROBIOTA & DISEASES

- 423** INTESTINAL MICROBIOTA PROFILE IN HEALTHY AND ENTEROPATHIC DOGS
Alessandro Benvenuti, *Italy*
- 425** PARKINSON'S DISEASE SPECIFIC MICROBIOTA INDUCES CONSTIPATION IN MICE
Tomonari Hamaguchi, *Japan*
- 428** THE CHANGE OF INTESTINAL FLORA AND BACTERIAL TRANSLOCATION IN RATS AFTER LIVER TRANSPLANTATION
Chunlei Chen, *China*
- 430** GUT MICROBIOTA BOOSTS ANTITUMOR IMMUNITY THROUGH MODULATION OF MYELOID-DERIVED SUPPRESSOR CELLS
Alessio Cardilli, *Belgium*
- 432** IMPACT OF INFLUENZA-LIKE ILLNESS ON THE HUMAN NASOPHARYNGEAL AND OROPHARYNGEAL MICROBIOTA IN THE AGING POPULATION
Jolanda Kool, *The Netherlands*
- 433** GUT MICROBIOME, OBESITY AND LIFESTYLE IN DEPRESSION: A CROSS-SECTIONAL STUDY
Carlos Mora-Martinez, *Spain*
- 437** SERIOUS ADVERSE DRUG REACTIONS RESULTING FROM ABDOMINAL TUBERCULOSIS ASSOCIATED WITH PORTAL VEIN HYPERTENSION? A CASE REPORT
Zhenzhen Zhang, *China*
- 438** EXPLORING GUT MICROBIOME METABOLIC PATHWAYS AND THEIR ASSOCIATIONS IN ACUTE MYOCARDIAL INFARCTION
Ayaulym Nurgozhina, *Kazakhstan*
- 440** GUT MICROBIOME AT THE ONSET OF MULTIPLE SCLEROSIS: AN ITALIAN COHORT STUDY
Simona Rolla, *Italy*
- 441** INTERACTIONS BETWEEN THE GUT MICROBIOME AND NOVEL TYPE 2 DIABETES MEDICATIONS IN TYPE 2 DIABETES PATIENTS
Annabel Klemets, *Estonia*

- 443** FECAL MICROBIOME TRANSPLANT FROM PATIENTS WITH HBV-RELATED CIRRHOSIS AGGRAVATES LIVER FIBROSIS IN MICE
Fengjiao Wang, *China*
- 444** MULTIPLE SCLEROSIS-ASSOCIATED GUT MICROBIOME IN AN ITALIAN COHORT: ASSOCIATIONS WITH ONSET, CLINICAL STATUS, THERAPY AND DIET
Rachele Rosso, *Italy*
- 450** EVALUATION OF THE CLINICAL PRESENTATION OF PATIENTS WITH CHRONIC HEART FAILURE OF VARIOUS PHENOTYPIC GROUPS AND THE ASSOCIATION OF INTESTINAL MICROBIOTA MEMBERS WITH THE DEVELOPMENT OF CHRONIC SYSTEMI
Baurzhan Aipov, *Kazakhstan*
- 451** IDENTIFICATION OF THE GUT MICROBIOTA FUNCTIONS THAT MAY CONTRIBUTE TO THE ACTIVATION OF THE INFLAMMATORY RESPONSE IN TREATED CELIAC PATIENTS
Sergio Romera-Giner, *Spain*
- 453** PREDICTIVE METABOLOMIC SIGNATURE FOR TRASTUZUMAB RESPONSE IN HER2+ BREAST CANCER: INTEGRATING MICROBIOME INSIGHTS
Nicole Palmieri, *Italy*
- 454** THE ROLE OF THE MICROBIOTA IN EOE
Laura Manuto, *Italy*
- 456** ORAL-GUT MICROBIOME IS ASSOCIATED WITH SARCOPENIA IN PATIENTS WITH ADVANCED CANCER FOLLOWING RADIOTHERAPY
Qingqing Hu, *China*
- 457** BENEFICIAL AND ANTI-INFLAMMATORY EFFECT OF POSTBIOTICS DERIVED FROM LACTOBACILLUS PARACASEI CNCM I-5220 ON THE SKIN
Francesca Algieri, *Italy*
- 458** FECAL MICROBIOTA TRANSPLANTATION COMBINED WITH ANTI-PD-1 IMMUNOTHERAPY IN UNRESECTABLE HEPATOCELLULAR CARCINOMA
Ping Chen, *China*
- 460** METABOLOMIC INSIGHTS: UNRAVELING THE EVOLUTION OF SHORT-CHAIN FATTY ACIDS LEVELS IN AUTISM SPECTRUM DISORDER ONSET
Alessio Trotta, *Italy*

08:30 – 09:30

Poster Area 2

Chair: Livia Emma, *Italy***Topic 4: MICROBIOTA & DISEASES**

- 461** ESTABLISHING THE DEFINES FOR A HEALTHY HUMAN GUT MICROBIOME-HEALTH MICROBIOME COHORT STUDY IN *CHINA*
Baohong Wang, *China*
- 463** PROPHYLACTIC ROLE OF POSTBIOTICS IN CONTROLLING CHEMOTHERAPY-INDUCED INTESTINAL DAMAGE
Alessandra Silvestri, *Italy*
- 464** UNRAVELING THE METABOLOMIC LANDSCAPE OF AUTISM SPECTRUM DISORDER: INSIGHTS FROM LONGITUDINAL METABOLOMIC ANALYSIS IN THE GEMMA PROJECT
Martina Lombardi, *Italy*
- 467** METABOLOMIC PROFILING IN AUTISM SPECTRUM DISORDER: A CASE-CONTROL STUDY
Vera Abenante, *Italy*
- 469** THE GUT PHAGEOME IS ASSOCIATED WITH HEALTHY BRAIN AGEING
Eleftheria Charalambous, *Germany*
- 470** COMPARATIVE ASSESSMENT OF MULTIOMIC INTEGRATION APPROACHES: BRIDGING METABOLOMICS AND MICROBIOME DATA
Andrea Ingenito, *Italy*
- 474** A NOVEL HUMAN PROBIOTIC BLEND SUCCESSFULLY DECREASES INFLAMMATION BY REARRANGING MICROBIAL POPULATIONS AND ALTERING MUCOSAL IMMUNE SUBSETS IN A CROHN'S DISEASE-ILEITIS MOUSE MODEL
Luca Di Martino, *USA*
- 479** IMMUNO-MICROBIAL SIGNATURES IN COLORECTAL CANCER
Hege Tunsjø, *Norway*
- 482** THE SMALL INTESTINE ON A PLATE: THE FUNCTION OF BILE SALTS IN HOST-MICROBE CROSSTALK
Pieter De Clercq, *Belgium*
- 486** ORAL AND FAECAL PREVOTELLA SPP, VEILLONELLA SPP, AND FUSOBACTERIUM SPP IN PREGNANT WOMEN WITH GESTATIONAL DIABETES
Moises Ramos-Solano, *Mexico*
- 491** PRELIMINARY DATA ON THE MICROBIOME IN COVID-19, A LONGITUDINAL STUDY
Laura Danielsen, *Denmark*

