

Scientific Program

The Program is Preliminary and is a subject to change.

Part of the scientific program are two not-to-miss pre-Conference workshops:

- Clinical and Translational Microbiome Studies Bootcamp – a workshop by Prof. Kjersti Aagaard's and Prof. Omry Koren's labs
- Introduction to Shotgun Metagenomic Data Analysis with bioBakery – a workshop by Prof. Nicola Segata's lab

For more information please click [here](#). **13:30 – 13:40** *Plenary Hall (Millennium Grand Ballroom)*

WELCOME ADDRESS BY THE SCIENTIFIC COMMITTEE 13:40 – 14:10
Plenary Hall (Millennium Grand Ballroom)

OPENING KEYNOTE LECTURE

Chair: **Nicola Segata**, University of Trento, Italy

Personalized medicine based on microbiome and deep human phenotyping

Eran Segal, Weizmann Institute of Science, Israel (14:10 – 14:20) *short technical break 14:20 – 15:55 Plenary Hall (Millennium Grand Ballroom)*

SESSION 1: THE MATERNAL MICROBIOME

Chairs: **Ina Schuppe Koistinen**, Karolinska Institutet, Sweden & **Maria Carmen Collado**, Institute of Agrochemistry and Food Technology, Spain

14:20 – 14:40

Conversations in the Womb: Role of the perinatal microbiome in maternal-fetal communication

Kjersti Aagaard, Baylor College of Medicine, USA

14:40 – 14:55

Impacts of the maternal microbiome on the developing infant

across the perinatal period

Lindsay Hall, Quadram Institute, UK

14:55 – 15:05

The preterm gut microbiota and administration routes of different probiotics: a randomized controlled trial

Ella-Noora Rahkola, University of Turku, Finland

15:05 – 15:15

Beta-resorcylic acid derived by gut microbiota protect against cisplatin-induced ovarian toxicity and subfertility in mice

Yinglin Feng, The First People's Hospital of Foshan, People's Republic of China

15:15 – 15:25

A novel approach to track individual strains during mother-to-infant transmission at the clonal level

Pernille Neve Myers, Clinical Microbiomics, Denmark

15:25 – 15:55

Panel Discussion **15:55 – 16:30** *Exhibition & Networking Area (Lobby 2nd Floor)*

COFFEE BREAK, EXHIBITION & NETWORKING

Industry Presentations by NimaGen and Perseus Biomics.

[For more information you can click here.](#) **16:30 – 17:55** *Plenary Hall (Millennium Grand Ballroom)*

SESSION 2: DEVELOPMENTAL PROGRAMMING OF THE MICROBIOME

Chairs: **David MacIntyre**, Imperial College London, United Kingdom & **Erika Isolauri**, University of Turku, Finland

16:30 – 16:50

Perinatal gut microbiota development in preterm neonates

Samuli Rautava, University of Turku, Finland

16:50 – 17:05

The unique metabolome of the in utero human intestine

Liza Konnikova, Yale University School of Medicine, USA

17:05 – 17:15

Characterizing the microbiota shared between mother's milk and the very-low-birth-weight infant gut

Sara Shama, University of Toronto, Canada*

17:15 – 17:25

Perinatal exposure to phenols and perfluoroalkyl substances and gut microbiota in one-year children

Aline Davias, Inserm, France

17:25 – 17:55

Panel Discussion (17:55 – 18:05) *short technical break* **18:05 – 19:40** *Plenary Hall (Millennium Grand Ballroom)*

SESSION 3: ENVIRONMENTAL EXPOSURES SHAPING THE MICROBIOME

Chair: **Eran Segal**, Weizmann Institute of Science, Israel & **Lindsay Hall**, Quadram Institute, UK

18:05 – 18:25

Resilience to risk exposures early in life through the microbiome

Erika Isolauri, University of Turku, Finland

18:25 – 18:40

Development of gut microbiome and virome during the first year of life

Alexandra Zhernakova, University Medical Center Groningen, Netherlands

18:40 – 18:50

CosmosID-HUB: An Analysis Software for Microbiome Research

Mo Langhi, CosmosID, USA

18:50 – 19:00

Deterioration of 5th century Roman tomb wall paintings assessed by microbiome analysis

Borislava Tsafarova, National Center of Infectious and Parasitic Diseases, Bulgaria

19:00 – 19:10

Comprehensive description of bats blood microbiome

Stefan Panaiotov, National Center of Infectious and Parasitic Diseases, Bulgaria

19:10 – 19:40

Panel Discussion **19:40 – 20:30** *Exhibition & Networking Area (Lobby 2nd Floor)*

WELCOME RECEPTION, EXHIBITION & OFFICIAL POSTER VIEWING & DISCUSSIONS 08:30 – 10:30 *Plenary Hall (Millennium Grand Ballroom)*

SESSION 4: GUT BRAIN AXIS (IN MEMORY OF PROF. JOHN BIENENSTOCK)

Chairs: **Kjersti Aagaard**, Baylor College of Medicine, USA & **Omry Koren**, Bar Ilan University, Israel

08:30 – 09:00

Keynote Lecture: The microbiota and immune system crosstalk in neurodevelopment and behavior

Rochellys Diaz Heijtz, Karolinska Institutet, Sweden*

09:00 – 09:20

Bacterial extracellular vesicles: novel players in the gut-brain axis

Roos Vandenbroucke, Ghent University, Belgium*

09:20 – 09:40

A role for the microbiome in social behavior?

