



Humanitas Congress Center
Milan, February 5/7, 2020

Congress Venue
Humanitas Congress Center
Via Manzoni, 56 - Rozzano MI, Italy

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Chairs:
N. Mancini, F. Peri, M. Rescigno



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2020 MicrobiotaMi

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Faculty

- **Yasmine Belkaid** National Institute of Allergy and Infectious Diseases (NIAID), USA
- **Patrice D. Cani** Catholic University of Leuven, Brussels, Belgium
- **Marco Colonna** Washington University School of Medicine, St. Louis, USA
- **Ernst Holler** University of Regensburg, Germany
- **Iliyan Iliev** Weill Cornell Medicine, New York, USA
- **Alexander Khoruts** University of Minnesota, Minneapolis, USA
- **Simona Lodato** Humanitas University, Milan, Italy
- **Nicasio Mancini** University "Vita-Salute" San Raffaele, Milan, Italy
- **Paul O'Toole** University College of Cork, Ireland
- **Eric Pamer** University of Chicago, USA
- **Enrico Papaleo** University "Vita-Salute" San Raffaele, Milan, Italy
- **Francesco Peri** University of Milano Bicocca, Milan, Italy
- **Manuela Raffatellu** University of California, San Diego, USA
- **Alessandro Repici** University "Vita-Salute" San Raffaele, Milan, Italy
- **Maria Rescigno** Humanitas University, Milan, Italy
- **Nicola Segata** University of Trento, Italy
- **Karen Sfanos** Johns Hopkins University School of Medicine, Baltimore, USA
- **Pasquale Striano** "G. Gaslini" Institute, University of Genoa, Italy
- **Ivan Zanoni** Harvard Medical School, Boston, USA



2020 Humanitas Congress Center
MicrobiotaMi Milan, February 5/7, 2020

After the success of our first edition, we are pleased to announce **MicrobiotaMI 2020**: three days of scientific sessions and multidisciplinary networking at the brand new **Humanitas Congress Center in Milan 5th-7th February 2020**.

Researchers in the broad field of microbiota, from bench to bedside, and companies will meet in Milan to share their knowledge and to create new collaborations and technology transfer opportunities.

The program is divided into **seven core sessions**:

1. **Microbiota and immune cells**
2. **Gut-liver-brain axis**
3. **Microbiota and Pathogens**
4. **Gut-bone marrow axis**
5. **Mucosal surface microbiota**
6. **Microbiota and immune system: from allergies to cancer**
7. **Global microbiota signatures and pathologies**

In each of these sessions, presentations will be made by leading immunologists and clinicians who will give **keynote lectures** on state of the art advancements in differing areas of the same microbiome field. A **final round table** for each session will discuss future development in that area, encouraging contributions from the audience.

MicrobiotaMi is characterized by a **multidisciplinary approach**, an outstanding scientific level, and a large active participation of young, early stage researchers. We anticipate the attendance of researchers from academia, clinical departments as well as biotech and pharma industries who are interested in the molecular, immunological and translational aspects of microbiota.

We look forward to seeing you at this exciting meeting in a stimulating interdisciplinary environment favored by the intercultural, young, creative, and fascinating city of Milan.

Chairs

Nicasio Mancini
San Raffaele University,
Milan

Francesco Peri
University of
Milano-Bicocca, Milan

Maria Rescigno
Humanitas University,
Rozzano, Milan



Scientific Program

● Wednesday February 5th

From 10:30 Registration

13:00 – 13:20 **Welcome address and introduction to MicrobiotaMI 2020**
Nicasio Mancini (Milan), Francesco Peri (Milan), Maria Rescigno (Milan)

PLENARY SESSION 1 “Microbiota and immune cells”

Chairman: Ivan Zanoni (Milan)

13.20 – 14:20 **ILC in mucosal immunity**
Marco Colonna (St. Louis)

14.20 – 14.35 **OC1 - Analysis of the Therapeutic Effect of Bifidobacterium Administration on Experimental Autoimmune Myasthenia Gravis in Lewis Rats**
Alessandra Consonni (Fondazione IRCCS Istituto Neurologico Carlo Besta, Milan, Italy)