- 493** QUANTIFYING ANTIBIOTIC-SPECIFIC PERTURBATIONS OF THE GUT MICROBIOME IN PEDIATRIC INFLAMMATORY BOWEL DISEASE
Kyle Bittinger, *USA*
- 501** EFFICACY AND SAFETY OF FECAL MICROBIOTA TRANSPLANTATION FOR THE TREATMENT OF CLOSTRIDIODES DIFFICILE INFECTION: A 10-YEAR EXPERIENCE OF A LARGE-VOLUME FMT CENTER
Marcello Fiorani, *Italy*
- 507** PRENATAL MATERNAL GUT MICROBIOTA PROFILES IN RELATION TO NON-COMMUNICABLE DISEASE OUTCOMES IN OFFSPRING
Gaik Chin Yap, *Singapore*
- 511** POTENTIAL INVOLVEMENT OF ENVIRONMENT AND MICROBIOME IN AUTISM SPECTRUM DISORDER FROM THE GEMMA PROJECT
Dario Siniscalco, *Italy*
- 512** STUDY ON THE MECHANISM OF ACIDIC TUMOR MICROENVIRONMENT-INDUCED INTRATUMORAL BACTERIA PROMOTING TUMOR INVASION AND METASTASIS
Yang Liu, *China*
- 513** FUSOBACTERIUM NUCLEATUM INDUCES OXALIPLATIN RESISTANCE BY INHIBITING FERROPTOSIS IN COLORECTAL CANCER
Yang Liu, *China*
- 514** FUSOBACTERIUM NUCLEATUM INFECTION LEADS TO INCREASED TUMOR TISSUE STIFFNESS AND ANGIOGENESIS IN COLORECTAL CANCER
Yunwei Wei, *China*
- 518** BILE ACID EQUILIBRIUM AS A MEASURE OF GUT MICROBIOTA TO ALCOHOL-RELATED LIVER DISEASE
Marisa Isabell Keller, *Germany*
- 580** EFFECT OF PROBIOTICS ON ALLERGIC RHINITIS: RESULTS FROM A RANDOMIZED CONTROLLED TRIAL
Lisa Lungaro, *Italy*

08:30 – 09:30

Poster Area 3

Chair: Carla Fiorentini, *Italy***Topic 4: MICROBIOTA & DISEASES**

- 520** GUT VIROME IS ASSOCIATED WITH SUBSEQUENT CELIAC DISEASE IN TWO EUROPEAN PROSPECTIVE BIRTH COHORTS
Katerina Chuda, *Czech Republic*
- 521** LONG-TERM DYNAMICS OF ENTEROBACTERIAL CLPB PROTEIN IN THE SERUM AND CLPB GENE IN GUT MICROBIOME OF ADOLESCENTS WITH ANOREXIA NERVOSA
Nadia Andrea Andreani, *Germany*
- 523** INVESTIGATION OF GUT MICROBIOME SIGNATURE AS A PREDICTIVE BIOMARKER OF RESPONSE TO IMMUNE CHECKPOINT INHIBITORS IN ADVANCED NSCLC PATIENTS
Jun-Yeong Heo *South Korea*
- 530** COMPREHENSIVE GENETIC ANALYSIS OF GENSCAN® AND THE GUT MICROBIOME
Hana Sladkova Kavinova, *Czech Republic*
- 536** INCREASED FECAL CALPROTECTIN IS ASSOCIATED WITH ALTERATIONS IN GUT MICROBIOME, SERUM MARKERS AND CLINICAL OUTCOMES IN OLDER INDIVIDUALS
Sebastian Heinzel, *Germany*
- 540** CORRELATION BETWEEN NASOPHARYNGEAL MICROBIOME AND CHILDHOOD ASTHMA AND CHANGES IN CLINICAL STATUS OF CHILDHOOD ASTHMA
Nam Sze Cheng, *Hong Kong*
- 541** THE ROLE OF CONTRACEPTIVE USAGE ON GUT MICROBIOME IN ESTONIAN MICROBIOME COHORT
Kreete Lüll, *Estonia*
- 549** LARGE SCALE ANALYSIS OF INTESTINAL MICROBIOTA ALTERATIONS ACROSS COLORECTAL CANCER STAGES IN 3,512 INDIVIDUALS
Gianmarco Piccinno, *Italy*
- 550** FECAL MICROBIOTA TRANSPLANTATION PLUS ANTI-PD-1 IMMUNOTHERAPY IN UNRESECTABLE HEPATOCELLULAR CARCINOMA
Ping Chen, *China*
- 557** BACTERIAL GUT METABOLOMIC BIOMARKERS OF MULTIPLE SCLEROSIS
Sanjay Shukla, *USA*

