# International Society of Microbiota



# Targeting Microbiota 2019

Towards Clinical Revolution

October 10 - 11, 2019 Park Inn Hotel - Krakow, Poland



www.microbiota-site.com



## International Society of Microbiota

On behalf of the International Society of Microbiota, we are pleased to inform you that the 7th World Congress on Targeting Microbiota will be organized in Park Inn Hotel - Krakow, Poland, on October 10 - 11, 2019.

During those days, a lot of oral and poster presentations will be introduced and will cover many hot topics:

- Microbiota 2019 : Recent Advances & Perspectives
- Microbiota Metabolites and Metabolome: Challenges & Perspectives
- Challenges of microbiota-host cross-talk understanding and intestinal microbiome signaling to extraintestinal organs
- Microbiota & medicine of tomorrow: Development of effective therapeutic strategies to manipulate the gut microbiota
- New Session dedicated to Built Environment Microbiome
- Special Workshop dedicated to Skin microbiota 2019: From basics to applied cosmetics and skin care
  - The first part Skin Microbiota: Recent advances and perspectives
  - The second part Strategies to modulate and affect skin microbiota in health and diseases

I do believe that this would be the best future strategy for the 7th World Congress of Targeting Microbiota in 2019: strong communication between basic, pre-clinical scientists and clinicians.

Microbiota & Medicine of Tomorrow: The Revolution

The Microbiota and microbiome are transforming deeply our understanding of Medicine of tomorrow. It is really a revolution which allows us to rethink and redesign our strategies about the way we will prevent and treat many diseases and pathologies.

#### Among the strategic questions which will be debated:

- How can all big data generated by microbiota sequencing or the metabolome be used?
- Can we speak about Artificial Intelligence and microbiota medicine?
- What is the credibility of tests, devices probiotics the market?

I hope to meet you at the next meeting to capture moments of conviviality and scientific inspirations and to study the various aspects of the microbiota with the best scientists we have in the world.

Krakow is a unique place for visitors and offers the most convenient and pleasant settings for international congresses, and has the oldest and largest academic centers in Poland. The city is famous for its historical old town (UNESCO World Heritage Site) along with the Wawel castle and the city's Kazimierz district. Krakow can be easily reached by plane, train or car.

Looking forward to seeing you soon,

Our warmest regards.



**Prof. Peter C. Konturek -** President of ISM Teaching Hospital of the University of Jena, Germany



# 7<sup>th</sup>World Congress on

# **Targeting Microbiota**

Towards Clinical Revolution

October 10-11, 2019 - Park Inn Hotel - Krakow, Poland

#### **Congress Sessions:**

- Microbiota 2019: Recent Advances & Challenges
- Microbiota Metabolites and Metabolome: Challenges & Perspectives
- Workshop: Skin microbiota 2019: From basics to applied cosmetics and skin care
- Session on Built Environment Microbiome
- Microbiota & medicine of tomorrow: Development of effective therapeutic strategies to manipulate the gut microbiota
- Round Table Discussion: The Scientific Committee will discuss two topics:
- -- The future of Microbiota Medicine
- -- The future of Microbiota Investments

#### Microbiota 2019 Key dates



Early Registration Sep. 17, 2019



**Short Oral Submission** Sep. 23, 2019



Poster Submission Sep. 28, 2019

#### Microbiota 2019 Speakers



Introduction note by the President of ISM Targeting

Peter C. Konturek Teaching Hospital of the University of Jena, Germany



International Space Station and Hospital Environments: Composition and function of microbiomes in confined built environments

Christine Moissl-Eichinger, Medical University Graz, Austria



Microbiota and cancer: Between Detection and **Prognosis** 

Romain Villeger University of Clermont Auvergne, France



microRNA in host-microbiome interaction and

Elena M Comelli, University of Toronto, Canada



Skin microbiota 2019: From basics to applied

Florence Abdallah, University Paris-Sud - Inserm, France



Intestinal barrier, gut microbiota and psoriasis

Mariusz Sikora, Medical University of Warsaw, Poland



Risk for Diabetes and Cardiovascular diseases in the Qatari population: Can the salivary microbiome predict it?

Souhaila Al Khodor



Gut microbiota and graft-versus-host disease in patients after bone marrow transplantation: FMT as a prevention or treatment?