14.35 – 14.50 **OC2 - Dissecting the role of the gut microbiota in immune modulation of Multiple Sclerosis**
Jessica Perego (Ospedale San Raffaele, Milan, Italy)

14.50-15.05 **OC3 - Microbiota-mediated shaping of gut secretory IgA in systemic metabolism**
Lisa Perruzza (Università della Svizzera italiana, Bellinzona, Switzerland)

15:05 – 15:30 **Poster Session**

15:30 – 16:00 **Poster Session and Coffee break**

PLENARY SESSION 2 “Gut-liver-brain axis”

Chairmen: Simona Lodato (Milan), Pasquale Striano (Genoa)

16:00 – 17:00 **Gut microbes and host metabolism: focus on recent translational approaches**
Patrice D. Cani (Brussels)

17:00 – 17:45 **Pharmacology of Intestinal Microbiota Transplantation: C. difficile and beyond**
Alexander Khoruts (Minneapolis)

17.45 – 18.00 **OC4 - Identification of a Choroid Plexus Vascular Barrier whose Closure upon Intestinal Inflammation Leads to Behavioral Impairments**
Sara Carloni (Humanitas University, Milan, Italy)

18.00 – 18.15 **OC5 - Bristol Stool Test support to explore potential dysbiosis in children with epilepsy**
Antonella Riva (University of Genoa, “G. Gaslini” Institute, Genoa, Italy)

18.15 – 18.30 **OC6 - Superabsorbent hydrogel supplementation prevents hepatic steatosis and insulin resistance in high fat diet-induced NAFLD pre-clinical model**
Alessandra Silvestri (Humanitas Clinical and Research Center IRCCS, Milan, Italy)

18:30 – 19:15 **Poster Session**

● Thursday February 6th

PLENARY SESSION 3 “Microbiota and Pathogens”

Chairman: Maria Rescigno (Milan)

09:00 – 10:00 **Microbial competition for metal ions in the inflamed gut**
Manuela Raffatellu (La Jolla)

10.00 – 10.15 **OC7 - How mutualism evolves: Dissecting the role of the host in microbiota evolution**
Marialaura Gallo (University of Padua, Italy)

10.15 – 10.30 **OC8 - Enteric microbiome markers as early predictors of clinical outcomes in liver transplant: results of an ongoing prospective study**
Melania Maccaro (Vita-Salute San Raffaele University, Milan, Italy)

10:30 – 10:45 **OC9 - Parasites and gut microbiota: is there a link?**
Antonio Mazzarelli (National Institute for Infectious Diseases, INMI “Lazzaro Spallanzani” IRCCS, Rome, Italy)

10:45 – 11:30 **Poster Session and Coffee break**

PLENARY SESSION 4 “Gut-bone marrow axis”

Chairman: Nicasio Mancini (Milan)

11:30 – 12:30 **Gut microbiota and host defense against infectious diseases**
Eric Pamer (Chicago)

12:30 – 13:15 **Microbiota modulate outcome of allogeneic stem cell transplantation**
Ernst Holler (Regensburg)

13.15 – 13.30 **OC10 - The commensal Prevotella heparinolytica skews dendritic cells towards a pro-Th17 phenotype and accelerates multiple myeloma progression**
Arianna Brevi (Vita-Salute San Raffaele University, Milan, Italy)

13.30 – 13.45 **OC11 - Antibiotic-induced gut microbiome and metabolome alterations affects therapeutic FMT efficacy**
Francesco Strati (European Institute of Oncology - IEO, Milan, Italy)

13:45 – 14:30 **Snack lunch**



Scientific Program

PLENARY SESSION 5 “Mucosal surface microbiota”

Chairman: Enrico Papaleo (Milan)

- 14:30 – 15:30** **Friend or Foe? The genitourinary microbiota in Health and disease**
Karen Sfanos (Baltimore)
- 15:30 – 16:15** **Gut mycobiota in Immunity and Inflammation**
Iliyan Iliev (New York)
- 16:15 – 16:30** **OC12 - Differential composition of vaginal microbiome is associated with successful intrauterine insemination (IUI) in couples with idiopathic infertility: a prospective observational study**
Virginia Amato (“Vita-Salute” San Raffaele University, Milan, Italy)
- 16:30-16.45** **OC13 - Sex specific alterations in the urinary and intratissutal microbiome in therapy naïve urothelial bladder cancer patients**
Filippo Pederzoli (“Vita-Salute” San Raffaele University, Milan, Italy)
- 16.45-17.00** **OC14 - Cutaneous barrier leakage and gut inflammation drive skin disease in Omenn Syndrome**
Barbara Cassani (Humanitas Clinical and Research Center IRCCS, Milan, Italy)

