



# International Society of Microbiota

6<sup>th</sup> World Congress on

## Targeting Microbiota

October 28-30, 2018 - Hotel Crowne Plaza, Porto, Portugal

### Day 1 – Sunday, October 28

17h00 – 18h00 Registration – Badges & Material Providing

### Day 2 – Monday, October 29

7h45 Welcoming & registration of attendees

8h50 Introduction note by the President of ISM Targeting Microbiota 2018, Prof. Peter Konturek

#### Session 1: Microbiota 2018: Recent Advances & Challenges

*Chairs: Marvin Edeas, Maria Vehreschild*

9h00 Honor the lodgers? – Interaction between the built environment microbiome and the human microbiome (Skin & Gut)  
*Markus Egert, Furtwangen University, Germany*

9h25 Impact of antibiotics and microbiota: recent scientific advances and perspectives  
*Maria Vehreschild, University Hospital Frankfurt, Germany*

9h50

10h15 Exploring the role of gut dysbiosis in neuroinflammation and hypertension  
*David Durgan, Baylor College of Medicine, USA*

10h40 Coffee Break, Network, Exhibition & Poster Session

*Chair: Julien Diana, Nicolas Cenac*

11h20 Link between microbiota & visceral pain: role of bioactive lipids  
*Nicolas Cenac, Inserm, CHU Purpan, France*

11h45 Altered gut microbiota and endocannabinoid system tone in vitamin D deficiency-mediated chronic pain  
*Francesca Guida, Università degli Studi della Campania "Luigi Vanvitelli", Italy*

11h55 Role of microbes in stem cells transplantation related complication  
*Ernst Holler, University Hospital Regensburg, Germany*

12h20 Enteric microbiome markers as early predictors of clinical outcome in allogeneic hematopoietic stem cell transplant  
*Nicasio Mancini, University Vita-Salute San Raffaele, Italy*

12h30 Metagenomic studies on gut microbial diversity in healthy controls and patients with *Entamoeba histolytica* infections from New Delhi  
*Lakshmi Rani Iyer, Jawaharla Nehru University, New Delhi, India*

12h40 Lunch Break, Network, Exhibition & Poster Session

#### Session 2: Strategies to manipulate microbiota & medicine of tomorrow

*Chairs: Markus Egert, Peter Konturek*

14h00 Fecal Microbiota Transplant 2018: What's next?  
*Peter Konturek, Teaching Hospital of the University of Jena, Germany*

- 14h25 **Phage therapy strategy to modulate the child stunting microbiota**  
*Mohammadali Khan Mirzaei, McGill University, Canada*
- 14h50 **Probiotic supplementation and associated infant gut microbiome and health: a cautionary retrospective clinical comparison**  
*Candice Quin, University of British Columbia, Canada*
- 15h00 **Fermented milk by *Lactobacillus Delbrueckii* CIDCA 133 is able to ameliorate the chemotherapy-induced intestinal mucositis in Balb/c mice**  
*Mariana Martins Drumond, Universidade Federal de Minas Gerais, Brazil*
- 15h10 **Microbiota “friendly” lipid nanoparticles to counteract the gastric infection burden**  
*Catarina Leal Seabra, University of Porto, Portugal*
- 15h20 **Curative properties of three probiotics strains in a mice model of cow-milk allergy: impact on T-helper responses**  
*Nathalie Esber, University of Paris Descartes, France*
- 15h30 **A new freeze-dried formulation to conserve stools over 12 months for fecal transplantation**  
*Julie Reygner, Université Paris Descartes - Faculté de Pharmacie, France*
- 15h40 **Anaerobic cultivated human intestinal microbiota – ACHIM a way to restore intestinal microbiota functions in IBS patients**  
*Elizabeth Norin, Karolinska Institutet, Sweden*
- 15h50 **IL-33 induced by dysbiosis in vaginal microbiota contributes to impaired antiviral immunity against herpes simplex virus infection to vaginal mucosa**  
*Heung Kyu Lee, Korea Advanced Institute of Science and Technology, Korea*
- 16h00 **Bacterial quorum sensing molecules manipulate host satiety pathway**  
*Paola Brun, University of Padova, Italy*