- 560** UNDERSTANDING THE ROLE OF GUT VIROME (AND BACTERIOPHAGES) IN MULTIPLE SCLEROSIS PATIENTS
Sanjay Shukla, *USA*
- 563** EXPLORING THE RELATION BETWEEN FLU AND PNEUMOCOCCAL VACCINE RESPONSIVENESS AND HUMAN GUT MICROBIOTA
Prokopis Konstanti, *The Netherlands*
- 566** ASSESSING QUALITY OF LIFE FOLLOWING FECAL TRANSPLANTATION: PROSPECTIVES AND PATIENT WELLBEING IMPLICATIONS
Claudia Gota, *Italy*
- 569** UNLOCKING THE MICROBIAL MYSTERIES: EXPLORING GUT MICROBIOTA IN TYPE 2 DIABETES AND END-STAGE RENAL DISEASE PATIENTS
Gratiela Gradisteanu Pircalabioru, *Romania*
- 571** PORPHYRINS-PRODUCERS IN AGEING: A SHIFT ON THE SKIN MICROBIOME POPULATION
CyrilleJarrin, *France*
- 579** THE GUT MICROBIOME AND HEALTH STATUS IN THE DUTCH POPULATION: DETERMINING KEY ASSOCIATIONS WITH HEALTH AND DISEASE
David Boverhoff, *The Netherlands*
- 581** EVALUATION OF GUT MICROBIOTA DYSBIOSIS INDEX AND FUNCTIONAL PROFILING IN CHILDREN AFFECTED BY AUTISM SPECTRUM DISORDERS: A SEARCHING FOR DISEASE BIOMARKERS AND PREDICTORS
Pamela Vernocchi, *Italy*
- 591** ANTIBIOTIC THERAPY SHIFTS THE MICROBIOME OF ANTI PD-L1/PD1-TREATED CANCER PATIENTS TOWARDS A STATE OF DYSBIOSIS
Giacomo Vitali, *Italy*
- 595** DECIPHERING THE INTERPLAY OF INTESTINAL MICROBIOME, NUTRITIONAL STATUS, AND HORMONAL IMBALANCE IN WOMEN WITH POLYCYSTIC OVARY SYNDROME AND METABOLIC SYNDROME
Midory Sánchez Rentería, *Mexico*
- 596** TONSILLAR MICROBIOME SIGNATURE ASSOCIATED WITH EPSTEIN-BARR VIRUS LATENCY IN ARGENTINEAN CHILDREN
Norma Paola Aguirre Morgado, *Mexico*

