

Advancing Research,
Understanding & Application

4TH INTERNATIONAL
WORLD OF MICROBIOME
CONFERENCE

26-28 OCTOBER 2023
SOFIA, BULGARIA

PROGRAM

WORLD OF
MICROBIOME



microbiome.kenes.com

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WELCOME LETTER

Dear Colleagues,

It is our pleasure to welcome you to the 4th edition of the **International World of Microbiome Conference (WoM 2023), 26-28 October in Sofia, Bulgaria**, or online!

The 4th edition of the WoM Conference covers various aspects of the microbiome and its impact on the human body - the pregnancy microbiome and its clinical impacts on the neonatal microenvironment, intestinal diseases and extraintestinal manifestations related to gut-microbiome interaction, future perspectives of FMT from microbiological and clinical point of view, development and target population of the biotics in personalized nutrition. The Conference aims to overcome the gaps and hurdles in the microbiota medical knowledge and therefore to unleash the potential for disease prevention, diagnosis, and treatment.

Alongside the invaluable scientific content, at WoM 2023 we will also focus specifically on networking opportunities, informal interactions, and supplementary activities, as we aim to promote collaboration and forge partnerships.

We encourage you to seize the opportunity to explore, be active and get involved with everything the Conference has to offer!

Sincerely,

WoM 2023 Scientific Committee



Prof Omry Koren
Bar Ilan University, Israel



Prof Erika Isolauri
University of Turku, Finland



Prof Samuli Rautava
University of Turku, Finland



Prof Kjersti Aagaard
Baylor College of Medicine, USA



Prof Nicola Segata
University of Trento, Italy



Prof Iris Dotan
Rabin Medical Center, Israel

PROGRAM TIMETABLE

THURSDAY, 26 OCTOBER

13:30 - 13:40	WELCOME ADDRESS BY THE SCIENTIFIC COMMITTEE
13:40 - 14:10	OPENING KEYNOTE LECTURE
14:20 - 15:55	SESSION 1: THE MATERNAL MICROBIOME
15:55 - 16:30	COFFEE BREAK, EXHIBITION & NETWORKING
16:30 - 17:55	SESSION 2: DEVELOPMENTAL PROGRAMMING OF THE MICROBIOME
18:05 - 19:40	SESSION 3: ENVIRONMENTAL EXPOSURES SHAPING THE MICROBIOME
19:40 - 20:30	WELCOME RECEPTION, EXHIBITION & OFFICIAL POSTER VIEWING & DISCUSSIONS

FRIDAY, 27 OCTOBER

08:30 - 10:30	SESSION 4: GUT BRAIN AXIS (IN MEMORY OF PROF. JOHN BIENENSTOCK)
10:30 - 11:10	COFFEE BREAK, EXHIBITION & NETWORKING
11:10 - 12:20	SESSION 5: YOU, YOUR MICROBIOME AND THE WORLD
12:30 - 13:15	PANEL DISCUSSION: GIVE THE BUGS OR FEED THE BUGS
13:15 - 14:30	LUNCH BREAK, EXHIBITION & NETWORKING
14:30 - 15:35	SESSION 6: THE FORGOTTEN MEMBERS OF THE MICROBIOME
15:35 - 16:00	THE HISTORY AND EARLY DAYS OF LACTOBACILLUS BULGARICUS
16:00 - 17:00	REFRESH AND RECONNECT BREAK
17:00 - 18:35	SESSION 7: DIET AND MEDICATION

SATURDAY, 28 OCTOBER

09:00 - 10:25	SESSION 8: FROM BENCH TO BEDSIDE - USING MICROBIOME IN CLINICAL TRIALS
10:25 - 11:00	COFFEE BREAK, EXHIBITION & NETWORKING
11:00 - 12:20	SESSION 9: IT'S NOT ALL ABOUT THE GUT: VAGINAL, ORAL AND SKIN MICROBIOMES IN HEALTH AND DISEASE
12:20 - 13:20	LUNCH BREAK, EXHIBITION & NETWORKING
13:20 - 14:15	SESSION 10: TEASING OUT A MECHANISM: HOW DOES THE MICROBIOME CONTRIBUTE TO DISEASE
14:15 - 14:45	CLOSING KEYNOTE LECTURE
14:45 - 15:00	CLOSING DISCUSSION WITH THE SCIENTIFIC COMMITTEE

GENERAL INFORMATION

VENUE

Grand Hotel Millennium Sofia

89B, Vitosha Blvd, 1463 Sofia, Bulgaria

www.grandhotelmillenniumsolia.bg

REGISTRATION DESK HOURS

Wednesday, 25 October 15:00 - 16:30

Thursday, 26 October 08:00 - 20:40

Friday, 27 October 08:00 - 19:00

Saturday, 28 October 08:30 - 15:15

EXHIBITION OPENING HOURS

Thursday, 26 October 15:30 - 20:30

Friday, 27 October 10:00 - 17:00

Saturday, 28 October 10:00 - 13:20

PARTICIPANTS BADGE

Upon registration, you will receive your name badge (for onsite delegates).

You are kindly requested to wear your badge during all sessions and events.

WI-FI

Free Wi-Fi will be available at the Conference. Please be aware that public Wi-Fi capacity is always limited and therefore limited to email and web browsing activity.

Network: **WOM23**

Password: **microbiome**

WELCOME RECEPTION

All onsite participants are invited to join the Welcome Reception, which will take place at the Exhibition & Networking Area (Lobby 2nd Floor) from 19:40 on Thursday, 26 October.

CERTIFICATE OF ATTENDANCE

After the last Conference Day, all delegates will receive a Certificate of Attendance via email after completing the online evaluation.

All poster and oral presenters will receive a separate certificate for their presentation/s via email.

MOBILE PHONES

Mobile phones must be muted during all sessions.

PHOTOGRAPHY AND RECORDING PRIVILEGES

No photographs, video recording or audio recording is permitted in the scientific sessions unless otherwise authorized by the Scientific Committee and the Conference Organizers.

GUEST ATTENDANCE POLICY

All event activities (including meal functions, exhibition, etc.) are exclusively reserved for registered attendees. Non-registered guests (including children, family members, colleagues, etc.) are not allowed in any of the event areas. Badges provided at registration are required for entrance into all functions and will be strictly enforced.

WOM 2023 VIRTUAL PLATFORM

All delegates have access to the virtual platform of the Conference during the event, and for 3 months after. You can enter the platform following this link: <https://microbiome.kenes.com/virtual-login/>

Please do not watch the sessions via the platform while you are onsite, as this may cause technical problems.

