Day 1 – Monday, October 17

7h45  Welcoming & Registration of Attendees

8h55  Welcome Introduction by Targeting Microbiota 2016 Chairpersons

**Session 1: Microbiota 2016: Recent Advances & Perspectives (Part 1)**

*Mechanistics, Cellular & Molecular Impacts, Microbiota & Olfaction, Microbiota & Pathologies*

*Microbiota & Immunity: The subtle balance, Microbiota & Mitochondria: The intriguing relationship*

9h00  Introduction: Mammals shape their microbiome to prevent disease: Recent Scientific advances & Perspectives  
Howard Weiner, Harvard Medical School, USA

9h25  Anti cancer chemotherapy and microbiota changes in colorectal cancer  
Iradj Sobhani, Editor-in-Chief of the Journal of ISM, Hôpital Henri Mondor, France

9h50  Moody microbes or fecal phrenology: what do we know about the microbiota-gut-brain axis?  
Paul Forsythe, McMaster University, Canada

10h15 Age-related immune senescence and microbiota dysbiosis: lessons from the fly  
Henri Jasper, Buck Institute for Research on Aging, Canada

10h40  Coffee Break & Poster Session

11h25 The butyrate revival. Short chain fatty acids as key mediators of gut microbiota  
Hervé Blottière, Micalis Institut, France

11h50 Impact of microbiota on odorant detection and olfactory preferences in mice  
Nicolas Meunier, Neurobiology of Olfaction (NBO), INRA / UVSQ, France

12h15 Functional redundancy-induced stability of gut microbiota subjected to disturbance  
Pilar Francino, Valencian Region Foundation for the Promotion of Health and Biomedical Research, Spain

12h40  Lunch Break & Poster Session

14h00 Transition from an infant- to adult-like gut microbiota – where do the bacteria come from?  
Ekaterina Avershina, Norwegian University of Life Sciences, Norway

14h25 Maternal microbiota sets neonatal innate immune system development  
Mercedes Gomez de Agüero, University of Bern, Switzerland

14h50 The gut microbiota mobiome in preterm infants with and without necrotizing enterocolitis  
Anuradha Ravi, Norwegian University of Life Sciences, Norway
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<tr>
<th>Time</th>
<th>Title</th>
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<tr>
<td>15h00</td>
<td>Infant gut microbiota and fungal transfer from mother to child</td>
<td>Kasper Schiel, Norwegian University of Science and Technology, Norway</td>
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<td>15h10</td>
<td>Lung microbes and their effect on asthma</td>
<td>Muriel Thomas, INRA Jouy, France</td>
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<td>15h35</td>
<td>Intercepting host microbial signalling for prevention of chronic pathogen establishment in respiratory disease microbiomes</td>
<td>Fergal O’Gara, National University of Ireland, Ireland</td>
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<td>15h45</td>
<td>Changes in the lung microbiome in relation to anti-pseudomonal therapy in children with cystic fibrosis</td>
<td>Lenka Kramna, Charles University in Prague, Czech Republic</td>
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<td>15h55</td>
<td>Coffee Break &amp; Poster Session</td>
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Day 2 – Tuesday, October 18

8h55  Opening of the second day

Session 1: Microbiota 2016: Recent Advances & Perspectives (Part 2)

9h00  Systemic immunity against selected gut microbes protects from atherosclerosis and western-diet-related inflammation
Filippo Canducci, San Raffaele Scientific Institute IRCCS, Italy

9h25  Bacteriocin from epidemic Listeria strains alters the host intestinal microbiota to favor infection
Juan-Jose Quereda, Institut Pasteur, France

9h50  The antigen CAIP promotes inflammatory-dependent mechanisms responsible for atherosclerosis progression in Helicobacter cinaedi-infected patients
Gaia Codolo, University of Padua, Italy

10h00  The effects of intracolonic indole and hydrogen sulfide, gut-bacteria metabolites, on the circulatory system in rats
Marcin Ufnal, Medical University of Warsaw, Poland