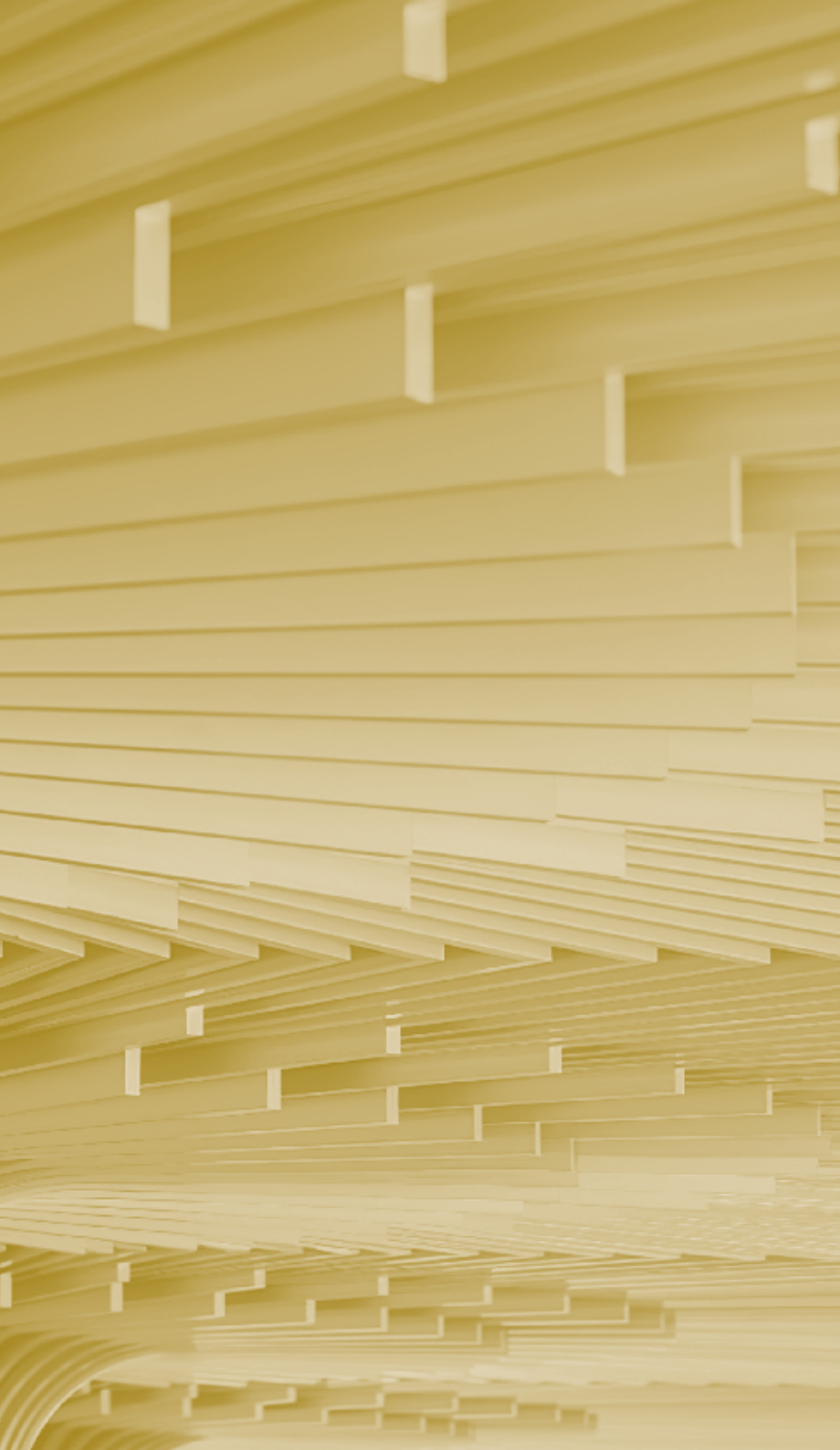
08:30 – 09:30

Poster Area 4

Chair: Maria Vasile, *Belgium***Topic 4: MICROBIOTA & DISEASES**

- 597** APOE-E ALLELES AND MILD COGNITIVE IMPAIRMENT CORRELATE TO CHANGES IN THE GUT MICROBIOME OF OLDER PERSONS
Gaspar Perez-Martinez, *Spain*
- 599** EXPLORING THE CUTANEOUS MICROBIOTA COMPOSITION IN INDONESIAN CHILDREN WITH ATOPIC DERMATITIS
Raden Mohamad Rendy Ariezal Effendi, *Indonesia*
- 601** MICROBIALLY DERIVED VOLATILE METABOLITES IN PEDIATRIC NON-ALCOHOLIC FATTY LIVER DISEASE (NAFLD)
Amalia Z. Berna, *USA*
- 603** COMBINED EFFECT OF FAT DIET AND COLORECTAL CARCINOGENESIS ON THE MODULATION OF GUT GLICOBIOLOGY AND ALTERATION OF THE CIRCULATING MICROBIOTA
Sonia Perrelli, *Italy*
- 604** UNVEILING ORAL MICROBIOME SIGNATURES IN AUTISM SPECTRUM DISORDER: IMPLICATIONS FOR SUBTYPING AND INTERVENTION
Per Adastra, *USA*
- 606** THE BUTYRATE ROLE IN MODULATING THE GUT-SKIN AXIS
Marica Cozzolino, *Italy*
- 610** PARALLEL TRACKING OF GUT AND SALIVARY MICROBIOTA PROFILES UPON LAROTRECTINIB TREATMENT FOR NTRK FUSION-POSITIVE GLIOBLASTOMA (GBM): A CASE REPORT
Luigia Turco, *Italy*
- 613** DISTURBANCES IN GUT MICROBIOTA CHARACTERISTICS REVEALED IN NON-DIABETICS WITH FAMILY HISTORY OF T2D
Oscar Gitton-Quent, *France*
- 617** EXPLORING THE GENETIC SIGNALS OF ROR(GAMMA-T)+ TREG CELL INDUCTION BY THE GUT MICROBIOME
Victor Martins, *Brazil*
- 619** GUT MICROBIOTA AND METABOLITES ASSOCIATED WITH EPICARDIAL ADIPOSE TISSUE ATTENUATION
Meenakshi Pradhan, *Sweden*
- 622** STUDY OF THE DIVERSITY OF THE INTESTINAL MICROBIOTA AND INFLAMMATORY CYTOKINES IN MEXICAN PATIENTS WITH ATTR CARDIAC AMYLOIDOSIS
María Magdalena Aguirre-García, *Mexico*

- 626** GUT MICROBIOME-BASED PREDICTION OF NEUROINFLAMMATION
Mahesh S. Desai, *Luxembourg*
- 633** BIOINFORMATIC PIPELINE TO CHARACTERIZE THE GLOBAL LANDSCAPE OF 100K HUMAN GUT ANTIBIOTIC RESISTOMES
Shivang Bhanushali, *Finland*
- 636** STRAINS OF THE GUT MICROBIOME ACROSS AGE AND INFLAMMATORY GRADIENTS IN JUVENILE IDIOPATHIC ARTHRITIS AND MATCHING ADULT PHENOTYPES
KelseyThompson, *USA*
- 638** THE INTERACTION BETWEEN THE ORAL MICROBIOME AND AN ORAL HEALTH-RELATED GENE IN AN AMAZONIAN RIVERINE POPULATION
Marina Quintas dos Santos, *Brazil*
- 649** MULTI-OMICS ANALYSIS OF GUT MICROBIOTA UNVEIL MICROBIAL FUNCTIONS ALTERATIONS ASSOCIATED TO PARKINSON'S DISEASE
Rémy Villette, *Luxembourg*
- 650** IMPACT OF WATER CHLORINATION ON METABOLIC HOMEOSTASIS VIA THE GUT MICROBIOTA
Elizabeth Howard, *USA*
- 651** THE CORRELATION BETWEEN SERUM 25(OH)D LEVEL AND INTESTINAL FLORA IN PATIENTS WITH LIVER DISEASE
Jundan Shao, *China*
- 659** DIFFERENCES IN THE COMPOSITION OF GUT MICROBIOTA IN OVERWEIGHT AND OBESE MEDICAL STUDENTS IN MEXICO
Karina Robles Rivera, *Mexico*
- 661** GLIADIN PROTEOLYTIC ACTIVITY FROM CELIAC DISEASE RELATED BLOOD AND GUT COMMENSAL BACTERIA
Ana Isabel Roque, *Portugal*