LIABILITY AND INSURANCE

The Conference Secretariat and Organizers cannot accept liability for personal accidents or loss of or damage to private property of participants. Participants are advised not to leave their personal belongings unattended in session halls and throughout the venue.

CONFERENCE SECRETARIAT

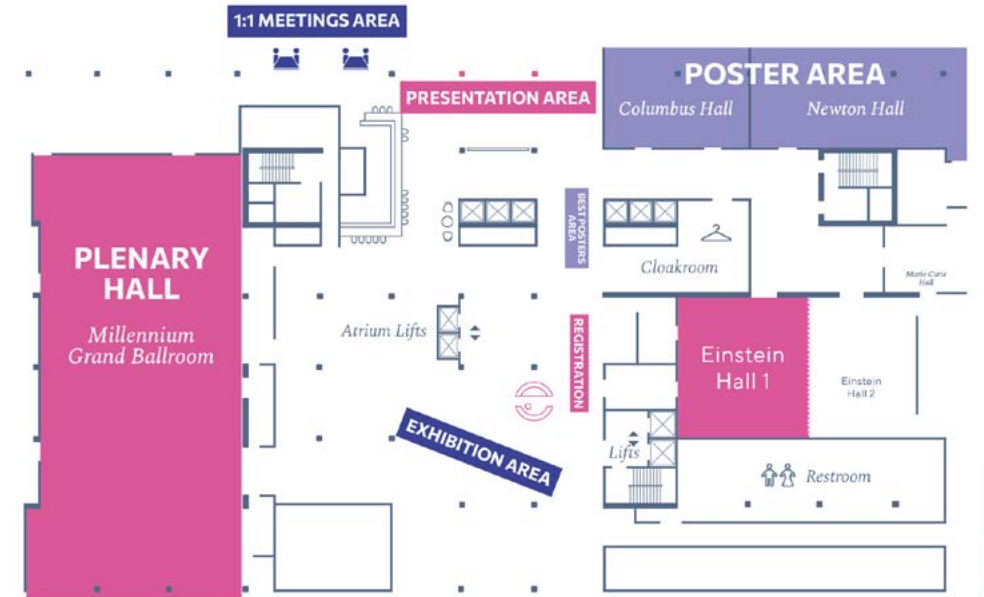


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Rue François-Versonnex 7, 1207 Geneva, Switzerland

www.kenes.com

CONFERENCE MAP



NETWORKING AT WOM 2023

Alongside the invaluable scientific content, at WoM 2023 we are focusing specifically on networking opportunities, informal interactions, and supplementary activities, as we aim to promote collaboration and forge partnerships.

Maximize your Conference experience by actively engaging in the exciting activities we have prepared for you. If you are active, you even have the chance to win an award by taking part in our WoM Game in the mobile app - an opportunity not to be missed!

THURSDAY, 26 OCTOBER

19:40 - 20:30 WELCOME RECEPTION, EXHIBITION & OFFICIAL POSTER VIEWING & DISCUSSIONS

📍 **Exhibition & Networking Area (Lobby 2nd Floor) and Poster Area (Columbus Hall & Newton Hall)**

The official poster viewing and discussions will be held during the Welcome Reception and all poster presenters are kindly requested to be available at their posters to answer any questions. Use the opportunity to interact with the minds behind the posters and to gain insights into both their research and their own experiences.

FRIDAY, 27 OCTOBER

16:00 - 17:00 REFRESH & RECONNECT BREAK

16:10 - 16:35 📍 Einstein Hall 1

Coffee with the Professor - enjoy a chat over a cup of coffee or tea with speakers chosen by you, the delegates. They are here to talk to you, offer mentorship advice, and discuss the challenges you may be facing.

Kjersti Aagaard, Baylor College of Medicine, USA
Maria Carmen Collado, Institute of Agrochemistry and Food Technology, Spain
Lindsay Hall, Quadram Institute, UK
Tim Spector, King's College London, UK
Alexandra Zhernakova, University Medical Center Groningen, Netherlands

16:35 - 17:00 📍 Presentation Area

My journey in the WoM - have you ever pondered the paths taken by some of the most celebrated professionals in this field to reach their current status? Now is your opportunity to ask them yourself! Join our enlightening talk-show session and discover their biggest failures and successes, uncover what motivates them and find out what continues to ignite their inspiration.

Moderators:

Erin Bolte, Baylor College of Medicine, USA
Michael Jochum, Baylor College of Medicine, USA

Panelists:

Rochellys Diaz Heijtz, Karolinska Institutet, Sweden and
Liza Konnikova, Yale University School of Medicine, USA
David MacIntyre, Imperial College London, United Kingdom

SATURDAY, 28 OCTOBER

10:35 - 10:50 **An Interview with a patient: Healing thanks to research**

📍 Presentation Area

Have you ever wondered about the real-world impact of your research efforts? Join us for a special session where you will have the privilege of hearing directly from a patient whose life was transformed through the advancements in microbiome studies. Don't miss this extraordinary opportunity to gain a unique perspective!

Interviewer: **Gianluca Ianiro**, Università Cattolica del Sacro Cuore, Italy

Speaker: **Luisa Grossardi**, patient of Dr Ianiro, Italy

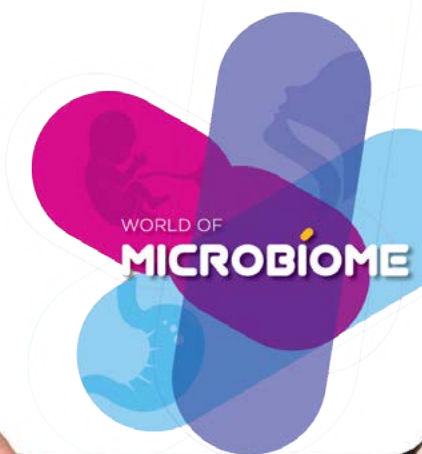
In addition, don't forget that you can schedule 1:1 meetings with other delegates via the WoM 2023 app.

DOWNLOAD THE WoM 2023 MOBILE APP

- Access the program
- Vote for the Best Poster
- Participate in the Live Q&A
- Schedule 1:1 Meetings
- Join the **WoM Game** and win prizes!



SCAN TO DOWNLOAD



INFORMATION FOR POSTERS

The official poster viewing and discussions will be held during the Welcome Reception on Thursday, 26 October. We kindly request all poster presenters to be available at their posters to answer any questions.

Posters will remain on display throughout the whole Conference, and delegates are welcomed to explore them at their convenience during other breaks, too.

Authors are encouraged to provide contact information, such as a business card, alongside their posters. This will enable all attendees to reach out with questions or comments, even if the presenter is temporarily unavailable.