Jaroslaw Bilinski, Medical University of Warsaw, Poland



Fecal Preservation by Freeze-Drying: Applications and Perspectives

Julie Reygner, Université Paris Descartes, France



Metabolic and Metagenomic Consequences of E. coli

Matteo Serino Inserm and Digestive Health Research Institute, France



Skin-Bacterial Microbiota Communication: Key Role in Cutaneous Homeostasis

Marc G.J. Feuilloley, University of Rouen Normandy, France



Microbiota Medicine of tomorrow: How do microbiota and metabolites will affect our classical thinking and make us rethink and redesign our strategies

Marvin Edeas. Université Paris Descartes, INSERM 1016, France



Special session on Built Environment Microbiome

Markus Egert, Furtwangen University, Germany



Gut bacterial metabolites as markers and mediators of cardiovascular aging

Marcin Ufnal Medical University of Warsaw, Poland



Dialogue between the skin and the microbiota: The immune system is under control

Chantal Pichon, French National Centre for Scientific Research, France



Brain-Gut-Microbiota Axis in Alzheimer's Disease

Modulating the microbiota of the hospital environment by probiotic cleaning: impact on infections and



antimicrobial resistance

Elisabetta Caselli, University of Ferrara, Italy



Hyaluronan, a new neuroimmune modulator of the microbiota-immune-gut-axis

Cristina Giaroni University of Insubria, Italy



Carcinogenic microbiota of oral cavity





Intergenerational Transfer of the Atopic-Disease Potential from the Murine Maternal Gut Microbiota Grafted with Human Faecalibacterium Prausnitzii

Heenam Stanley Kim, Korea University, Korea



Microbiota Dysbiosis is Associated with HPV-Induced Cervical Carcinogenesis

Woiciech Kwasniewski. Medical University of Lublin, Poland



Psychotropic Drugs and Microbiota - Important and Little Known Interaction

Igor Loniewski Pomeranian Medical University, Poland



### 7th World Congress on

# **Targeting Microbiota**

October 10-11, 2019 - Park Inn Hotel, Krakow, Poland

### Scientific Agenda

Day 1 – Wednesday, October 9, 2019

17h00 – 18h30 Registration – Badges & Material delivery at the Hotel.

Day 2 - Thursday, October 10, 2019

7h45	Welcoming & Registration of attendees
8h50	Introduction note by the President of ISM Targeting Microbiota 2019, Prof. Peter Konturek
	Session 1: Microbiota 2019: Recent Advances & Challenges
	Chairs: Marvin Edeas, Peter Konturek
9h00	Role of Intestinal Microbiota in Intestinal Inflammation with Respect to Stress  Peter Konturek, Teaching Hospital of the University of Jena, Germany
9h20	Metabolic and Metagenomic Consequences of E. coli Infections Matteo Serino, Inserm and Digestive Health Research Institute, France
9h40	Brain-Gut-Microbiota Axis in Alzheimer's Disease Agata Mulak, Wroclaw Medical University, Poland
10h00	Risk for Diabetes and Cardiovascular Diseases in the Qatari population: Can the salivary microbiome predict it? Souhaila Al Khodor, Sidra Medicine, Qatar
10h20	Diet Type, Antibiotic Intake and Gut Microbiota: A Lesson from a Large Cross-Sectional Study Tewodros Debebe, BIOMES NGS GmbH, Germany
	10h30 Coffee Break, Network & Poster Session
11h15	Biomedical Approach in Autism Spectrum Disorders – The Importance of Assessing Inflammation <i>Tatjana Mijatovic, R.E.D. Laboratories, Belgium</i>
11h25	MicroRNA in Host-Microbiome Interaction and Probiotics  Elena M Comelli, University of Toronto, Canada
11h45	Microbiota and cancer: between Detection and Prognosis Romain Villeger, University of Clermont Auvergne, France
12h05	Microbiota Dysbiosis is Associated with HPV-Induced Cervical Carcinogenesis Wojciech Kwasniewski, Medical University of Lublin, Poland
	12h30 Lunch Break, Network & Poster Session
14h00	The Impact of Lactobacillus, Bifidobacterium, E.Coli and Lactoferrin on the Phenomenon of Translocation in the Low-Birth-Weight Preterm Neonates  Magdalena Strus, Jagiellonian University Medical College, Poland
14h20	Carcinogenic Microbiota of Oral Cavity

Tomasz M. Karpiński, Poznań University of Medical Sciences, Poland

#### 14h40 Short oral presentations

Gut Microbiome Shifts during Pregnancy can Predict Gestational Diabetes Onset Annalisa Terranegra, Sidra Medicine, Qatar