Omry Koren, Bar Ilan University, Israel*

09:40 – 09:50

Short chain fatty acids and tryptophan metabolites in the gut are persistently altered by maternal western style feeding

Erin Bolte, Baylor College of Medicine, USA

09:50 – 10:00

Faecal microbiota transplantation (FMT) is a safe and effective intervention for patients with irritable bowel

syndrome (IBS)

Magdy El-Salhy, Stord Hospital, Helse Fonna, Norway

10:00 – 10:30

Panel Discussion **10:30 – 11:10** *Exhibition & Networking Area
(Lobby 2nd Floor)*

COFFEE BREAK, EXHIBITION & NETWORKING

Industry Presentations by TargEDys and Massive Bioinformatics.

[For more information you can click here.](#) **11:10 – 12:20** *Plenary
Hall (Millennium Grand Ballroom)*

SESSION 5: YOU, YOUR MICROBIOME AND THE WORLD

Chair: **Iris Dotan**, Rabin Medical Center, Israel & **Pauline Scanlan**, University College Cork, Ireland

11:10 – 11:25

Diet shapes protective niches in the microbiome of patients with Crohn's disease

Dirk Haller, Technical University of Munich, Germany

11:25 – 11:35

Does our microbiome travel well? Gut microbiome perturbations precede the onset of post-infectious IBS in intercontinental travelers

John Penders, Maastricht University, Netherlands

11:35 – 11:45

Population-level variability in gut microbiome antibiotic resistance: an analysis of demographic, dietary, health, and geographic factors

Katariina Pärnänen, University of Turku, Finland

11:45 – 11:55

Bridging the gap between clinical and preclinical gut microbiome research with the SIFR® technology

Pieter Van den Abbeele, Cryptobiotix, Belgium*

11:55 – 12:20

Panel Discussion(12:20 – 12:30) *short technical break* **12:30 – 13:15** *Plenary Hall (Millennium Grand Ballroom)*

PANEL DISCUSSION: GIVE THE BUGS OR FEED THE BUGS

Chair: **Kjersti Aagaard**, Baylor College of Medicine, USA

Panelists:

Erika Isolauri, University of Turku, Finland

Iris Dotan, Rabin Medical Center, Israel

Dirk Haller, Technical University of Munich, Germany

Samuli Rautava, University of Turku, Finland **13:15 – 14:30**

Exhibition & Networking Area (Lobby 2nd Floor)

LUNCH BREAK, EXHIBITION & NETWORKING

13:25 – 14:15

Best Poster Presentations

[For more information you can click here.](#) **14:30 – 15:35** *Plenary Hall (Millennium Grand Ballroom)*

SESSION 6: THE FORGOTTEN MEMBERS OF THE MICROBIOME

Chairs: **Rochellys Diaz Heijtz**, Karolinska Institutet, Sweden & **Alexandra Zhernakova**, University Medical Center Groningen, Netherlands

14:30 – 14:45

The human archaeome

Christine Moissl-Eichinger, Medical University of Graz, Austria

14:45 – 15:00

Protists associated with the healthy human gut microbiome: who is in there and what are they doing?

Pauline Scanlan, University College Cork, Ireland

15:00 – 15:15

The human blood microbiome: microbial morphology, life cycle and bacterial-fungal interactions

Stefan Panaiotov & Yordan Hodzhev, National Center of

Infectious and Parasitic Diseases, Bulgaria

15:15 – 15:35

Panel Discussion **15:35 – 16:00** The history and early days of *Lactobacillus bulgaricus*

Irina Gotova & Zoltan Urshev, LB Bulgaricum, Bulgaria **16:00 – 17:00** *Exhibition & Networking Area (Lobby 2nd Floor)*

REFRESH AND RECONNECT BREAK

16:10 – 16:35

Coffee with the Professor

16:35 – 17:00

My journey in the WoM

For more information please [click here](#). **17:00 – 18:35** *Plenary Hall (Millennium Grand Ballroom)*

SESSION 7: DIET AND MEDICATION

Chair: **Dirk Haller**, Technical University of Munich, Germany

17:00 – 17:30

Keynote Lecture: Personalisation and the human microbiome

Tim Spector, King's College London, United Kingdom

Chairs: **Christine Moissl-Eichinger**, Medical University of Graz, Austria & **Tim Spector**, King's College London, United Kingdom