Location: Poster Area (Columbus Hall & Newton Hall)

POSTER MOUNTING:

Wednesday, 25 October 15:30 - 16:30

Thursday, 26 October 08:00 - 15:30

POSTER DISMANTLING:

Saturday, 28 October 13:20 - 16:00

The organizers will not be responsible for any posters that are not dismantled until the designated hour specified above.

BEST POSTERS PRESENTATIONS

Out of the outstanding received submissions, the Scientific Committee has chosen the top 10 posters to be presented orally. We invite you to attend these short talks and engage with the presenters by asking questions and sharing your comments. You will then be able to vote on the one poster you think is the BEST of the best. You can cast your vote before 11:00 on 28 October via the mobile app.

Date: Friday, 27 October

Time: 13:25 - 14:15

Location: Exhibition & Networking Area (Lobby 2nd Floor)

E-POSTERS

All posters presented onsite are also available online in the e-Poster Gallery of the virtual platform. Some abstracts are only presented online as e-Posters - they are indicated with "Online Only" sign.

ABSTRACT TOPIC	Board No.
BEST POSTERS	1-10
META-OMICS TECHNIQUES AND INTEGRATIVE APPLICATIONS COMPUTATIONAL AND STATISTICAL METHODS FOR MICROBIOME RESEARCH	11-20
THE FIRST 1000 DAYS OF LIFE: FROM PREGNANCY TO INFANCY IN HEALTH AND DISEASE	21-43
GUT BRAIN AXIS	44-49
IT'S NOT ALL ABOUT THE GUT: VAGINAL, ORAL AND SKIN MICROBIOMES IN HEALTH AND DISEASE	50-60
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ANIMAL AND ENVIRONMENTAL MICROBIOMES	116-131
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POSTERS

Board No.	POSTER TITLE
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BEST POSTERS

- 1 MINING THE GUT MICROBIOTA FOR TYPE 1 DIABETES PREVENTATIVE FACTORS.
Bree Tillett, Emma Hamilton-Williams, Eliana Marino
- 2 ASSOCIATION BETWEEN MATERNAL VITAMIN D STATUS DURING PREGNANCY AND INFANT GUT MICROBIOTA DEVELOPMENT
Agnes Arnadottir, Ingibjorg Gunnarsdottir, Viggo Marteinson, Sigurlaug Skirnisdottir, Stephen Knobloch, Alexandra Klonowski
- 3 DYNAMICS OF MICROBIOME COMPOSITION FROM PLACENTA TO FETUS AND NEONATE.
Young Joo Lee, Yoomin Kim, Na Mi Lee, Yong-Sung Choi
- 4 PROOF OF CONCEPT: METATRANSCRIPTOMIC ANALYSIS OF THE EQUINE PLACENTAL MICROBIOME
Machteld Van Heule, Cory Schlesener, Kirsten Scoggin, Hossam El-Sheikh Ali, Barry Ball, Peter Daels, Bart C. Weimer, Pouya Dini
- 5 MATERNAL WESTERN STYLE DIET FEEDING PROGRAMS GUT EPITHELIAL SEROTONIN RESPONSE TO MICROBES
Erin Bolte, Mindy Engevik, Derek O'Neil, Kjersti Aagaard
- 6 THE DIVERSITY OF MICROBIOME PROFILES IN PERIODONTAL SUBGINGIVAL POCKETS
Jale Moradi, Randi Bertelsen, Ellen Berggreen, Dagmar Bunæs, Anne Bolstad
- 7 THE CIRCULATING MICROBIAL TRANSCRIPTOME IN MYELOID MALIGNANCY PATIENTS
An Dinh Nguyen, Tatiana Dombrowski, Vedant Thorat, Valeria Visconte, Arda Durmaz, Yasuo Kubato, Ben Ponvilawan, Jaroslaw Maciejewski, Thomas Laframboise

- 8 DEVELOPMENT OF EARLY LIFE GUT RESISTOME AND MOBILOME ACROSS GESTATIONAL AGES AND MICROBIOTA-MODIFYING TREATMENTS
Ahmed Bargheet, Claus Klingenberg, Eirin Esaiassen, Erik Hjerde, Jorunn Pauline Cavanagh, Johan Bengtsson-Palme, Veronika Pettersen
- 9 EXPLORATION OF 2,500 FOOD METAGENOMES REVEALS UNEXPLORED MICROBIAL DIVERSITY AND SPECIES OVERLAPS WITH THE HUMAN MICROBIOME
Niccolò Carlino, Nicola Segata, Edoardo Pasolli, Avelino Álvarez-Ordóñez, Federica Armanini, Francesco Asnicar, Coral Barcenilla Canduela, Aitor Blanco Miguez, Paul Cotter, José Francisco Cobo-Díaz, Francesca De Filippis, Danilo Ercolini, Eline Klaassens, John Leech, Abelardo Margolles, Viggo Marteinson, Samuel Mortensen, Federica Pinto, Michal Punčochář, Narciso Quijada, Carlos Sabater, Martin Wagner, Liam Walsh
- 10 INTRODUCTION OF PROBIOTIC-BASED SANITATION IN THE EMERGENCY WARD OF A CHILDREN'S HOSPITAL DURING THE COVID-19 PANDEMIC
Maria D'Accolti, Irene Soffritti, Francesca Bini, Carolina Cason, Giuseppina Campisciano, Sante Mazzacane, Eleonora Mazziga, Manola Comar, Elisabetta Caselli

META-OMICS TECHNIQUES AND INTEGRATIVE APPLICATIONS COMPUTATIONAL AND STATISTICAL METHODS FOR MICROBIOME RESEARCH

- 11 UTILITY OF MULTIVARIATE DATA ANALYSIS AND PENALIZED META-REGRESSION TO EXPLORE SOURCES OF HETEROGENEITY IN MICROBIOME META-ANALYSES
Arthur Saracco, Marie Chavent, Marta Avalos-Fernandez
- 12 LACTIC ACID BACTERIA SCREENING AND GENOMIC CHARACTERIZATION FOR POSTBIOTICS ACTIVITY
Chiara Maria Calvanese, Francesca De Filippis, Vincenzo Valentino