PLENARY SESSION 7 “Global microbiota signatures and pathologies”

Chairman: Francesco Peri (Milan)

- 11.30 – 12:30** **The hidden human microbiome diversity and personalized host-microbiome interaction**
Nicola Segata (Trento)
- 12.30 – 12.45** **OC17 - The impact of sexual behaviour and cardiovascular risk factors on gut microbial dysbiosis HIV related**
Giuseppe Ancona (San Paolo Hospital, University of Milan, Italy)
- 12.45 – 13.00** **OC18 - Assessment of single cell RNA-seq statistical methods on microbiome data**
Matteo Calgaro (University of Verona, Italy)
- 13.00-13.15** **OC19 - Fecal microbiota, serum biomarkers, diet and lifestyle: colorectal cancer risk and prognosis**
Federica Corso (European Institute of Oncology - IEO, Milan, Italy)
- 13:15 – 13.45** **Poster Prizes and Closing remarks**
Nicasio Mancini (Milan), Francesco Peri (Milan), Maria Rescigno (Milan)

● Friday February 7th

PLENARY SESSION 6 “Microbiota and immune system: from allergies to cancer”

Chairmen: Iliyan Iliev (New York), Alessandro Repici (Milan)

- 09:00 – 10:00** **Microbiota control of tissue immunity and repair**
Yasmine Belkaid (Bethesda)
- 10:00 – 10.45** **Role of the gut microbiota in causation, detection and treatment of cancer**
Paul O’ Toole (Cork)
- 10.45 – 11.00** **OC15 - Identification of a new vascular marker correlating with colorectal cancer metastatization to distant organ**
Alice Bertocchi (Humanitas Research, Milan, Italy)
- 11.00 – 11.25** **OC16 - Intestinal tumor development in Lynch Syndrome: a role for the microbiota?**
Wietske Pieters (The Netherlands Cancer Institute, Amsterdam, The Netherlands)
- 11:15 – 11:30** Coffee break



