

INTERNATIONAL SOCIETY OF MICROBIOTA

5th WORLD CONGRESS ON

TARGETING MICROBIOTA

TOWARDS CLINICAL REVOLUTION



OCTOBER 26-27, 2017 - BERLIN, GERMANY



PROGRAM

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International Society of Microbiota

5th World Congress on

Targeting Microbiota

October 26-27, 2017 - Steigenberger Hotel Berlin, Germany

Dear Colleagues,

On behalf of the members of the scientific committee, we are pleased to inform you about the **strategies for our annual meeting: 5th World Congress on Targeting Microbiota**, which will be held in Berlin, Germany on October 26-27, 2017.

A substantial amount of evidence has shown that a diverse population of micro-organisms live in our skin, mouth, nose, lungs and intestines, where they play a strategic role in regulating and possibly controlling human health, well-being, metabolism and diseases.

During both days, many oral and poster communications will be presented and will cover many hot topics:

- Microbiota 2017: Recent Advances & Perspectives
- Challenges of microbiota sequencing and analyzing: How to interpret the results?
- 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

During this two-day conference, we will try to answer many questions, among them:

- Can we modulate the quality and diversity of human microbiota?
- How to induce durable beneficial changes in gut microbiota?
- Where is the red line of the gut microbiota manipulation?
- What are the strategic mediators of gut microbiota?
- How to understand better the role of bacterial metabolites?
- What is the perfect microbiota "signature" and how to use it as a biomarker to "predict" and/or treat many diseases?

We very much look forward to seeing you in Berlin for this exciting event.

Prof. Lorenzo Drago

University of Milan, Italy

President of the International Society of Microbiota

Prof. Marvin Edeas

University Paris Descartes, Cochin Institute, France

Prof. Peter Konturek

Thuringia-Clinic Saalfeld, Germany

Co-chairmen of the Scientific Committee



International Society of Microbiota

Targeting Microbiota 2017 Congress Speakers



Microbiota & Mitochondria intertalk in hemodialysis patients

Marvin Edeas
University Paris Descartes, Institut Cochin, France



Role of microbiota in Graft-versus-Host Disease (GvHD) and complications of allogeneic stem cell transplantation

Daniela Weber
Regensburg Universitätsklinikum, Germany



Skin microbioma approaches: atopic dermatitis versus psoriasis

Lorenzo Drago
University of Milano, Italy



Human gut microbiota: from structures to functions

Hervé Blottière
INRA, France



Microbiota and autoimmune diseases: a shield or a sword?

Filippo Canducci
University of Insubria, Italy



The microbiota, epigenome and transcriptome of colonic inflammation in inflammatory bowel disease

Marcus Claesson
University College Cork, Ireland



Novel techniques in microbiota research: from meta-omics to single cells

Jakob Zimmermann
University of Bern, Switzerland



Lactobacilli modulate epithelial cytoprotection through the Nrf2 pathway
Indoles from commensal bacteria extend healthspan

Rheinallt M. Jones
Emory University School of Medicine, USA



Hemodynamic effects of hydrogen sulfide, indole and tmao-gut bacteria-derived molecules: the role of the gut-blood barrier

Marcin Ufnal
Medical University of Warsaw, Poland



Unraveling the gut microbiome of the long-lived naked mole-rat

Gerd Birkenmeier
University of Leipzig, Germany



RNA-based stable isotope probing to link structure and function of prebiotics-assimilating intestinal microbiotas

Markus Egert
Furtwangen University, Germany



Advances in fecal microbiota transplantation

Peter Konturek
Teaching Hospital of the University of Jena, Germany



Metabolic, epigenetic, and transgenerational effects of gut bacterial choline consumption

Federico Rey
University of Wisconsin Madison, USA



The human infant gut microbiota mobilome

Knut Rudi
Norwegian University of Life Sciences, Norway



Dysbiosis profiling and pediatric diseases: pattern correlations and bacterial dysfunctions

Lorenza Putignani
Bambino Gesù Children's Hospital and Research Institute, Italy



Probiotics and bone health: recent scientific advances and perspectives

Roberto Pacifici
Emory University School of Medicine, USA



The microbiota-gut-brain axis: modulation by probiotics and antibiotics

Paul Forsythe
Mc Master University, Canada



Probiotics as potential therapeutics in the management of metabolic syndrome

Ryo Aoki
Ezaki Glico Co., Japan



Intestinal microbiota and primary sclerosing cholangitis: is there any link?