16h10 *Coffee Break, Network, Exhibition & Poster Session*

### **Session 3: Microbiota sequencing, big data interpretation, and artificial intelligence: myth or reality?**

**Chair: Yasubumi Sakakibara**

- 16h50 **Microbiota sequencing, big data interpretation, and artificial intelligence: myth or reality?**  
The aim of this discussion is to connect all the key actors involved in microbiota assessment and analysis: mathematician, computer scientists, bioinformatician, clinician, academics and industrials in order to initiate the discussion about sequencing, big data generating and how to integrate artificial intelligence into microbiota analysis interpretation.
- Introduction – Metagenome analysis and bioinformatics method for metagenome assembly: recent advances and perspectives**  
*Yasubumi Sakakibara, Keio University, Japan*
- Development of meta-transcriptome analysis method and its application to meta-transcriptome map of common marmoset**  
*Mika Uehara, Keio University, Japan*
- 17h15 **A preliminary study on bioinformatics probiotic database for microbiota**  
*Melike Yilmaz, Izmir Institute of Technology, Turkey*
- 17h25 **Electron-microscopic analysis of skin bacterial microbiota in patients with atopic dermatitis and in healthy human hosts**  
*Oksaba V. Rybalchenko, St Petersburg State University, Russian Federation*
- 17h35 **Improving the accuracy and reproducibility of microbiome measurements across labs**  
*Thomas Kuri, Zymo Research Europe GmbH, Freiburg, Germany*
- 17h45 **A higher standard for microbiome studies: best practices from sampling to analysis**  
*Evgueni Doukhanine, DNA Genotek, Canada*
- 18h05 **Genomics solutions that enhance and accelerate microbiota analysis**  
*Mette K. Lund, Eurofins Genomics, Denmark*
- 18h15 **Assessing gut microbiota-host crosstalk: development of a standardized and quantitative targeted metabolomics**  
*Carlos Malpica, MLP Vision Biotech SL, Spain*
- 18h25 **Identification of bacterial taxa with a potential role in Parkinson’s disease using illumine MiSeq and Ion Torrent PGM next generation sequencing**  
*Severin Weis, Furtwangen University, Germany*
- 18h35 **Discussion**
- 18h45 **End of the day**
- 20h30 **Targeting Microbiota Dinner - The dinner will be at the InterContinental Porto - Praça da Liberdade, 25, 4000-322 Porto, Portugal**



## Day 3 – Tuesday, October 30

8h25 Opening of the second day

### Session 4: Strategic role of metabolites and mediators on the microbiota-host cross-talk

*Chair: Knut Rudi*

8h30 **Microbiota and mitochondria inter-talk in hemodialysis patients: a pilot study**

*Marvin Edeas, Université Paris Descartes, Institut Cochin, France*

8h55 **Crosstalk between gut microbiota, innate immune cells and endocrine cells in the pancreas regulates autoimmune diabetes**

*Julien Diana, Institut National de la Santé et de la Recherche Médicale (INSERM), France*

9h20 **MAIT cells (Mucosal-Associated Invariant T cells) in liver disease and antibacterial response**

*Antonio Riva, Institute of Hepatology London, Foundation for Liver Research, United Kingdom*

9h45 **The effect of gut bacterial metabolites on cardiovascular risk**

*Marcin Ufnal, Medical University of Warsaw, Poland*

10h10 **The triple interaction diet-microbiome-epigenome: a novel approach to type 1 diabetes**

*Annalisa Terranegra, Sidra Medicine, Qatar*

10h20 **Examining the relationship between maternal body size, gestational glucose tolerance, mode of delivery and ethnicity on human milk microbiota at 3 months post-partum**