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- 13 KLEBOTOXIN: A NOVEL TOOL FOR DETECTING KLEBSIELLA OXYTOCA SPECIES COMPLEX MEMBERS AND THE TIL ENTEROTOXIN LOCUS
Amar Cosic, Sabine Kienesberger, Bettina Halwachs, Ellen Zechner
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- 14 FROM LAB TO DATA: CHOOSING THE BEST METHODS FOR ACCURATE GUT MICROBIOME ANALYSIS
Gábor Gulyás, Tamás Járay, Ákos Dörmő, Balázs Kakuk, Zsolt Csabai, Md Asaduzzaman, Miksa Henkrich, Zsolt Boldogkői, Dóra Tombácz
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- 15 INVESTIGATING THE RELATIONSHIP BETWEEN TRAVELLER'S DIARRHOEA AND SOIL AND GUT MICROBIOMES
Sarah Harding, Eva Lymberopoulos, S Paschke, Amedra Basgaran, M Hobbs, M Alomari, N Sharma
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- 16 METABOLITE AND MICROBIOME STABILITY IN HUMAN FECAL SAMPLES IN DIFFERENT STORAGE CONDITIONS
Heidi Isokääntä, Santosh Lamichhane, Teemu Kallonen, Alex Dickens
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- 17 SQUEEGEE: A NEW CONTAMINATION DETECTION TOOL FOR LOW MICROBIAL BIOMASS MICROBIOMES
Michael Jochum, Yunxi Liu, R. A. Leo Elworth, Todd Treangen, Kjersti Aagaard
-
- 18 A STATISTICAL PROGRAMMING FRAMEWORK FOR MICROBIOME DATA INTEGRATION AND ANALYSIS
Leo Lahti, Tuomas Borman
-
- 20 MULTI-OMIC CHARACTERIZATION OF A DEXTRAN SULFATE SODIUM (DSS)-RESISTANT COLITIS PHENOTYPE AFTER DIETARY INTERVENTION WITH FRUITS AND VEGETABLES USING A TRANSLATIONAL NUTRITIONAL PORCINE ANIMAL MODEL.
Gloria Solano-Aguilar, Sukla Lakshman, Zhihao Liu, Jianghao Sun, Celine Chen, Jonathan Shao, Bryan Vinyard, Harry Dawson, Joe Urban
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THE FIRST 1000 DAYS OF LIFE: FROM PREGNANCY TO INFANCY IN HEALTH AND DISEASE

- 21 EFFECT OF ANTIBIOTIC PROPHYLAXIS AND DELIVERY MODE ON LACTOBACILLUS AND BIFIDOBACTERIUM COUNTS IN BREAST MILK
Gülsüm Kaya, Aysun Kaya, Ceren Özkul Koçak, Fahri Ovalı, Sebahat Aksaray, Mustafa Altındış
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- 22 AMPICILLIN-GENTAMIN TREATMENT BEFORE 1 MONTH OF LIFE IMPACTS ON MICROBIOTA AND RESISTOME DEVELOPMENT: FOLLOW-UP 2 YEARS OLD IN THE SPANISH DEMIAN COHORT
Silvia Arboleya, Silvia Saturio, Alejandra Rey-Mariño, Marta Suarez, Laura Mantecón, Nuria Fernandez, Gonzalo Solís, Miguel Gueimonde
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- 23 SIGNATURES OF THE GUT MICROBIOME ASSOCIATED WITH FEEDING HABITS IN EARLY LIFE
Cassandre Bedu-Ferrari, Dharti Patangia, C. A. Ryan, E. M. Dempsey, Paul Ross, Catherine Stanton
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- 24 EARLY-LIFE GUT MICROBIOME DEVELOPMENT IN HONG KONG CHINESE: A LONGITUDINAL STUDY OF THE FIRST THREE YEARS OF LIFE
Paul Chan, Ting-Fan Leung, Wing-Hung Tam, Zigui Chen
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- 25 BREAST MILK MICROBIOTA IN RELATION TO MATERNAL DIET AND ALLERGY DEVELOPMENT IN CHILDREN AT 12 MONTHS OF LIFE
Marta Selma-Royo, Raul Cabrera-Rubio, Sonia González, Cecilia Martinez-Costa, Maria Carmen Collado
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- 26 BIFIDOBACTERIUM ABUNDANCE EARLY IN LIFE SHAPES THE ANTIBIOTIC RESISTANCE LOAD IN THE INFANT GUT MICROBIOTA
Maria Carmen Collado, Anna Samarra, Raul Cabrera-Rubio
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- 27 IMPACT OF MATERNAL DIETARY SUPPLEMENTATION DURING LACTATION ON THE BREAST MILK MICROBIOTA AND METABOLOMIC PROFILES
Raul Cabrera-Rubio, Tamara Garcia-Barrera, Maria Carmen Collado, Ella Schaefer
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- 28 GUT MICROBIOTA, SECRETORY IMMUNOGLOBULIN A AND BAYLEY-III COGNITIVE SCORES IN CHILDREN FROM THE CANADIAN CHILD STUDY COHORT.
Aline Davias, Myah Verghese, Sarah Bridgman, Catherine Field, Matthew Hicks, Anne Hicks, Theo Moraes, Elinor Simons, Stuart Turvey, Padmaja Subbarao, James Scott, Piushkumar Mandhane, Anita Kozyrskyj
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- 29 THE MICROBIOTA OF BULGARIAN INFANTS AS A SOURCE OF LACTOBACILLI WITH PROBIOTIC PROPERTIES
Ralitsa Georgieva, Antonya Danguleva-Cholakova, Lyubomira Yocheva, Lilia Tserovska, Elena Karaivanova
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- 30 FECAL MICROBIOTA TRANSPLANTATION FROM INFANTS BORN BY CESAREAN SECTION AGGRAVATES HIGH-FAT DIET INDUCED OBESITY AND METABOLIC PHENOTYPE IN MICE
Caroline Junker Mentzel, Camilla Hartmann Friis Hansen, Lukasz Krych, Jakob Stokholm, Line Zachariassen, Morten Rasmussen, Frederikke Mortensen, Ping-Ping Jiang
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- 31 INFLUENCE OF GESTATIONAL AGE ON INFANT GUT MICROBIOTA AND SHORT CHAIN FATTY ACIDS (SCFAS): THE NELA COHORT
Carmen Martínez-Graciá, Clara Suárez-Martinez, Genoveva Yagüe-Guirao, Marina Santaella-Pascual, Eva Morales, Luis García-Marcos
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- 32 LONGITUDINAL EVALUATION OF INFANT GUT MICROBIOME COLONIZATION IN THE FIRST 6 MONTHS: EFFECTS OF EARLY EXPOSURE TO DIETARY SUGAR AND FIBER
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- 33 BIFIDOBACTERIUM BREVE-REACTIVE ANTIBODIES IN BLOOD SERUM OF CHILDREN OF MOTHERS AT RISK OF GESTATIONAL DIABETES
Celeste Peterson, Anu Bärenson, Kristi Alnek, Helis Janson, Tiiu Rööp, Epp Sepp, Raivo Uibo, Aili Tagoma
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- 34 GUT MICROBIOME CONTRIBUTION TO PREDICTION OF POSTPRANDIAL GLYCEMIA IN PATIENTS WITH GESTATIONAL DIABETES
Polina Popova, Artem Isakov, Anna Anopova, Elena Vasukova, Angelina Eriskovskaya, Evgenii Pustozherov, Aleksandra Tkachuk, Soha Zgairy, Elad Rubin, Carmel Even, Sondra Turjeman, Tatiana Pervunina, Elena Grineva, Omry Koren
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- 35 LONG-TERM EFFECTS OF CONTINUOUS ANTIBIOTIC PROPHYLAXIS ON THE GUT MICROBIOME PROFILE IN INFANTS WITH VESICOURTERAL REFLUX
Giorgia Procaccianti, Federica D'Amico, Mariachiara Mengoli, William Morello, Jessica Fiori, Esra Baskin, Fatos Yalcinkaya, Augustina Jaukauskiene, Marco Pennesi, Aleksandra Zurowska, Francesca Becherucci, Dorota Drozd, Djalila Mekahli, Grazyna Krzemien, Claudio La Scola, Katarzyna Taranta-Janusz, Otto Mehls, Marco Candela, Giovanni Montini, Silvia Turrone
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- 36 ISOLATION AND IDENTIFICATION OF LACTIC ACID BACTERIA FROM BREAST MILK OF BULGARIAN WOMEN AND THEIR INFANT FAECES
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- 37 BACTERIAL COMPOSITION IN BREAST MILK FROM WOMEN DIAGNOSED WITH GESTATIONAL DIABETES MELLITUS IN COMPARISON TO WOMEN WITHOUT GESTATIONAL DIABETES MELLITUS: A PILOT STUDY
Louise Rold, Johan Guldbæk, Caroline Lindegaard, Stine Kirk, Line Nygaard, Caspar Bundgaard-Nielsen, Julie Holm-Jacobsen, Ann-Maria Jensen, Peter Leutscher, Anne-Cathrine Viuff, Søren Hagstrøm, Suzette Sørensen
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- 39 PROBIOTIC SUPPLEMENTATION AND RISK OF NECROTIZING ENTEROCOLITIS AND MORTALITY AMONG EXTREMELY PRETERM INFANTS - A MULTICENTER, DOUBLE-BLINDED, REGISTRY-BASED RANDOMIZED CONTROLLED TRIAL: STUDY PROTOCOL