17:30 – 17:45

Effects of diet on maternal-infant microbiota and breast milk composition: relevance for health outcomes

Maria Carmen Collado, Institute of Agrochemistry and Food Technology, Spain

17:45 – 17:55

Environmental pollution shapes the gut microbiome and drives the enrichment in xenobiotics-degrading activities

Francesca de Filippis, University of Naples Federico II, Italy

17:55 – 18:05

Diet modulation of the gut microbiota and its impact on antitumor immunity in non-small cell lung cancer patients treated with immune checkpoint inhibitors

Myriam Benlaifaoui, CHUM Research Center, Canada

18:05 – 18:35

Panel Discussion **09:00 – 10:25** *Plenary Hall (Millennium Grand Ballroom)*

SESSION 8: FROM BENCH TO BEDSIDE – USING MICROBIOME IN CLINICAL TRIALS

Chair: **Samuli Rautava**, University of Turku, Finland

09:00 – 09:20

Microbial manipulation in IBD – from research to practice

Iris Dotan, Rabin Medical Center, Israel

09:20 – 09:35

Gut microbiome into clinical practice

Gianluca Ianiro, Università Cattolica del Sacro Cuore, Italy*

09:35 – 09:45

A randomized double-blind phase 2 trial of fecal microbiota transplantation versus placebo in allogeneic hematopoietic cell transplantation and acute myeloid leukemia

Armin Rashidi, Fred Hutchinson Cancer Center, USA

09:45 – 09:55

Microbial and aucosal gene expression findings from the first randomized clinical trial on fecal microbiota transplantation for chronic pouchitis

Reetta Satokari, University of Helsinki, Finland

09:55 – 10:25

Panel Discussion **10:25 – 11:00** *Exhibition & Networking Area (Lobby 2nd Floor)*

COFFEE BREAK, EXHIBITION & NETWORKING

10:35 – 10:50

An Interview with a patient: **Healing thanks to research**

For more information please [click here](#). **11:00 – 12:20** *Plenary Hall (Millennium Grand Ballroom)*

SESSION 9: IT'S NOT ALL ABOUT THE GUT: VAGINAL, ORAL AND SKIN MICROBIOMES IN HEALTH AND DISEASE

Chair: **Benoit Chassaing**, French National Institute of Health and Medical Research, France

11:00 – 11:15

Deciphering women's reproductive health through population-based microbiome studies

Ina Schuppe Koistinen, Karolinska Institutet, Sweden

11:15 – 11:30

Spatial characterisation of reproductive tract microbiota-host immune responses in preterm birth

David MacIntyre, Imperial College London, United Kingdom

11:30 – 11:40

Effect on sub-gingival microbiome of diverse subgingival air-polishing in the treatment of advanced periodontitis: a randomized controlled clinical trial

Irene Soffritti, University Of Ferrara, Italy

11:40 – 11:50

Quantifying the effects of urbanization on the health of ancient populations with the ancient oral microbiome

Sterling Wright, Penn State University, USA

11:50 – 12:20

Panel Discussion **12:20 – 13:20** *Exhibition & Networking Area (Lobby 2nd Floor)*

LUNCH BREAK, EXHIBITION & NETWORKING

12:45 – 13:00

Awards Ceremony **13:20 – 14:15** *Plenary Hall (Millennium Grand*

Ballroom)

SESSION 10: TEASING OUT A MECHANISM: HOW DOES THE MICROBIOME CONTRIBUTE TO DISEASE

Chairs: **Liza Konnikova**, Yale University School of Medicine, USA & **Gianluca Ianaro**, Università Cattolica del Sacro Cuore, Italy

13:20 – 13:35

Diet-Microbiota interaction: a personalized point of view

Benoit Chassaing, French National Institute of Health and Medical Research, France

13:35 – 13:45

Studying post-translational modifications at the diet-host-microbe interface

Lior Lobel, Bar-Ilan University, Israel

13:45 – 13:55

A depleted gut microbiome predicts incident type 2 diabetes

Yong Fan, University Of Copenhagen, Denmark

13:55 – 14:15

Panel Discussion **14:15 – 14:45** *Plenary Hall (Millennium Grand Ballroom)*

CLOSING KEYNOTE LECTURE

Chair: **Roberto Berni Canani**, University of Naples “Federico II”, Italy

Metagenomics of the human microbiome: next steps and clinical applications

Nicola Segata, University of Trento, Italy **14:45 – 15:00**
Plenary Hall (Millennium Grand Ballroom)

CLOSING DISCUSSION WITH THE SCIENTIFIC COMMITTEE

**the speakers marked with a star (*) next to their affiliation have not given consent to have their presentations recorded, therefore their talks will be available for viewing only live*

(on-site and online)