Setting Standards in Microbiome and Multi-Omics Research to Power Novel Discovery Heloise Breton, DNA Genotek, Canada

Reproducibility of Statistical Methods in Comparative Metagenomics Vera Odintsova, Knomics LLC, Russia

Strict Anaerobic Bacteria Involvement in Gut-Brain Axis: A Novel Regulator of Pain and Well-Being Sandie Gervason, Clermont-Auvergne University, France

Immediate Elevation of Gaba in Rat Brain after Feeding with Lactobacillus Rhamnosus JB-1
The Gut-Brain Axis Study of Animal Model of Depressive Disorder
Anna Orzylowska, Medical University of Lublin, Poland

Impact of Chronic Social Stress in Gut-Brain-Axis in Female C57BL/6 Mice Malena Dos Santos Guilherme, University Medical Center Mainz, Germany

The Aged Microbiota in Alzheimer's Disease – An Investigation in Model Mice Kristina Endres, University Medical Center JGU Mainz, Germany

15h50 Coffee Break, Network & Poster Session

#### Session 2: Microbiota Metabolites and Metabolome: Challenges & Perspectives

Chairpersons: Annalisa Terranegra, Marcin Ufnal

16h20	Introduction: Gut Bacterial Metabolites as Markers and Mediators of Cardiovascular Aging
	Marcin Ufnal, Medical University of Warsaw, Poland

#### 16h40 Application of targeted metabolomics to tackle host-microbiome interactions

Nicolas Schauer, Biocrates, Austria

#### 17h00 Microbiota and Metabolomics: Effects of Bariatrics Surgery

Paulina Samczuk, Medical University of Białystok, Poland

17h20 Short oral presentations (7 minutes for presentation + 3 min for questions)

#### Gut Mycobiota and Fungal Metabolites in Human Homeostasis

Izabella Maria Mogilnicka, Medical University of Warsaw, Poland

#### **Targeting Microbiota with Long Read Nanopore Sequencing**

Michał Kaszuba, genXone SA, Poland

#### Pre- and Postmenopausal Women Have Different Core Urinary Microbiota

Annemarie Brusen Villadsen, North Denmark Regional Hospital, Hjørring Aalborg University, Denmark

#### Identification of Potential Microbiome Markers for an Early Diagnosis of AGVHD

Dhinoth Kumar Bangarusamy, SIDRA Medicine, Qatar

Modulation of MAPK And NFkB Pathways by Human Gut Microbiota Metabolites- Urolithins and Their Phase II Metabolites. Jakub P. Piwowarski, Medical University of Warsaw, Poland

The Microbial Composition of Appendix in Complicated versus Uncomplicated Acute Appendicitis Patients Eveliina Munukka, Microbiome Biobank, Faculty of medicine, University of Turku, Finland

Altered Abundance of Indicator Species of Intestinal Microbiota of Patients with Recurrent Rhinosinusitis Michalik, MML Medical Center, Poland

Mucosally-Induced Effects of Lactococcus Lactis Bacteria Expressing Myelin Epitopes in Animal Multiple Sclerosis Model Agnieszka Szczepankowska, Institute Of Biochemistry And Biophysics, Pas, Poland

Heat Stress-Induced Increase in Inflammatory Cytokines and Gut Microbiota Changes in Pigs Yadnyavalkya Dattatraya Patil, Lincoln University, New Zealand

18h50 End of the day

20h00 Targeting Microbiota Dinner

#### Day 3 - Friday, October 11, 2019

#### 8h25 Opening of the second day

#### Session 3 - Skin microbiota 2019: From basics to applied cosmetics and skin care

Chair: Chantal Pichon

8h30 General Introduction of the session

Skin-Bacterial Microbiota Communication: A New Element in Cutaneous Neurogenic Inflammation

Marc G.J. Feuilloley, University of Rouen Normandy, France

8h50 Dialogue between the Skin and the Microbiota: The Immune System is Under Control

Chantal Pichon, French National Centre for Scientific Research, France

9h10 Intergenerational Transfer of the Atopic-Disease Potential from the Murine Maternal Gut Microbiota Grafted with Human Faecalibacterium

Prausnitzii Pathobionts

Heenam Stanley Kim, Korea University, Korea

09h30 Intestinal Barrier, Gut Microbiota and Psoriasis

Mariusz Sikora, Medical University of Warsaw, Poland

9h50 Coffee Break, Network & Poster Session

**Practical Workshop** 

10h30 Skin Microbiota and Formulation: Recent Advances and Perspectives

Strategies to Modulate and Affect Skin Microbiota in Health and Diseases?