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- 40 MICROBIOTA CHARACTERIZATION OF MOTHER-INFANT DYADS BELONGING TO THE NELA COHORT: SINCE DELIVERY UNTIL EARLY LIFE

Clara Suárez-Martinez, Andrea Trueba-Argamasilla, Marina Santaella-Pascual, Eva Morales, Luis García-Marcos, Genoveva Yagüe-Guirao, Carmen Martínez-Graciá

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Ekaterina Voroshilina, Leonid Khayutin, Elena Kudryavtseva, Evgeny Plotko, Vladislav Kovalev

GUT BRAIN AXIS

- 44 EARLY CHILDHOOD GUT MICROBIOTA: ITS ASSOCIATION WITH EMOTIONAL REGULATION AND COGNITIVE ASPECTS OF EXECUTIVE FUNCTION

Hideaki Fujihara, Michiko Matsunaga, Eriko Ueda, Takamasa Kajiwara, Aya Takeda, Satoshi Watanabe, Kairi Baba, Keisuke Hagihara, Masako Myowa

- 45 P-CRESOL DERIVATIVES INTERACT WITH THE BLOOD-BRAIN BARRIER AND HIGHLIGHT THE COMPLEX NATURE OF MICROBIOTA-HOST COMMUNICATION PATHWAYS ASSOCIATED WITH THE GUT-BRAIN AXIS

Lesley Hoyles, Simon Mcarthur

- 46 ARTEMISIA ASIATICA EX ON MUCINIPHILA DOMINANCE FOR MODULATION OF ALZHEIMER'S DISEASE IN MICE

Manho Kim

- 47 COUPLING AMONG MICROBIOMES, AUTONOMIC NERVES, AND SELF-REGULATION IN HUMAN CHILDREN AND THEIR MOTHERS

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WORKSHOPS

Part of the scientific program of this year's World of Microbiome Conference are two not-to-miss workshops.

Registration for the workshops is available only to WoM 2023 registered onsite participants. Places are limited and an additional registration fee for each workshop applies.

Location: Einstein Hall 1

WEDNESDAY, 25 OCTOBER

16:00 - 19:30 **Clinical and Translational Microbiome Studies Bootcamp**
A workshop by Prof. Kjersti Aagaard's and Prof. Omry Koren's labs

1. Microbiome study design (with active learning)

- human clinical studies & basics of human study design
- animal models for "humanized" microbiome manipulation
- special case of low biomass samples

2. Statistics (with active learning)

- power analysis
- clinical metadata considerations
- basic biostats for human studies

3. Sample collections - animal; human; organizing samples

4. Data projection and visualization

THURSDAY, 26 OCTOBER

09:00 - 12:30 **Introduction to Shotgun Metagenomic Data Analysis with bioBakery**

A workshop by Prof. Nicola Segata's lab

1. Intro into Computational Metagenomics
 2. Setting of the the computational environment
 3. Quantitative taxonomic profiling of metagenomics with MetaPhlAn
 4. Strain-level microbiome analysis with StrainPhlAn
 5. Integrated analyses and meta-analyses with curated MetagenomicData
-

SCIENTIFIC PROGRAM

THURSDAY, 26 OCTOBER

Plenary Hall (Millennium Grand Ballroom)

13:30 - 13:40 Welcome Address by the Scientific Committee

Omry Koren, Bar Ilan University, Israel

Erika Isolauri, University of Turku, Finland

Samuli Rautava, University of Turku, Finland

Kjersti Aagaard, Baylor College of Medicine, USA

Nicola Segata, University of Trento, Italy

Iris Dotan, Rabin Medical Center, Israel

13:40 - 14:10 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 **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 β -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

Exhibition & Networking Area (Lobby 2nd Floor)

15:55 - 16:30 COFFEE BREAK, EXHIBITION & NETWORKING

16:05 - 16:15 Industry presentation by NimaGen: EasySeq™: the next revolution in microbiome library prep, powered by reverse-complement PCR
Brian van der Veer, Senior Manager Microbiology, NimaGen, Netherlands