Poster Exhibition

- P01** The impact of *Akkermansia muciniphila* on bone health.
Sarah Abdollahiyan Microbiology Research Center, Pasteur Institute of Iran, Tehran, Iran
- P02** The Relative Abundance of Important Gut Microbiota Members in Iranian CVD Patients.
Sara Ahmadi Badi Microbiology Research Center, Pasteur Institute of Iran, Tehran, Iran
- P03** *Akkermansia muciniphila*-derived extracellular vesicles ameliorate obesity by impact on tight junction protein, inflammation and energy homeostasis.
Fatemeh Ashrafiyan Department of Mycobacteriology and Pulmonary Research, Pasteur Institute of Iran, Tehran, Iran & Microbiology Research Center (MRC), Pasteur Institute of Iran, Tehran, Iran
- P04** Probiotic modulation of dendritic cell function in Crohn's disease patients.
Shaghayegh Baradaran Ghavami Gastroenterology and Liver Diseases Research Center, Research Institute for Gastroenterology and Liver Diseases, Shahid Beheshti University of Medical Sciences, Tehran, Iran
- P05** Gut microbiota, subclinical carotid atherosclerosis and major cardiovascular risk factors in general population: which association?
Andrea Baragetti Department of Pharmacological and Biomolecular Sciences, University of Milan, Milan, Italy & SISA Center for the Study of Atherosclerosis, Bassini Hospital, Cinisello Balsamo, Milan, Italy
- P06** Microbiota-driven gut vascular barrier disruption is a prerequisite for NASH development.
Paola Brescia Humanitas Clinical and Research Center – IRCCS, Rozzano, MI, Italy
- P07** Gut microbiota alterations affect glioma growth and innate immune cells involved in tumor immunosurveillance.
Giuseppina D'Alessandro Department of Physiology and Pharmacology, Sapienza University, Rome, Italy & IRCCS Neuromed, Pozzilli, IS, Italy
- P08** Study of changes in the intestinal microbiota of rats caused by implantation of a biopolymer construct based on poly-3-hydroxybutyrate and alginate.
Andrei Dudun Research Center of Biotechnology RAS, Russia
- P09** Alteration of gut microbiota composition in obese adults; a possible link between obesity and fatty liver disease.
Hanieh-Sadat Ejtahed Endocrinology and Metabolism Research Center, Endocrinology and Metabolism Clinical Sciences, Institute, Tehran University of Medical Sciences, Tehran, Iran
- P10** Characterization of fecal and oral microbiome associated with Lynch syndrome.
Roberto Ferrarese Laboratory of Microbiology and Virology, Ospedale San Raffaele, Milan, Italy
- P11** One month of Ketogenic Diet alters short chain fatty acids production in drug-resistant epileptic patients.
Cinzia Ferraris Human Nutrition and Eating Disorder Research Center, Department of Public Health, Experimental and Forensic Medicine University of Pavia, Pavia, Italy
- P12** Toll-like receptor 4-mediated inflammation triggered by extracellular IFI16 is enhanced by lipopolysaccharide binding.
Andrea Iannucci CAAD - Center for Translational Research on Autoimmune and Allergic Disease, University of Eastern Piedmont, Novara, Italy & Department of Translational Sciences, University of Eastern Piedmont, Novara, Italy
- P13** Gut microbiota composition in osteopenia and osteoporosis patients.
Shahrbanoo Keshavarz Azizi Raftar Microbiology Research Center, Pasteur Institute of Iran, Tehran, Iran
- P14** Unraveling the Pathways Involved in Gut Vascular Barrier Impairment in Metastatic Colorectal Cancer.
Antonino Lo Cascio Humanitas Clinical and Research Center – IRCCS, Rozzano, MI, Italy
- P15** An anti-inflammatory diet enriched in omega3 and inulin prevents Type 1 Diabetes by inducing intestinal Treg cell differentiation and restoring gut barrier integrity in NOD mice.
Marta Lo Conte Experimental Diabetes Unit – DRI, San Raffaele Scientific Institute, Milan, Italy
- P16** Beneficial properties of a synbiotic innovative supplement (probit®; MGP gold and *kluveromyces marxianus* b0399) on antitubercular drugs-induced gastrointestinal side effects.
Mauro Mantovani ARTIB (Associazione Ricerca Terapie Innovative Biointegrate), Italy
- P17** Microbiota Composition in HIV-positive and HIV-Exposed Uninfected Pediatric Subjects.
Esther Merlini Clinic of Infectious Diseases, Dept Health Sciences, University of Milan, Italy
- P18** The Airway Microbiota pattern in Cystic Fibrosis.
Maryam Meskini Department of Mycobacteriology and Pulmonary Research, Pasteur Institute of Iran, Tehran, Iran & Microbiology Research Center (MRC), Pasteur Institute of Iran, Tehran, Iran
- P19** Microbiota-mediated PROTEIN X expression affects Immune Breast Cancer Microenvironment and Overall Survival.
Alessandro Mauro Mozzarelli Humanitas University, Department of Biomedical Sciences, Milan, Italy
- P20** Characterization of the urinary microbiota in bladder cancer patients.
Bianca Oresta Humanitas Clinical and Research Center – IRCCS, Rozzano, MI, Italy
- P21** Phenotyping and genotyping of non-*Escherichia coli* Enterobacteriaceae isolated from the gut microbiota of healthy subjects.
Maddalena Rossi Department of Life Sciences, University of Modena and Reggio Emilia, Modena, Italy
- P22** 16S profiling and isolation of mucin degraders from human gut microbiota.
Maddalena Rossi Department of Life Sciences, University of Modena and Reggio Emilia, Modena, Italy
- P23** The Lung and Gut Microbiota in Pulmonary Tuberculosis: A Systematic Review
Rouhollah Abdolhamidi Pharmaceutical Sciences Research Center, Pharmaceutical Sciences Branch, Islamic Azad university, Tehran, Iran
- P24** Comparability of 16S rRNA gene sequencing in fresh frozen and formalin fixed paraffin embedded colorectal cancer samples.
Garazi Serna Molecular Oncology Group, Vall d'Hebron Institute of Oncology, Barcelona, Spain
- P25** Gut microbiota composition in type 2 diabetic patients.
Seyed Davar Siadat Microbiology Research Center, Pasteur Institute of Iran, Tehran, Iran
- P26** Biofilm and soluble virulence factors produced by *Staphylococcus* spp. strains isolated from skin microbiota in people with acne.
Gheorghe Silvana-Adelina Carol Davila University of Medicine and Pharmacy, Bucharest, Romania & Cantacuzino National Medico-Military Institute for Research and Development, Bucharest, Romania
- P27** Gut Microbiota and their Metabolites In Colorectal Cancer: A Systematic Review.
Samira Tarashi Microbiology Research Center, Pasteur Institute of Iran, Tehran, Iran
- P28** Microbial communities in agricultural soil fertilized with animal manure in Northern Italy.
Roberta Tolosi Department of Comparative Biomedicine and Food Science, University of Padua, Legnaro (PD), Italy
- P29** Soy intake and breast cancer.
Edy Virgili Outpatient Nutritionist, Porto Sant'Elpidio (FM), Italy
- P30** Può la modulazione del microbiota migliorare la risposta alla terapia con checkpoint inhibitor? Case-report
Filippo Zerilli Osp. S. Antonio Abate, Erice A.S.P. di Trapani, Italy
- P31** Gut microbiota and B cell receptor (BCR) inhibitors for the treatment of lymphoid malignancies: retrospective recognition of different enterotypes correlated to clinical response or irAEs occurrence. A cross-sectional study.
Valentina Zuccaro Department of Infectious Diseases, Fondazione IRCCS "Policlinico San Matteo," Pavia, Italy