Florence Abdallah, University Paris-Sud, France

#### Session 4: Session on Built Environment Microbiome

Chair: Markus Egert

11h20 General Introduction of the session

**Special Session on Built Environment Microbiome** 

Markus Egert, Furtwangen University, Germany

11h40 International Space Station and Hospital Environments: Composition and Function of Microbiomes in Confined Built Environments

Christine Moissl-Eichinger, Medical University Graz, Austria

12h00 Modulating the Microbiota of the Hospital Environment by Probiotic Cleaning: Impact on Infections and Antimicrobial Resistance

Elisabetta Caselli, University of Ferrara, Italy

12h20 Lunch Break, Network & Poster Session

## Session 5: Microbiota & medicine of tomorrow: Development of effective therapeutic strategies to manipulate the gut microbiota

Chairs: Elena M Comelli, Carole Nicco

13h30 Gut Microbiota and Graft-versus-host Disease in Patients after Bone Marrow Transplantation: FMT as a prevention or treatment? Jaroslaw Bilinski, Medical University of Warsaw, Poland

13h50 Fecal Preservation by Freeze-Drying: Applications and Perspectives

Julie Reygner, Université Paris Descartes, France

14h10 Hyaluronan, A New Neuroimmune Modulator of the Microbiota-Immune-Gut-Axis

Cristina Giaroni, University of Insubria, Italy

14h30 Psychotropic Drugs and Microbiota - Important and little-Known Interaction

Igor Loniewski, Pomeranian Medical University, Poland

#### 15:20 Short oral presentations

Can Faecal Transplantion From Patients Diagnosed With Depression Into Rats Induce A Depressive-Like Phenotype? *Julie Kristine Knudsen, Aalborg University, Denmark* 

Morphology of Blood Microbiota Accessed by Light and Electron Microscopy Stefan Panaiotov, National Center of Infectious and Parasitic Diseases, Bulgaria

STW 5 (IBEROGAST®) and Microbiome: In Vitro and in Vivo Studies

Ramy Ammar, Bayer Consumer Health, Germany

Comparison of Fecal Microbiota and Selected Parameters Between Healthy and Postpartum Dysgalactia Syndrome in Sows Yeong-Hsiang Cheng, National I-Lan University, Taiwan

Fermented Milk by Lactobacillus Delbrueckii Cidca133, Carrying the Vaccinal Plasmid Pexu:Hps65 Ammeliorates Intestinal Mucositis in Murine Model

Mariana Martins Drumond, Federal Center for Technological Education of Minas Gerais, Brazil

Importance of Therapy with Intestinal Alkaline Phosphatase against Experimental Colitis in Obese Mice with Voluntary Physical Activity Role of Myokines, Proinflammatory Factors and Microbiota

Thomas Brzozowski, Jagiellonian University Medical College, Poland

Targeting Faecalibacterium Prausnitzii with Prebiotic Xylo-Oligosaccharides Prevents from Non-Alcoholic Fatty Liver Disease (NAFLD) Satu Pekkala, University of Jyvaskyla, Finland

Importance of Intestinal Microbiota Indicators for Clinical Purposes of Using Targeted Microbiological Therapy Anna Maria Basińska, Institute of Microecology, Poland

The Presence of Bacteria Varies between Colorectal Adenocarcinomas, Precursor Lesions and Non-Malignant Tissue Caspar Bundgaard-Nielsen, North Denmark Regional Hospital, Hjørring Aalborg University, Denmark

Early Introduction of Solid Foods: Ingestion Level Matters more than Prebiotics Supplementation for Shaping the Gut Microbiota Charlotte Paës, INRA, France

#### 17h00 Concluding remarks

Marvin Edeas, Université Paris Descartes, INSERM 1016, France

How do microbiota and metabolites, will affect our classical thinking and make us rethink and redesign our strategies concerning the medicine of tomorrow?

- 17:20 Round Table Discussion: The Scientific Committee will discuss two topics:
  - 1) The future of Microbiota Medicine
  - 2) The future of Microbiota Investments

With the intervention of **Dr. Peter Bak**, Back Bay Life Science Advisors, USA, who will provide his vision and recommandations: Corporate Development in the Microbe Space: Has Investment Outpaced Science?

Targeting Microbiota 2019 Scientific & Innovation Awards

17h40 End of Targeting Microbiota 2019s