16:15 - 16:25 Industry presentation by Perseus Biomics: Sequencing-free metagenomics: a paradigm shift in microbiome profiling
Pierre-Henri Ferdinand, Director or Business Development, Perseus Biomics, Belgium

Plenary Hall (Millennium Grand Ballroom)

16:30 - 17:55 **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 **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

Exhibition & Networking Area (Lobby 2nd Floor)

19:40 - 20:30 WELCOME RECEPTION, EXHIBITION & OFFICIAL POSTER VIEWING & DISCUSSIONS

FRIDAY, 27 OCTOBER

Plenary Hall (Millennium Grand Ballroom)

08:30 - 10:30 **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 Vandembroucke, 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

Exhibition & Networking Area (Lobby 2nd Floor)

10:30 - 11:10 COFFEE BREAK, EXHIBITION & NETWORKING

10:40 - 10:50 Industry presentation by Targedys: Pioneering precision probiotics: the added-value of the mechanism of action by TargEDys

Nina Vinot, Sales & Marketing director, TargEDys, France

10:50 - 11:00 Industry presentation by Massive Bioinformatics: MassBiome: Discover the microbial world inside you!
Ibrahim Halil Miraloglu, Co-founder and CEO, Massive Bioinformatics, Turkey

Plenary Hall (Millennium Grand Ballroom)

11:10 - 12:20 **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 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

Exhibition & Networking Area (Lobby 2nd Floor)

13:15 - 14:30 LUNCH BREAK, EXHIBITION & NETWORKING

13:25 - 14:15 Best Posters Presentations
Chairs: **Omry Koren**, Bar Ilan University, Israel & **Nicola Segata**, University of Trento, Italy

13:25 - 13:30 MINING THE GUT MICROBIOTA FOR TYPE 1 DIABETES PREVENTATIVE FACTORS
Bree Tillett, University of Queensland, Australia

13:30 - 13:35 ASSOCIATION BETWEEN MATERNAL VITAMIN D STATUS DURING PREGNANCY AND INFANT GUT MICROBIOTA DEVELOPMENT
Agnes Arnadottir, Matis, Iceland

13:35 - 13:40 DYNAMICS OF MICROBIOME COMPOSITION FROM PLACENTA TO FETUS AND NEONATE
Young Joo Lee, Kyunghee University, South Korea

13:40 - 13:45 PROOF OF CONCEPT: METATRANSCRIPTOMIC ANALYSIS OF THE EQUINE PLACENTAL MICROBIOME
Machteld van Heule, Ghent University, Belgium

13:45 - 13:50 MATERNAL WESTERN STYLE DIET FEEDING PROGRAMS GUT EPITHELIAL SEROTONIN RESPONSE TO MICROBES
Erin Bolte, Baylor College of Medicine, USA

- 13:50 - 13:55 THE DIVERSITY OF MICROBIOME PROFILES IN PERIODONTAL SUBGINGIVAL POCKETS
Jale Moradi, Oral Health Centre of Expertise, Norway
- 13:55 - 14:00 THE CIRCULATING MICROBIAL TRANSCRIPTOME IN MYELOID MALIGNANCY PATIENTS
Thomas LaFramboise, Case Western Reserve University, USA
- 14:00 - 14:05 DEVELOPMENT OF EARLY LIFE GUT RESISTOME AND MOBILOME ACROSS GESTATIONAL AGES AND MICROBIOTA-MODIFYING TREATMENTS
Veronika Pettersen, UiT The Arctic University of Norway, Norway
- 14:05 - 14:10 EXPLORATION OF 2,500 FOOD METAGENOMES REVEALS UNEXPLORED MICROBIAL DIVERSITY AND SPECIES OVERLAPS WITH THE HUMAN MICROBIOME
Niccolò Carlino, University of Trento, Italy
- 14:10 - 14:15 INTRODUCTION OF PROBIOTIC-BASED SANITATION IN THE EMERGENCY WARD OF A CHILDREN'S HOSPITAL DURING THE COVID-19 PANDEMIC
Irene Soffritti, University of Ferrara, Italy


Plenary Hall (Millennium Grand Ballroom)


- 14:30 - 15:35 **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

Exhibition & Networking Area (Lobby 2nd Floor)

- 16:00 - 17:00 REFRESH & RECONNECT BREAK

16:10 - 16:35  Einstein Hall 1
Coffee with the Professor

16:35 - 17:00  Presentation Area
My journey in the WoM
More information is available on page [11](#)

Plenary Hall (Millennium Grand Ballroom)

17:00 - 18:35 **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

SATURDAY, 28 OCTOBER

Plenary Hall (Millennium Grand Ballroom)

09:00 - 10:25 **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 Ianaro, 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

Exhibition & Networking Area (Lobby 2nd Floor)

10:25 - 11:00 COFFEE BREAK, EXHIBITION & NETWORKING

10:35 - 10:50  Presentation Area
An Interview with a patient: Healing thanks to research
More information is available on page [12](#)

Plenary Hall (Millennium Grand Ballroom)

11:00 - 12:20 **SESSION 9: IT'S NOT ALL ABOUT THE GUT: VAGINAL, ORAL AND SKIN MICROBIOMES IN HEALTH AND DISEASE**

Chairs: **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

Exhibition & Networking Area (Lobby 2nd Floor)

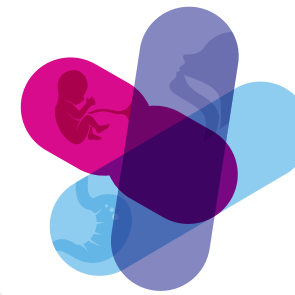
12:20 - 13:20 LUNCH BREAK, EXHIBITION & NETWORKING

12:45 - 13:00  Presentation Area
Awards Ceremony

Plenary Hall (Millennium Grand Ballroom)

- 13:20 - 14:15 **SESSION 10: TEASING OUT A MECHANISM: HOW DOES THE MICROBIOME CONTRIBUTE TO DISEASE**
Chairs: **Liza Konnikova**, Yale University School of Medicine, USA & **Gianluca Ianiro**, 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 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 CLOSING DISCUSSION WITH THE SCIENTIFIC COMMITTEE
Omry Koren, Bar Ilan University, Israel
Erika Isolauri, University of Turku, Finland
Samuli Rautava, University of Turku, Finland
Kjersti Aagaard, Baylor College of Medicine, USA
Nicola Segata, University of Trento, Italy
Iris Dotan, Rabin Medical Center, Israel