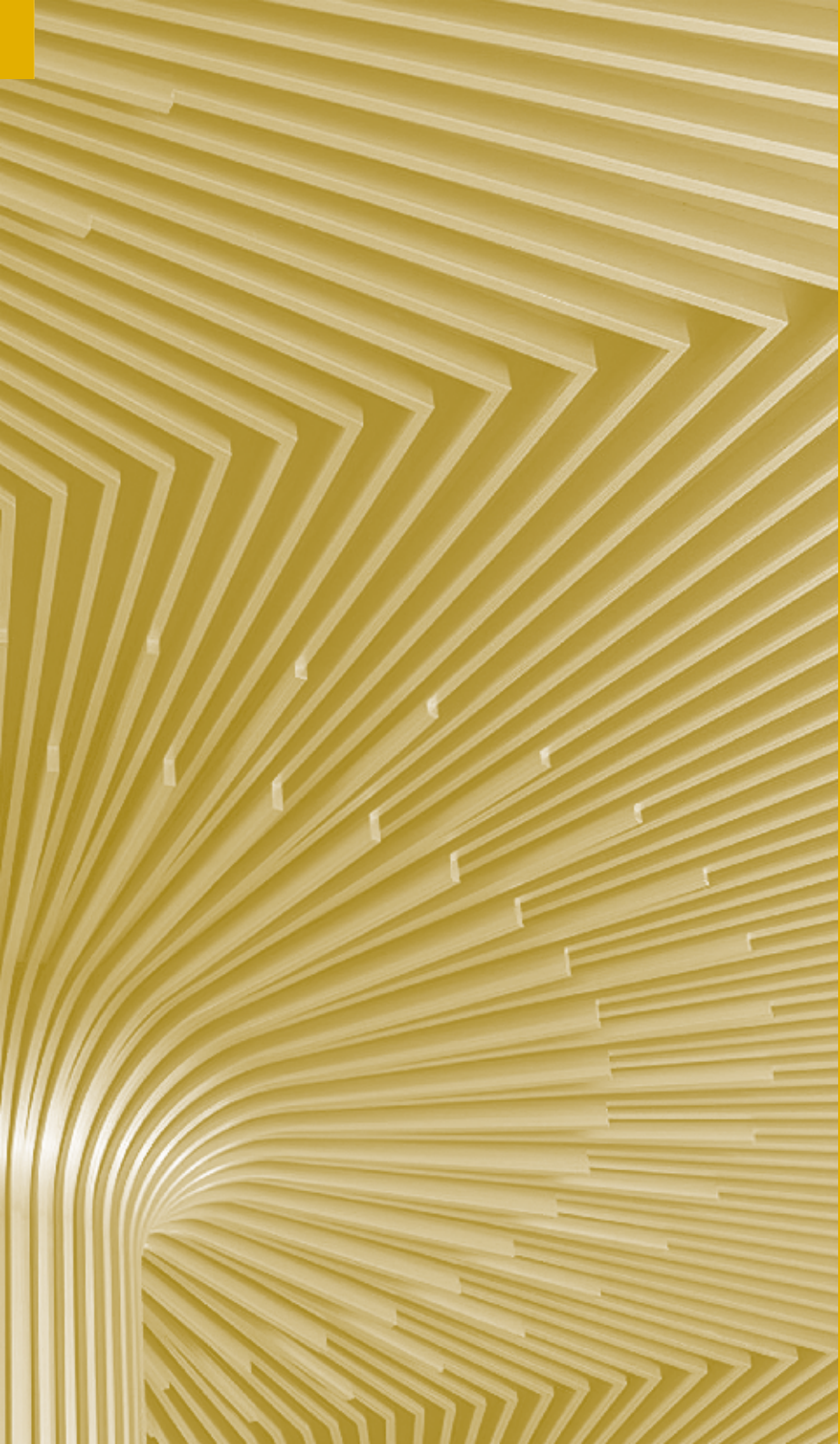


Faculty

Ajami	Nadim	USA
Alhasan	Moumen	Germany
Arrieta	Marie-Claire	Canada
Arumugam	Manimizhiyan	Denmark
Asnicar	Francesco	Italy
Azad	Meghan	Canada
Barbara	Giovanni	Italy
Barberi	Massimo	Italy
Basterra Cossío	Juan	Spain
Belzer	Clara	The Netherlands
Benech	Nicholas	France
Berni Canani	Roberto	Italy
Bol	Kalijn	The Netherlands
Bork	Peer	Germany
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Cena	Hellas	Italy
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Collado	Maria Carmen	Spain
Comelli	Elena	Canada
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Derosa	Lisa	France
de Jonge	Wouter J.	The Netherlands
De Seta	Francesco	Italy
Denkert	Carsten	Germany
Desai	Mahesh	Luxembourg
Di Pierro	Francesco	Italy
Diaz Heijtz	Rochellys	Sweden
Dinleyici	Ener Cagri	Turkey
Domènech Amadó	Roser	European Commission
Doré	Joël	France
Druart	Céline	France
Ehrlich	Stanislav Dusko	UK

Elkrief	Arielle	Canada
Emma	Livia	Italy
Falcone	Marika Maria Caterina	Italy
Fanos	Vassilios	Italy
Fasano	Alessio	USA
Fiocchi	Alessandro	Italy
Fiorentini	Carla	Italy
Flores - Munguia	Roberto	USA
Fontaine	Fanette	Italy
Foster	Jane	USA
Francavilla	Ruggiero	Italy
Gasbarrini	Antonio	Italy
Ghosh	Tarini Shankar	India
Grosso	Giuseppe	Italy
Guarino	Alfredo	Italy
Guarner Aguilar	Francisco	Spain
Guglielmetti	Simone Domenico	Italy
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Huttenhower	Curtis	USA
Ianiro	Gianluca	Italy
Indrio	Flavia	Italy
Kaushic	Charu	Canada
Knight	Robert	USA
Koch	Maurizio	Italy
Koren	Omry	Israel
Kraneveld	Aletta	The Netherlands
Laleman	Wim	Belgium
Leader	Geraldine	Ireland
Lelouvier	Benjamin	France
Lo Vecchio	Andrea	Italy
Maguin	Emmanuelle	France
Marabelli	Romano	France
Marino	Angelo	European Commission
Mazmanian	Sarkis	USA
Medlock	Greg	USA
Miele	Luca	Italy
Morabito	Stefano	Italy
Neu	Josef	USA
Nezi	Luigi	Italy
Oduaran	Ovokeraye	South Africa

Ohno	Hiroshi	Japan
Paoli	Antonio	Italy
Piccinno	Gianmarco	Italy
Poeta	Marco	Italy
Ponziani	Francesca Romana	Italy
Putignani	Lorenza	Italy
Rescigno	Maria	Italy
Ribaldone	Davide Giuseppe	Italy
Ricci	Antonia	Italy
Rodriguez	Julie	France
Roncada	Paola	Italy
Ross	Paul	Ireland
Salenius	Karolina	Finland
Sanguinetti	Maurizio	Italy
Sanz	Yolanda	Spain
Satokari	Reetta	Finland
Scaldaferri	Franco	Italy
Scheperjans	Filip	Finland
Segata	Nicola	Italy
Selosse	André-Marc	France
Sharma	Vineet Kumar	India
Shoae	Saeed	UK
Singh	Vikramjeet	Germany
Sokol	Harry	France
Stewart	Christopher	UK
Swann	Jonathan	UK
Trebicka	Jonel	Germany
Vanderhoof	Jon Arvid	USA
Vasile	Maria	Belgium
Vatanen	Tommi	Finland
Vecchi	Corrado	Italy
Ventura	Marco	Italy
Verduci	Elvira	Italy
Vicariotto	Franco	Italy
Vonaesch	Pascale	Switzerland
Wargo	Jennifer	USA
Wassermann	Birgit	Austria
Weir	Tiffany	USA
Wiest	Reiner	Switzerland
Wilmes	Paul	Luxembourg
Zaman	Muhammad Hamid	USA
Zitvogel	Laurence	France
Zhao	Liping	USA



General Information

DATES & TIMES

June 22 - 25, 2024.