10h10  Coffee Break & Poster Session

Session 2: Microbiota & Skin: Recent Advances & Perspectives

11h10  Changing of skin and gut Microbiotas in ordinary life: cosmetics and bowel
Lorenzo Drago, University of Milan, Italy

11h35  Faecalibacterium prausnitzii dynamics in the human gut microbiome underlying atopic dermatitis
Heenam Stanley Kim, Korea University, Republic of Korea

12h00  Long lasting effect of skin microbiome modulation induced by probiotic solution application
Bernhard Paetzold, University Clinic Magdeburg, Germany

12h10  Lunch Break & Poster Session

Session 3: Microbiota Analysis 2016: The challenge of interpretation

How to manage the big data? Strategic role of bio-informaticians to interpret the results
Microbiota & Bioinformatics: Strategic targets, Microbiota analysis & predictive medicine: the perfect biomarker

13h30  Microbiota & bioinformatics: strategic targets
Sean Kennedy, Institut Pasteur, France

13h55  Bioinformatics, integrating clinical and microbiome data: the challenge
Examples from gut, oral and nasal microbiota in Parkinson’s disease
Velma Aho, University of Helsinki, Finland

14h20  Tools and approaches to achieve strain resolution analyses of the microbiota
The gut microbiota mobilome and the potential of pathogen transmission of antibiotic resistance
Knut Rudi, Norwegian University of Life Sciences, Norway

14h45  Shotgun sequencing of total RNA as a novel method to define microbiota community structures
Fabien Cottier, Agency for Science, Technology and Research, Singapore

14h55  Multi-omics analysis of microbial and microbiome samples
Sandrine Miller, MoBio Laboratories, USA
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<th>Time</th>
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<tr>
<td>15h05</td>
<td>Oral Neisseria tropism and persistence from metagenomic sequencing data</td>
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<td><strong>Claudio Donati</strong>, Fondazione Edmund Mach, Italy</td>
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<td>15h15</td>
<td>Where are the standards? Needs for universal microbiota analysis</td>
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<td><strong>Francisco Codoner</strong>, LifeSequencing, Spain</td>
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<td>15h25</td>
<td>Coffee Break &amp; Poster Session</td>
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<td>16h10</td>
<td>Revealing insights into the composition of the vaginal microbial community structure in Korean woman</td>
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<td><strong>Soyeon Lim</strong>, Korean Research Institute of Bioscience and Biotechnology, Republic of Korea</td>
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<td>16h20</td>
<td>Transcriptional and functional analyses of the gene encoding anti-inflammatory peptides by faecalibacterium prausnitzii a2-165</td>
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<td><strong>Sriti Burman</strong>, The University of Queensland Diamantina Institute, Australia</td>
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<td>16h30</td>
<td>TSI - a low volume small intestine in vitro model with increased throughput</td>
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<td><strong>Tomasz Cieplak</strong>, University of Copenhagen, Denmark</td>
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<td>16h40</td>
<td>Identification of blood microbiota alteration associated with liver fibrosis in obese patients</td>
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<td><strong>Benjamin Lelouvier</strong>, Vaiomer, France</td>
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<td>16h50</td>
<td>Bacteriophages for improving human health: from food additives to dietary supplements</td>
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<td><strong>Alexander Sulakvelidze</strong>, Intralytix, USA</td>
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<td>17h15</td>
<td>Microbiota &amp; nonalcoholic fatty liver disease: recent advances and perspectives</td>
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<td><strong>Gabriel Perlemuter</strong>, Hôpital Antoine-Béclère, France</td>
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<td>17h40</td>
<td>Curing/remission of multiple autoimmune diseases is possible by manipulation of the human gut microbiome: the effect of a lectin limited, polyphenol enriched, prebiotic/probiotic regimen in 78 patients</td>
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<td><strong>Steven Gundry</strong>, The International Heart and Lung Institute, USA</td>
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<td>17h50</td>
<td>Probiotics supplementation modulates IFN-III response and their relationships with CSF-miRNAs levels in treated HIV-1 positive patients with suppressed viremia</td>
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<td><strong>Giuseppe Corano Scheri</strong>, Sapienza University of Roma, Italy</td>
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<td>18h00</td>
<td>Improvement of intestinal mucosa after probiotic supplementation in HIV-1 patients</td>
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<td><strong>Ivan Schietroma</strong>, Sapienza University of Roma, Italy</td>
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<td>18h10</td>
<td>Chemotherapy impact on the gut microbiome of patient-derived tumor xenograft models</td>
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<td><strong>Françoise Le Vacon</strong>, Biofortis Mérieux NutriSciences, France</td>
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<td>18h20</td>
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<td>20h00</td>
<td>Tuesday dinner between speakers and attendees</td>
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**Session 4: Challenges to control the diversity and variability of microbiota: From the basic research to the clinical studies (Part 1)**