Johannes Hov
University of Oslo, Norway



Host genetics driving gut microbiota composition: experimental challenges

Andy Wullaert
Ghent University, Belgium



Microbiota, bacterial translocation and inflammation in chronic kidney disease

Didier Ducloux
CHU Besançon, France



International Society of Microbiota

5th World Congress on

Targeting Microbiota

October 26-27, 2017 - Steigenberger Hotel Berlin, Germany

Day 1 – Thursday, October 26

7h45 Welcoming & registration of attendees

8h55 Introduction note by Targeting Microbiota 2017 Chairpersons
Lorenzo Drago, Marvin Edeas, Peter Konturek

Session 1: Microbiota 2017: Recent Advances & Perspectives

Chairpersons: Lorenzo Drago - Marvin Edeas

9h00 Role of microbiota in Graft-versus-Host Disease (GvHD) and complications of allogeneic stem cell transplantation
Daniela Weber, Regensburg Universitätsklinikum, Germany

9h25 Microbiota and autoimmune diseases: a shield or a sword?
Filippo Canducci, University of Insubria, Italy

9h50 Host genetics driving gut microbiota composition: experimental challenges
Andy Wullaert, University of Ghent, Belgium

10h15 Lactobacilli modulate epithelial cytoprotection through the Nrf2 pathway
Comments on Indoles from commensal bacteria extend healthspan
Rheinalt M. Jones, Emory University School of Medicine, USA

10h45 Coffee Break & Poster Session

Chairpersons: Gerd Birkenmeier – Paul Forsythe

11h15 The human infant gut microbiota mobilome
Knut Rudi, Norwegian University of Life Sciences, Norway

11h40 Hemodynamic effects of hydrogen sulfide, indole and TMAO-gut bacteria-derived molecules: the role of the gut-blood barrier
Marcin Ufnal, Medical University of Warsaw, Poland

12h05 Role of nasal microbiota in respiratory recurrent infections
Desiderio Passali, Honorary President Italian Society of Rhinology, Italy

Short oral presentations (7 minutes presentation + 3 minutes questions)

12h20 The gut microbiota is a crucial regulator of local intestinal androgen metabolism in male mice
Hannah Colldén, University of Gothenburg, Sweden

12h30 Antibiotic-induced microbiota perturbation causes gut endocannabinoidome changes, hippocampal neuroglial reorganization and depression in mice
Francesca Guida, University of Campania, Naples, Italy

12h40 Lunch Break & Poster Session



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Session 2: Challenges of microbiota sequencing and analyzing: How to interpret the results?

Chairpersons: Knut Rudi – Markus Egert - Filippo Canducci

14h00 Human gut microbiota: from structures to functions

Hervé Blottière, INRA, France

14h25 RNA-based stable isotope probing to link structure and function of prebiotics-assimilating intestinal microbiotas

Markus Egert, Furtwangen University, Germany

14h50 Novel techniques in microbiota research: from meta-omics to single cells

Jakob Zimmermann, University of Bern, Switzerland

15h15 Coffee Break & Poster Session

16h15 Short oral presentations for sessions 1 & 2 (7 minutes presentation + 3 minutes questions)

Iron supplements modulate colon microbiota composition and potentiate the protective effects of probiotics in dextran sodium sulfate-induced colitis

Manuela Santos, Canadian Cancer Society Research Institute, Canada

The role of gut microbiota in the development of angiotensin II induced vascular dysfunction in mice

Rebecca Schöler, University Medical Center Mainz, Germany

Exposure to antibacterial chemicals influence oral microbiome composition

Randi J. Bertelsen, University of Bergen, Norway

The role of the microbiota in neurodegeneration: molecular mechanisms and prospects for gene therapy

Robert Friedland, University of Louisville, USA

Exploring the gut microbiome role in Parkinson's disease and in primary parkinsonisms

Clarissa Consolandi, National Research Council, Italy

Early life determinants of the fecal resistome

Aimee Marguerite Baumann-Dudenhoeffer, Saint Louis School of Medicine, USA

Newborn meconium microbiota diversity is related to maternal and cord blood lipid profiles

Shu-Ling Chuang, Chelsea & Westminster Hospital, United Kingdom

Identification of a microbial signature of colonic hypersensitivity in IBS-like murine models

Frédéric Antonio Carvalho, University of Auvergne, France

Culture-independent characterization of spores in stool samples

Ekaterina Avershina, Norwegian University of Life Sciences, Norway

Next generation 16S ribosomal RNA gene sequencing reveals intestinal bacterial genera with a potential role in Parkinson's disease

Severin Weis, Hochschule Furtwangen, Germany

Applying quality engineering principles to enhance reproducibility of longitudinal metagenomics studies

Héloïse Breton, DNA Genotek, Canada

Design of microbiome cohort studies – lessons learned from preparatory phase

Petra Videnska, Masaryk University, Czech Republic

A commensal gut bacteria MRX0004 alleviates inflammatory responses in a severe asthma model through reduction of neutrophil infiltration to the lung

Emma Jane Raftis, 4D Pharma PLC, United Kingdom

18h25 End of the first day

20h30 Dinner between speakers and attendees.