The Congress will commence at 12.00 (CET) Saturday, June 22 and will conclude on Tuesday, June 25 at 12.30 (CET).

Invitations to participate are personal and non-transferable.

CONGRESS VENUE

Confindustria Congress Center

Viale dell'Astronomia, 30 - 00144 Rome, Italy

Phone +39 06 5903379

www.centrocongressi.confindustria.it

LANGUAGE

The Congress will be in English.

REGISTRATION & NAME BADGES AVAILABLE AT THE ORGANIZING SECRETARIAT DESK

On-site registration and issuance of badges is available daily from:

-
- Saturday June 22 11.00 - 18.30
 - Sunday June 23 07.30 – 18.30
 - Monday June 24 07.30 – 18.30
 - Tuesday June 25 08.00 – 12.30
-

Registration payment can be made by credit card or cash directly at the Organizing Secretariat desk.

For security purposes, participants will be requested to present an identification document.

Participants and exhibitors will be required to wear name badges to access the venue and all the Congress rooms.

Organizing Secretariat desk will be at floor R (1st Floor):

- Room BC (Participants)
- Room D (Faculty)

REGISTRATION FEES (22% VAT INCLUDED)

Full registration - High Income	€ 650,00
Full registration - Medium Income	€ 550,00
Full registration - Lower Income	€ 450,00
Junior <35 years old	€ 280,00
Trainee or PhD	€ 100,00

IHMC Congress uses the World Bank's Classification of Countries as of 19 August 2022 to categorize the fees above. Individuals living and working in low, low middle and upper middle countries must provide proof of nationality for that country and proof of employment/residence in the country.

See all categories here: www.worldbankcategories.org

Registration fees include:

- admission to scientific sessions, technical exhibition
- final programme
- welcome cocktail (at the congress venue)
- lunch as scheduled in the programme (at the congress venue)
- certificate of attendance
- certificate of Italian ECM (agli aventi diritto)

BANKING AND CURRENCY EXCHANGE

The Italian monetary system is the Euro (€). Foreign currency can be exchanged at banks, currency exchange offices, hotels and the airport upon presentation of an identification document. All major credit cards are accepted in most hotels, restaurants and shops.

E-POSTERS

The e-poster areas will be open from 11.30 on June 22 to 12.30 on June 25. The poster areas are at Floor R (1st Floor), Room: EF, ILMN, Q. Further information about e-poster scheduling can be found in the dedicated programme pages.

SLIDE CENTER

All speakers and authors must deliver their presentation to the slide center 2 hours in advance or the day before their speech. Slides Center is located in Room P (Floor R – 1st floor).

DRESS CODE

Smart casual

CLOAKROOM

If required, luggage can be left in the cloakroom at the venue. Open guardarobe is located in Room K.

LIABILITY AND INSURANCE

The Organizing Secretariat cannot accept liability for personal injuries or for loss of, or damage to property belonging to Congress participants (or accompanying persons) either during or as a result of the Congress. Please check the terms and conditions of your health insurance.

TRANSPORTATION**Public transport**

Leonardo Express, a non-stop service (www.trenitalia.com/it/treni_regionali/lazio/leonardo_express).

Metro B - Eur-Magliana stop. 3-minutes' walk from the metro station to the Congress Center.

Taxi

The Congress venue is located 23 km from the airport. Allow 30 mins by taxi, depending on traffic. The cost of the taxi ranges from 30.00 to 50.00 euro.

We recommend using only licensed taxis located outside the airports and train stations, or call taxis directly from the following companies:

Radio Taxi - ph. +39 06 3570

Samarcanda - ph. +39 06 5551

La Capitale - ph. +39 06 4994

Uber

Uber remains legal to use in Rome; however, Italy only allows Uber Black (and UberVans) as drivers must possess the car NCC license in order to operate. Due to the fact that there is no UberX or UberPOOL, Uber in Italy tends to be more expensive, on average, than taxis.

PARKING (WALKING DISTANCE)

- Piazzale Luigi Sturzo (Public) - 7 min
- Eur garage - Via della Chimica, 10 (Private) - 8 min
- Garage car parking - Viale dell'Urbanistica, 1 (Private) - 5 min

Parking in the blue lines in the city of Rome is subject to payment of the hourly rate:

www.atac.roma.it/utility/atac-sosta

Parking in the white line is free.