*Lauren Lemay-Nedjelski, University of Toronto, Canada*

10h30 *Coffee Break, Network, Exhibition & Poster Session*

*Chair: Ernst Holler*

11h15 **Targeted gut microbiota and short chain fatty acid profile among term and preterm infants**

*Jan Mazela, Poznan University of Medical Sciences, Poland*

11h40 **Psycho neuro immunology and gut microbes**

*Paul Forsythe, McMaster University, Canada*

12h05 **Using germfree animal models to prove the role of the gut microbiota in liver diseases**

*Philippe Gérard, INRA, France*

12h30 **Gut microbiota from infant with cow's milk allergy leads to atopic orientation in a murine model of CMA**

*Aurélié Mauras, University of Paris Descartes, France*

12h40 *Lunch Break, Network, Exhibition & Poster Session*

*Chair: Jan Mazela, Carole Nicco*

13h45 **Recent advances on the relation between the microbiome-gut-brain axis and the neurodegenerative diseases**

*Maria Cecilia Giron, University of Padova, Italy*

14h10 **Individual differences in the microbiome and metabolome during circadian misalignment and sleep restriction: associations with the ability to maintain wakefulness**

*Kenneth Wright, University of Colorado Boulder, USA*

14h35 **Sepsis and microbiota: obstacles, recent advances and strategies**

*Natalia Beloborodova, Negovsky Research Institute of General Reanimatology, Russia*

15h00 **Gut dysbiosis and altered barrier function precedes the appearance of metabolic syndrome in a rat model of maternal food-restriction**

*Paula Martínez-Oca, University Complutense of Madrid, Spain*

15h10 **Fecal microbiota transplantation in the intestinal decolonization of carbapenemase-producing *Klebsiella pneumoniae*: new therapeutic application?**

*João Carlos Silva, Centro Hospitalar Vila Nova de Gaia Espinho, Portugal*

**15h20** **Current and new approaches for measuring gut-blood barrier permeability**  
*Kinga Jaworska, Medical University of Warsaw, Poland*

15h30 *Coffee Break, Network, Exhibition & Poster Session*

**Chairs: Paul Forsyth**

**16h05** **Interventional strategies binding the human blood microbiota with the states of health, latent and active tuberculosis**  
*Stefan Panaiotov, National Center of Infectious and Parasitic Diseases, Bulgaria*

**16h15** **Delayed liver regeneration in germ-free mice is normalized following colonization with conventional mouse microbiota**  
*Antony M. Wheatley, National University of Ireland, Ireland*

**16h25** **Bile acids, MAIT cell activity and inflammatory parameters and the link to weight in 15 years old children**  
*Gunda Herberth, Helmholtz Center for Environmental Research Leipzig, Germany*

**16h35** **Akkermansia Muciniphila ameliorates inflammatory bowel disease via improvement of gut tight junction and epithelial cell ER stress**  
*Qiaozhu Su, Queen's University Belfast, United Kingdom*

**16h45** **Is skeletal muscle remodeling associated with gut microbiota signature?**  
*Maxence Jollet, University Montpellier, INRA, France*

**16h55** **Evaluation of the effect of the oral consumption of capsules containing *Lactobacillus Paracasei* LPC-S01 on the vaginal microbiota of healthy adult women: A randomized, placebo-controlled, double-blind, crossover pilot trial**  
*Simone Guglielmo, Università degli Studi di Milano, Italy*

**17h05** **Intestinal Microbiota as a risk for antimicrobial resistance spread – health and ecological threat**  
*Helena Neto Ferreira, University of Porto, Portugal*

**17h15** **General discussion & Concluding remarks**  
Among of questions which will be discussed:  
- Microbiota 2018: Marketing, Claims & Regulations - Bridging the gap between Marketing Strategy and Science  
- Microbiota & Medicine of tomorrow: Can we speculate?

**Targeting Microbiota 2018 Awards**

**17h45** **End of Targeting Microbiota 2018**