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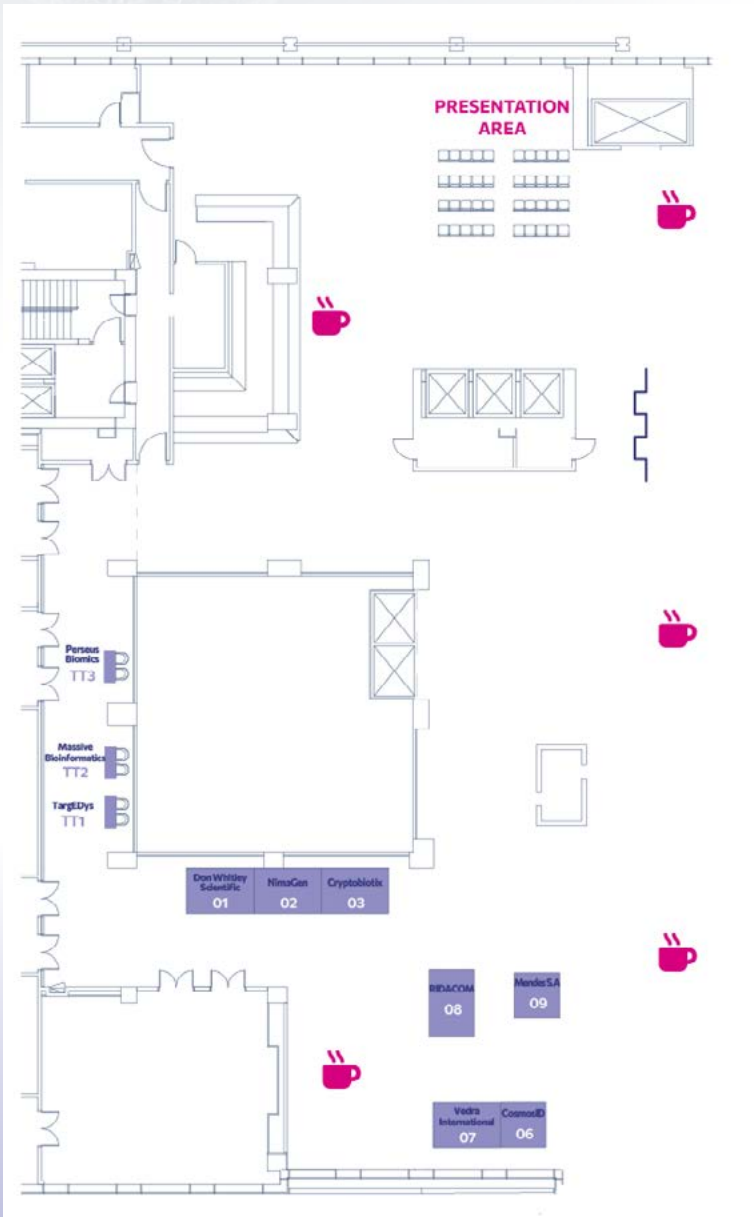


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EXHIBITION MAP



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Clinical Microbiomics

Fruebjergvej 3, Copenhagen, Denmark 2100

Booth #:

<https://clinical-microbiomics.com/>



Clinical Microbiomics is a CRO dedicated to microbiome and metabolomics science from discovery through clinical validation. Advance clinical trial programs and R&D pipelines with end-to-end microbiome sequencing and metabolomics pipelines, including multi-omics data analysis and machine learning. Complemented by the highest resolution microbiome profiling available, our advanced bioinformatics enable clonal-level resolution, strain tracking and engraftment analysis that can be correlated to clinical outcomes and used for strain selection or MOA hypothesis generation or validation. Our regulatory experts partner with you to provide a submission-ready data package for using microbiome endpoints in clinical trials.

CosmosID

20023 Century Blvd, Germantown, USA 20874

Booth #: 06

<https://www.cosmosid.com/>



CosmosID is a leading developer of microbial genomics platforms, specializing in metagenomic microbial identification. The Maryland-based company provides award-winning solutions for unlocking the microbiome and is renowned for its next-generation sequencing (NGS) technologies. CosmosID focuses on rapid identification of microorganisms for various applications including infectious disease diagnostics, public health surveillance, and food safety. CosmosID's innovative approach to bioinformatics has positioned it as an important player in the health care industry, contributing significantly to research and development in the field of microbial genomics.

Cryptobiotix

Technologiepark-Zwijnaarde 82, Ghent, Belgium 9052

Booth #: 03

<https://cryptobiotix.eu/>



Cryptobiotix is a preclinical CRO providing insights into the gut microbiome. The validated ex vivo SIFR® technology facilitates unmatched throughput and has shown to be predictive for clinical outcomes. We investigate the interaction between products and the gut microbiome, for customers in functional foods and therapeutic products, across foodtech, biotech and pharma. At preclinical stage, two key elements are addressed: discovery of lead products and unravelling their mechanism of action. We achieve this through tailor-made experimental design, analytics across omics and host-microbiome interactions, and compelling preclinical storytelling. From early R&D screening to in-depth characterisation, Cryptobiotix addresses your specific research questions and provide you with the answers to accelerate and de-risk your product development.

Don Whitley Scientific Ltd

Victoria Works, Victoria Street, Bingley, UK BD162NH

Booth #: 01

<https://www.dwscientific.com>



Don Whitley Scientific has designed and manufactured anaerobic workstations for over 40 years. Use a Whitley Workstation in your research - the proven way to emulate the anaerobic conditions of the intestinal microenvironment. Call at the Don Whitley Scientific stand and see how our workstations have been developed specifically for researchers. There is a comprehensive range of features to help replicate an in vivo environment, plus options and accessories to tailor the workstation to meet your requirements.

Massive Bioinformatics

Kazim Dirik Mah. Universite Cad. No:79/26 Bornova,
Izmir, Turkey 35100

Booth #: TT2

<https://massivebioinformatics.com/>



Massive Bioinformatics is a team of interdisciplinary experts who specialize in utilizing the power of bioinformatics and biotechnology to provide authentic and targeted solutions to novel problems in various fields such as health, science, and technology. They utilize Next Generation Sequencing (NGS) technologies to offer profound analysis services and state-of-the-art software specialized to meet the sectoral needs. The team has developed two pioneering products, Massive Analyser and Massbiome. Massive Analyser is a cloud-based platform that analyzes and organizes genomic data based on somatic and germline gene panel analysis, while Massbiome is a microbiome analysis-based personalized wellness platform that helps understand the effect of microbial content on various health problems.