ORGANIZING SECRETARIAT**MEETING&CONSULTING**

Via Michele Mercati, 33 - 00197 Rome, Italy

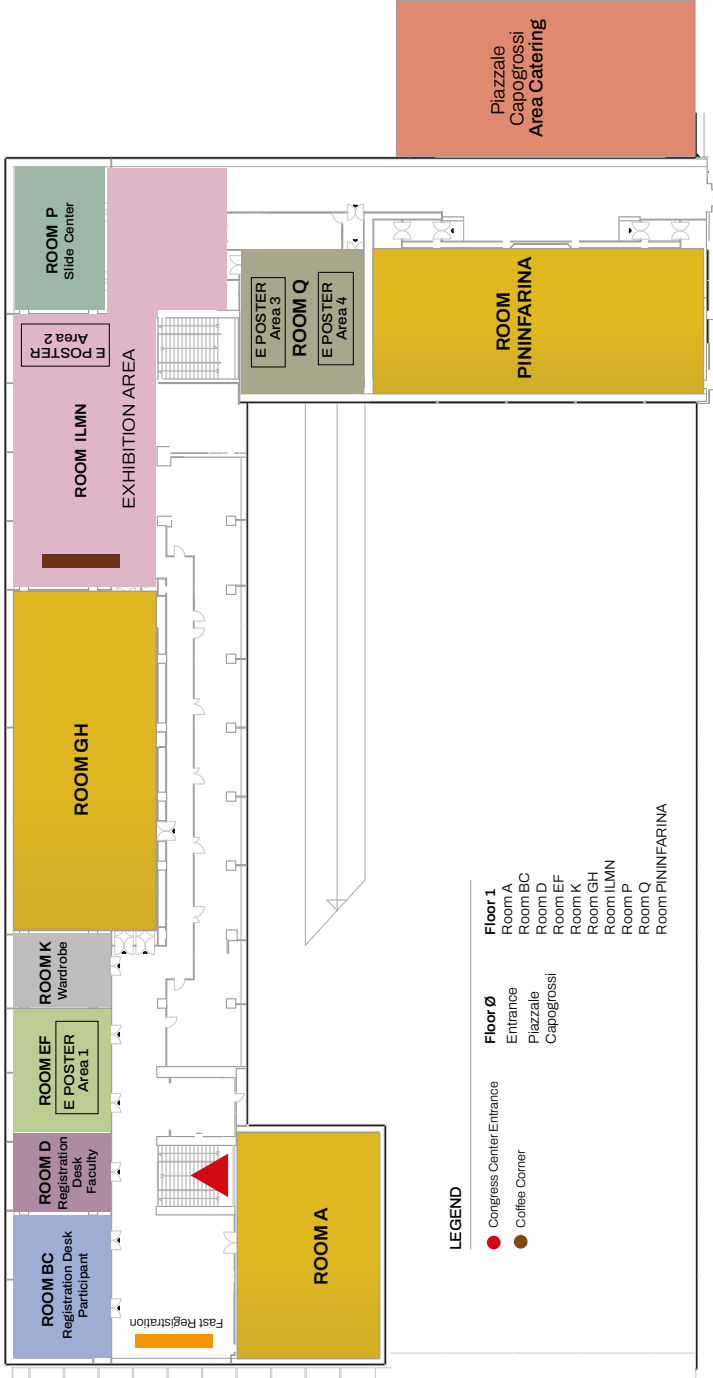
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secretariat@ihmc2024rome.com

www.ihmc2024rome.com

www.emec-roma.com

Congress Map





Italian ECM Credits Educazione Continua In Medicina

Accreditamento riservato ai partecipanti con sede lavorativa in Italia

CREDITI ECM

Il Congresso è stato accreditato per l'Educazione Continua in Medicina (ECM) dal Provider: **e meeting&consulting n. 1124**

Referente Scientifico: **Alessio Fasano**

Obiettivo Formativo: **Linee guida – protocolli – procedure**

Destinatari dell'iniziativa

Professioni e Discipline:

- **Biologo**
- **Chimico:** Chimica analitica
- **Dietista:** Dietista; Iscritto nell'elenco speciale ad esaurimento
- **Farmacista:** Farmacista pubblico del SSN; Farmacista territoriale; Farmacista di altro settore
- **Medico Chirurgo:** Allergologia ed immunologia clinica; Dermatologia e Venereologia; Endocrinologia; Gastroenterologia; Malattie metaboliche e Diabetologia; Malattie dell'apparato respiratorio; Malattie infettive; Medicina interna; Neonatologia; Oncologia; Pediatria; Reumatologia; Ginecologia e Ostetricia; Biochimica clinica; Farmacologia e Tossicologia clinica; Microbiologia e Virologia; Patologia clinica (laboratorio di analisi chimico-cliniche e microbiologia); Igiene degli alimenti e della nutrizione; Medicina generale (Medici di famiglia); Pediatria (Pediatri di libera scelta); Scienza dell'alimentazione e Dietetica
- **Infermiere**
- **Infermiere Pediatrico**
- **Veterinario:** Igiene degli allevamenti e delle produzioni zootecniche; Igiene prod., trasf., commercial., conserv. e tras. alimenti di origine animale e derivati; Sanità animale

Al fine di ottenere i crediti è necessario appartenere ad una delle professioni accreditate, frequentare il 90% della durata complessiva delle ore formative.

La documentazione per l'ottenimento dei crediti ECM verrà pubblicata online successivamente alla chiusura del Congresso e sarà disponibile a partire dal giorno 25 giugno 2024, fine evento, per le successive 72 ore.

Le credenziali personali di accesso potranno essere richieste presso il desk ECM, all'interno della Segreteria Organizzativa (Participants).

Il certificato di acquisizione crediti ECM verrà inviato entro 90 giorni dal termine del Congresso, agli aventi diritto, direttamente dal provider e meeting&consulting.

Il Congresso prevede la rilevazione elettronica delle presenze mediante la lettura del QR code stampato sul badge, pertanto si ricorda ai partecipanti di registrare la presenza presso il desk ECM all'interno della Segreteria Organizzativa (Participants), all'inizio ed alla chiusura dei lavori.