To participate, please register online before October 12. The exact venue will be communicated soon.



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Day 2 – Friday, October 27

8h25 Opening of the second day

Session 3: Challenges of microbiota-host cross-talk understanding and intestinal microbiome signaling to extraintestinal organs

Chairpersons: Peter Konturek - Hervé Blottière

8h30 **Microbiota & mitochondria intertalk in hemodialysis patients**
Marvin Edeas, University Paris Descartes, Institut Cochin, France

8h55 **Microbiota, bacterial translocation and inflammation in chronic kidney disease**
Didier Ducloux, CHU Besançon, France

9h20 **Intestinal microbiota and primary sclerosing cholangitis: is there any link?**
Johannes Hov, University of Oslo, Norway

9h45 **The microbiota, epigenome and transcriptome of colonic inflammation in inflammatory bowel disease**
Marcus Claesson, University College Cork, Ireland

10h10 *Coffee Break & Poster Session*

10h55 **Dysbiosis profiling and pediatric diseases: pattern correlations and bacterial dysfunctions**
Lorenza Putignani, Bambino Gesù Children's Hospital and Research Institute, Italy

11h20 **The microbiota-gut-brain axis: modulation by probiotics and antibiotics**
Paul Forsythe, Mc Master University, Canada

11h45 **Skin microbioma approaches: atopic dermatitis versus psoriasis**
Lorenzo Drago, University of Milano, Italy

12h10 **Short oral presentations** (7 minutes presentation + 3 minutes questions)

Are quorum sensing peptides the missing link between microbiota and disease?
Evelien Wynendaele, Ghent University, Belgium

The neonatal transfer of intestinal microbiota partially reverses microbiota dysbiosis in rats with intra-uterine growth retardation
Catherine Michel, INRA-Université de Nantes, France

Effects of 5-fluorouracil chemotherapy on colon inflammation, gut microbiota, and adverse physiological outcomes
Alexander Theodore Sougiannis, University of South Carolina School of Medicine, USA

Modulation of skeletal muscle function by gut microbiota dysbiosis and reseeded
Kévin Nay, INRA, France

12h50 *Lunch Break & Poster Session*



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Session 4: Microbiota & medicine of tomorrow: Development of effective therapeutic strategies to manipulate the gut microbiota

Chairpersons: Rheinallt M. Jones - Federico Rey

- 14h00 Advances in fecal microbiota transplantation**
Peter Konturek, Teaching Hospital of the University of Jena, Germany
- 14h25 Metabolic, epigenetic, and transgenerational effects of gut bacterial choline consumption**
Comments on the social ties linked with gut microbiota
Federico Rey, University of Wisconsin-Madison, USA
- 14h50 Probiotics and bone health: recent scientific advances and perspectives**
Roberto Pacifici, Emory University School of Medicine, USA
- 15h15 Unraveling the gut microbiome of the long-lived naked mole-rat**
Gerd Birkenmeier, University of Leipzig, Germany
- 15h40 Coffee Break & Poster Session*
- 16h10 Probiotics as potential therapeutics in the management of metabolic syndrome**
Ryo Aoki, Ezaki Glico Co., Japan
- 16h35 Short oral presentations (7 minutes presentation + 3 minutes questions)**
- Can dietary probiotics reduce human stress via the microbiome-gut-brain axis?**
Carl Gordon Johnston, Youngstown State University, USA
- SYN-004 (Ribaxamase) protects the diversity of the gut microbiome in patients receiving intravenous ceftriaxone treatment**
John Kokai-Sun, Synthetic Biologics, Inc., USA
- Exploring the microbial taxonomic and metabolic alterations during faecal microbiota transplantation for the treatment of clostridium difficile infection**
Lee Kellingray, Quadram Institute Bioscience, United Kingdom
- Probiotics modulated gut microbiota suppresses hepatocellular carcinoma growth in mice**
Gianni Panagiotou, Hans Knoll Institute, Germany
- The influence of ketogenic diet in gut microbial diversity of obese Mexican adults with type 2 diabetes**
Victor Armando Martinez Silva, Cinvestav-IPN, Mexico
- Cross-talk between the microbiota and their sisters, the mitochondria: the real cause of mitochondrial health or dysfunction?**
Steven Gundry, Center for Restorative Medicine, USA
- 17h35 Health Optimization Medicine (HOME): a framework to include microbiota and mitochondria in clinical practice**
Theodore Achacoso, BioBalance Wellness Institute and Health Optimization, USA
- 17h50 Concluding remarks with Lorenzo Drago, Marvin Edeas, Peter Konturek**
Targeting Microbiota 2017 Awards
- 18h15 End of Targeting Microbiota 2017**