CONGRESS VENUE

HUMANITAS CONGRESS CENTER

Via Manzoni, 113 – 20089 Rozzano (Milano)
www.humanitasedu.it



Humanitas University is an International Medical School based in Milan, built alongside the renowned Humanitas Research and Teaching Hospital. Three buildings immersed in a green area, 25.000 square meters to accommodate 1,200 students from 31 countries around the world. A Simulation Lab of 2,000 square metres, one of the most technological and large in Europe, high-tech classrooms, digital library and residences. A few steps away from the research laboratories directed by Prof. Mantovani and the hospital, an integral part of the campus as a teaching place for future doctors, nurses and physiotherapists

How to reach the Congress Venue

The Humanitas University is very well connected to the airports, railway stations, city centre via ground transportation:



From Malpensa Airport

Take SS336dir to Vizzola Ticino from Strada Statale 336 - 3 min (2.4 km)
Follow SS336dir, A4 / E64 and A50 / E35 in the direction of Via Cassino Scansio / Strada Provinciale 35 dei Giovi in Rozzano.
Take exit 7-Pavia-Milan-Ticinese from A50 / E35 - 36 min (55.4 km)
Take Viale Monte Amiata, Viale Isonzo, Via Gianni Mazzocchi, Via A. Grandi and Via Alessandro Manzoni to your destination in Cascina Perseghetto



From Linate Airport

Take A51 to Milan from Viale Enrico Forlanini - 5 min (3.5 km)
Continue on A51. Take A1 and A50/E35 in the direction of Via Eugenio Curiel in Rozzano. Take exit 7bis from A50/E35 - 12 min (17.0 km)
Continue on Via Eugenio Curiel to your destination at Cascina Perseghetto



From Central Station

Take Via Vittor Pisani, Piazza della Repubblica, Bastioni di Porta Venezia, Viale Luigi Majno ... and Viale Beatrice d'Este in the direction of Via Ferdinando Bocconi - 18 min (5.3 km)
Continue on Via Ferdinando Bocconi towards Via Carlo Bazzi - 3 min (1.0 km)
Continue on Via Carlo Bazzi. Guide from Via Medeghino, Via dei Missaglia, Via Eugenio Curiel and Via Alessandro Manzoni at Cascina Perseghetto - 19 min (8.8 km). Turn right. Your destination is on the right

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