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
# Targeting Microbiota 2017 Congress Speakers

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<td>Peter Konturek&lt;br&gt;Teaching Hospital of the University of Jena, Germany</td>
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<td>Marvin Edeas&lt;br&gt;University Paris Descartes, Institut Cochin, France</td>
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<td>Daniela Weber&lt;br&gt;Regensburg Universitätsklinikum, Germany</td>
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<td>Knut Rudi&lt;br&gt;Norwegian University of Life Sciences, Norway</td>
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<td>Lorenzo Drago&lt;br&gt;University of Milano, Italy</td>
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<td>Paul Forsythe&lt;br&gt;Mc Master University, Canada</td>
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<td><strong>Novel techniques in microbiota research: from meta-omics to single cells</strong></td>
<td>Probiotics as potential therapeutics in the management of metabolic syndrome</td>
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<td>Jakob Zimmermann&lt;br&gt;University of Bern, Switzerland</td>
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<td><strong>Lactobacilli modulate epithelial cytoprotection through the Nrf2 pathway</strong></td>
<td>Intestinal microbiota and primary sclerosing cholangitis: is there any link?</td>
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<td><strong>Hemodynamic effects of hydrogen sulfide, indole and tmao-gut bacteria-derived molecules: the role of the gut-blood barrier</strong></td>
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<td>Gerd Birkenmeier&lt;br&gt;University of Leipzig, Germany</td>
<td>Markus Egert&lt;br&gt;Furtwangen University, Germany</td>
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Day 1 – Thursday, October 26

7h45  Welcoming & registration of attendees

8h50  Introduction note by Targeting Microbiota 2017 Chairpersons
Lorenzo Drago, Marvin Edeas, Peter Konturek

9h00  Targeting Microbiota 2017: Questions & Strategies
Microbiota & mitochondria intertalk in hemodialysis patients
Marvin Edeas, University Paris Descartes, Institut Cochin, France

Session 1: Microbiota 2017: Recent Advances & Perspectives
Chairpersons: Lorenzo Drago - Marvin Edeas

9h30  Role of microbiota in Graft-versus-Host Disease (GvHD) and complications of allogeneic stem cell transplantation
Daniela Weber, Regensburg Universitätssklinikum, Germany

9h55  Microbiota and autoimmune diseases: a shield or a sword?
Filippo Canducci, University of Insubria, Italy

10h20  Host genetics driving gut microbiota composition: experimental challenges
Andy Wullaert, University of Ghent, Belgium

10h45  Coffee Break & Poster Session
Chairpersons: Gerd Birkenmeier – Paul Forsythe

11h15  Lactobacilli modulate epithelial cytoprotection through the Nrf2 pathway
Comments on Indoles from commensal bacteria extend healthspan
Rheinallt Jones, Emory University School of Medicine, USA

11h40  The human infant gut microbiota mobilome
Knut Rudi, Norwegian University of Life Sciences, Norway

12h05  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

12h30  Role of nasal microbiota in respiratory recurrent infections
Desiderio Passàli, Honorary President Italian Society of Rhinology, Italy

12h45  Lunch Break, Network & Poster Session

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 microbionas
Markus Egert, Furtwangen University, Germany

14h50  Novel techniques in microbiota research: from meta-omics to single cells
Jakob Zimmermann, University of Bern, Switzerland

15h15  Short oral presentations (7 minutes presentation + 3 minutes questions)

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

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

15h35  Coffee Break, Network & Poster Session

16h20  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 Schüler, University Medical Center Mainz, Germany

Exposure to antibacterial chemicals influence oral microbiome composition
Randi 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-Dudenhoefler, 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

18h30  End of the first day

20h30  Targeting Microbiota Dinner at Steigenberger Hotel Berlin
Appointment in the lobby of the hotel. If you would like to participate, please register online or contact the staff on site.
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 Intestinal microbiota and primary sclerosing cholangitis: is there any link?
Johannes Hov, University of Oslo, Norway

8h55 The microbiota, epigenome and transcriptome of colonic inflammation in inflammatory bowel disease
Marcus Claesson, University College Cork, Ireland

9h20 Dysbiosis profiling and pediatric diseases: pattern correlations and bacterial dysfunctions
Lorenza Putignani, Bambino Gesù Children's Hospital and Research Institute, Italy

9h45 The microbiota-gut-brain axis: modulation by probiotics and antibiotics
Paul Forsythe, Mc Master University, Canada

10h10 Skin microbiota approaches: atopic dermatitis versus psoriasis
Lorenzo Drago, University of Milano, Italy

10h35 Coffee Break, Network & Poster Session

11h20 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 reseeding
Kévin Nay, INRA, France

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, 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

12h30 Lunch Break, Network & Poster Session
Session 4: Microbiota & medicine of tomorrow:  
Development of effective therapeutic strategies to manipulate the gut microbiota  

Chairpersons: Rheinallt 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

16h00 Probiotics as potential therapeutics in the management of metabolic syndrome  
**Ryo Aoki**, Ezaki Glico Co., Japan

16h25 Short oral presentations (7 minutes presentation + 3 minutes questions)

- 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

16h55 Health Optimization Medicine (HOMe): a framework to include microbiota and mitochondria in clinical practice  
**Theodore Achacoso**, BioBalance Wellness Institute and Health Optimization, USA

17h10 Concluding remarks by Peter Konturek

17h30 End of Targeting Microbiota 2017 Awards