Mendes SA

Via S. Balestra 10, Lugano, Switzerland 6900

Booth #: 09

<https://www.vivomixx.eu>



Mendes SA is a Swiss pharmaceutical company specialized in the development and commercialization of food supplements containing lactic acid bacteria and bifidobacteria with a high scientific profile. Vivomixx® is the main product, a food supplement containing a combination of 8 different strains of live bacteria and present in the market with different formulation: boxes of 10 sachets, providing 450 billion bacteria per sachet, boxes of 10 capsules, providing 112 billion bacteria per capsule, bottles of drops providing 50 billion bacteria per bottle and boxes of microcapsule providing 10 billion per microcapsule. Other formulations are in development.

NimaGen

Hogelandseweg 88, Nijmegen, Netherlands 6545AB

Booth #: 02

<https://www.nimagen.com>



NimaGen specializes in DNA sequencing applications, with a complete portfolio of high quality Sanger Sequencing and Fragment Analysis (CE) kits, and clean-up reagents. NimaGen's slogan "Innovators in DNA Sequencing Technologies" reflects the next generation of NGS library preparation kits, using the novel Reverse Complement PCR (RC-PCR) technology. Our EasySeq™ 16S Microbiome Library Prep Kits for Illumina or Oxford Nanopore allow deconvolution of the microbiome from a wide variety of samples in a one-tube, single reaction NGS workflow!

Perseus Biomics

Industriepark 6, bus 3, Tienen, Belgium 3300

Booth #: TT3

<https://www.perseusbiomics.com/>



Perseus Biomics develops DynaMAP, an novel metagenomic approach for the taxonomic profiling of virtually any microbiome. At a price point competitive to amplicon/16S sequencing, DynaMAP delivers same-day, untargeted microbiome profiles with a taxonomic resolution down to strain level. DynaMAP uses fluorocoding and optical mapping of native metagenomic DNA instead of bias-prone PCR or sequencing: no amplification, no library prep, no sequencing nor heavy bioinformatics pipeline. DynaMAP is a smart and elegant approach to metagenomics and an advantageous time- and cost-efficient alternative to NGS.

Reckitt / Mead Johnson Nutrition

Reckitt Benckiser Plc, 103-105 Bath Rd, Slough,
UK SL1 3UH

Booth #:

<https://www.reckitt.com/>

The Mead Johnson Pediatric Nutrition Institute - part of Reckitt - relentlessly pursues a healthier world by working closely with global experts to advance nutrition science and share it with Healthcare Professionals who can use it to make a real difference for their patients. With our global network of research and development scientists, research laboratories, and facilities that put us at the forefront of pediatric nutrition science, we continue to build upon decades of innovation and collaboration to positively impact the future. MJPNI puts Reckitt's purpose to protect, heal and nurture into practice through shared success with our partners.



RIDACOM Ltd.

1 Koloman Str., Sofia, Bulgaria 1618

Booth #: 08

<https://www.ridacom.com/>

We believe science is the main driving force behind human progress. We strive to help researches bring new developments and innovations that positively impact our healthcare and environment. We are committed to making science as exciting and intriguing as we see it. Powered by the expertise of our people RIDACOM delivers personalized products solutions to the fields of life science, microbiome analysis, genomics and precision medicine, pharma and biotechnology.



TargEDys SA

1, chemin de Saulxier, Longumeau, France 91160

Booth #: TT1

<http://targedys.com>

TargEDys® is a commercial-stage French biotech specialized in the development of nutraceutical solutions through breakthrough microbiome interventions. The company is based on 20 years of research on the microbiota and probiotics and their mechanisms of action, conducted within academic laboratories. TargEDys® portfolio focuses on overweight, undernutrition, and mental health, all based on the concept of PreciBiotic strains backed by a molecular mechanism of action and in vivo studies. We seek exclusive long-term partnerships with pharma and nutra players and brands for the distribution of our finished products (EnteroSatys in weight management, Cresclylia for children's growth, Nodalys for 50+ maintenance of bone and muscle mass, and PhyliaBiome for stress management) including at distributor's brand.



Vedra International JSC

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<https://vedrainternational.eu/>

We are Vedra International – we combine years of experience on the pharmaceutical market in Bulgaria, Romania and Serbia with innovative solutions, in order to guarantee that patients have access to the best products for their health. We exclusively represent modern, effective and high-quality pharmaceutical therapies from leading international manufacturers that help people become healthy at last with the power of nature and without detrimental side effects. One of our top brands is the leading scientifically-backed probiotics brand Omni-Biotic.



GETTING AROUND IN SOFIA

Sofia, Bulgaria's charming capital, is not only known for its rich history and cultural treasures but also for its vibrant atmosphere. With its unique blend of old-world charm and modern conveniences, Sofia offers a wide array of options to explore the city. As WoM's venue "Grand Hotel Millennium" is located in the heart of the city, you're in for a treat. Here's a brief guide on how to get around the city and make the most of your stay.

GETTING FROM THE AIRPORT TO THE VENUE

By public transportation

Sofia metro line 1 has a station right outside of Terminal 2. It takes about 30 minutes to get to Serdika station where you have to change to M3 line for one station until the National Palace of culture station (NDK). The hotel is located 10 minutes away by walking from the metro station.

By taxi

The taxi ride from the airport to the venue hotel takes around 30 minutes and it costs approximately 15-20 EUR. There is a taxi stand outside the terminals. You can also download the [TaxiMe app](#).

Getting around Sofia

Sofia's public transportation network is very well developed with metro, bus, tramway and trolleybus lines. A single-trip ticket could be purchased in all means of transport with a contactless credit or debit card, and it costs 1,60 BGN (0,80 EUR). There is also a day pass for 4 BGN (2 EUR).

Sofia highlights

- **Alexander Nevsky Cathedral:** One of Sofia's most iconic landmarks and a majestic masterpiece of Bulgarian architecture. The Cathedral is a symbol of Bulgarian Orthodoxy, and it is a must-visit, both for its cultural significance and its breathtaking beauty.

- **Vitosha Boulevard:** The city's main shopping street. Besides stores, the street is dotted with charming cafes and restaurants, offering an exquisite array of cuisines from Bulgaria and around the world. In addition to that, the boulevard offers splendid views of Vitosha Mountain, Sofia's majestic natural backdrop.
- **Ancient Serdika Complex:** Nestled in the very heart of Sofia, the Serdika Complex is a mesmerizing district that takes you on a captivating journey through time. It is an archaeological complex displaying the remains of the Roman city, Serdika that once occupied this area.
- **The City Garden:** It is Sofia's oldest and most central public garden. The Garden is a place of culture as it is surrounded by the National Art Gallery, the City Gallery, the National Theater, the Bulgarian National Bank and the Ministry of Defense. You could enjoy the view from one of the various cafés in the garden.