Data	Corso e Nr. ID.	Room	Inizio e Fine Corso	Durata	Crediti
I COURSE AFTERNOON - ID. 416198					
22/06/2024	STANDARDIZATION OF MICROBIOTA STUDIES	GH	16.30 – 18.30	2 hrs.	0,6
22/06/2024	INFLUENCE OF NUTRITION ON HUMAN MICROBIOME	PININFARINA	16.30 – 18.30		
22/06/2024	THE INTERACTION OF HUMAN HOLOBIONT WITH OTHER BIONTS - I	A	16.30 – 18.30		
I COURSE MORNING - ID. 416289					
23/06/2024	ENVIRONMENTAL FACTORS INFLUENCING THE HUMAN HOLOBIONT	GH	9.00 – 11.00	4 hrs.	1,2
23/06/2024	ENGRAFTMENT AND MATURATION OF HUMAN MICROBIOME IN EARLY LIFE	GH	11.00 – 13.00		
23/06/2024	MICROBIOTA IN THE CONTEST OF OTHER OMICS	A	11.00 – 13.00		
23/06/2024	MICROBIOTA AND DISEASE: GENERAL ASPECTS - I	PININFARINA	11.00 – 13.00		
II COURSE AFTERNOON - ID. 416302					
23/06/2024	THE INTERACTION OF THE HUMAN HOLOBIONT WITH OTHER BIONTS - III	GH	14.30 – 16.30	4 hrs.	1,2
23/06/2024	MICROBIOTA AND DISEASE: GENERAL ASPECTS II	GH	16.30 – 18.30		
23/06/2023	MICROBIOME AND GASTROENTEROLOGICAL DISEASES	PININFARINA	14.30 – 16.30		
23/06/2024	CONTROVERSIES ON THE ROLE OF THE MICROBIOME IN PEDIATRIC GI DISEASES	PININFARINA	16.30 – 18.30		
23/06/2024	MICROBIOME STUDIES IN DEVELOPING COUNTRIES	A	14.30 – 16.30		
23/06/2024	MICROBIOME IN OTHER HUMAN ORGAN/SYSTEM	A	16.30 – 18.10		
III COURSE AFTERNOON - ID. 416321					
24/06/2024	MICROBIOME AND GUT BRAIN AXIS	GH	14.30 – 16.30	4 hrs.	1,2
24/06/2024	MANIPULATING THE GUT MICROBIOME TO IMPROVE GASTROINTESTINAL DISORDERS	GH	17.00 – 19.00		
24/06/2024	MICROBIOTA AND OTHER DISEASES	PININFARINA	14.30 – 16.30		
24/06/2024	MANIPULATING THE GUT MICROBIOME TO IMPROVE NEUROLOGICAL DISEASES	PININFARINA	17.00 – 19.00		
24/06/2024	MICROBIOME AND CANCER DEVELOPMENT	A	14.30 – 16.00		
24/06/2024	MANIPULATION OF THE GUT MICROBIOME TO PREVENT AND TREAT NON – COMMUNICABLE DISEASES	A	17.30 – 19.00		
II COURSE MORNING - ID. 416335					
25/06/2024	ARTIFICIAL INTELLIGENCE AND ITS USE IN MICROBIOME AND OTHER OMICS STUDIES	GH	09.30 – 12.30	3 hrs.	0,9



Sponsored Symposia

SUNDAY JUNE 23RD

Room A

13.00-13.30

MEAD JOHNSON - RECKITT

CMPA, TOLERANCE AND MICROBIOME IMPLICATION. EXPERT INSIGHT DISCUSSION

Chair: Dr. Nitida Pastor, *Spain*

Speaker: Prof. Jon Arvid Vanderhoof, *USA*

13.30-14.00

BioGaia

DECIPHERING MOLECULAR CROSS-TALKS OF CLASSIC AND NEXT-GENERATION PROBIOTICS WITHIN THE HOLOBIONT: THE BEAUTY OF SYNERGY

Speaker: Gianfranco Grompone, *Sweden*

SUNDAY JUNE 23RD

Room Pininfarina

13.00-14.00

CANADIAN INSTITUTES OF HEALTH RESEARCH, INSTITUTE OF INFECTION AND IMMUNITY (CIHR-III)

THE CANADIAN MICROBIOME INITIATIVE: A FOCUS ON FUNCTION AND TRANSLATION

13.00 **CIHR-III Welcome & Overview**

Chair: Dr. Charu Kaushic, *Scientific Director, CIHR Institute of Infection and Immunity, Canada*

13.10 **CMI2 Team presentation**

Project Title: Causational Roles of the Gut Microbiome in Childhood Asthma: Leveraging the Child Cohort Study

Title: How early life exposures shape the infant microbiome to promote or prevent asthma

Speaker: Dr. Megan Azad, *NPI Padmaja Subbarao, Canada*

13.20 **CMI2 Team presentation**

Project Title: The Microbiome of Premature Infants

Title: Microbiome maturation in premature infants

Speaker: Dr. Marie Claire Arrieta Mendez, *NPI, Canada*

13.30 **CMI2 Team presentation**

Project Title: Pathogen-Microbiome Dynamics During Pregnancy in Young Mothers

Title: Protist - microbiome interactions in the maternal gut during pregnancy

Speaker: Dr. John Parkinson, *NPI, Canada*

13.40 **CMI2 Team presentation**

Project Title: Dissecting Host-Microbiome Modifiers of Type 2 Diabetes Risk

Title: A Canadian team effort to deciphering microbiome determinants of Type 2 diabetes

Speaker: Dr. André Marette, *NPI, Canada*

13.50 **CMI2 Team presentation**

Project Title: The Vaginal Microbiome in Cervical Cancer and Mucosal Immunity

Title: The vaginal microbiome and cervical cancer in Ugandan women with HIV

Speaker: Dr. Adam Burgener, *NPI, Canada*

14.00 **Closing**

Room GH

13.00-14.00

THE GLOBAL GRANTS FOR GUT HEALTH:

HOW THE GERIATRIC GUT MICROBIOME INFLUENCES HUMAN HEALTH AND AGEING

13.00 **Welcome and Introductory Remarks**

Helena Jensen, *Nature Portfolio/Springer Nature*, GGGH Administration team, UK

13.03 **Healthy aging and the gut microbiome**

Johannes Paul Johnson-Martinez, *University of Washington*, (On behalf of Sean Gibbons, *Institute for Systems Biology*), Seattle, USA

13.15 **Q&A Session**

Johannes Paul Johnson-Martinez

13.21 **Stromal heterogeneity and the microbiota in the aging intestine**

Vasiliki Koliaraki, *Alexander Fleming Biomedical Sciences Research Center, Vari, Greece*

13.33 **Q&A Session**

Vasiliki Koliaraki

13.39 **Gut microbiome alterations in neurocognitive disorders**

Paul O'Toole, *University College Cork, Cork, Ireland*

13.51 **Q&A Session**

Paul O'Toole

13.56 **Concluding Remarks**

Helena Jensen, Gavin Buffett from *Springer Nature*

Facilitators:

Gavin Buffett, *Nature Portfolio/Springer Nature*, GGGH Administration team, Japan

Helena Jensen, *Nature Portfolio/Springer Nature*, GGGH Administration team, UK

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MEETING&CONSULTING

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