*Phage therapy, Diet, probiotics and prebiotics, CRISPR/Cas system, Quorum sensing*
Day 3 – Wednesday, October 19

8h55  Opening of the second day

Session 4: Challenges to control the diversity and variability of microbiota:
From the basic research to the clinical studies (Part 2)

9h00  Lactobacillus rhamnosus GG intake modifies preschool children’s intestinal microbiota, alleviates penicillin-associated changes and reduces antibiotic use
Katri Korpela, Helsinki University, Finland

9h25  Gut microbiota bone axis: recent advances and perspectives
Elena Comelli, University of Toronto, Canada

9h50  Sex steroid deficiency-associated bone loss is microbiota dependent and prevented by probiotics
Roberto Pacifici, Emory University School of Medicine, USA

10h15  Coffee Break & Poster Session

Session 5: Microbiota Innovations 2016
The Fecal Microbiota Transplantation: Clinical & Practical Issues

11h15  Emerging role of fecal microbiota therapy in the treatment of gastrointestinal diseases
Peter C. Konturek, Thuringia-Clinic Saalfeld, Germany

12h00  Important human microbial ecological system modulator - FMT (fecal microorganism transplantation) or one of the best clinical applications of epigenetics in gastroenterology
Diana Zandere, University of Riga, Latvia

12h45  Lunch Break & Poster Session

14h00  MyNewGut: insulin resistance - linking modulation of the gut microbiome to dietary recommendations and health claims to tackle obesity
Stoffer Loman, NutriClaim, The Netherlands

14h15  Target-specific modulation of complex gut microbiota using novel DNA-based nanoparticle therapeutics
Nichola Wong, Institute of Food Research Procarta Biosystems, United Kingdom

14h25  The prevalence of Fusobacterium nucleatum before and after periodontal treatment of periodontitis patients in Taiwanese
Chingzong Wu, Taipei Medical University College of Oral Medicine, Taiwan

14h35  Impact of Enterobius vermicularis infection and mebendazole treatment on intestinal microbiota and host immune response
Chin-An Yang, China Medical University Hospital, Taiwan

14h45  Microbiota & mitochondria analysis in hemodialysed patients
Pierre-Yves Durand, Echo Santé Vannes, France

14h55  Associating a specific gut microbiome with kidney stone disease
Kelvin Paul Davies, Albert Einstein College of Medicine, USA

15h05  Influence of probiotics on inflammation in patients on continuous ambulatory peritoneal dialysis
Diana Yonova, Medical University Dialysis Center, Bulgaria

15h15  Structuring genetic and taxonomic diversity in gut microbes of lizards affected by a quick dietary change
Chloé Vigliotti, CNRS, France
15h25  Zebrfish gut as a house for human intestinal bacteria  
Nerea Arias Jayo, Azti tecnalia, Spain

15h35  Colonic bacteria and methanogens specifically response to different types of dietary fibers through the alteration of community, fermentation mode and metabolic pathways in swine and mice model  
Yuheng Luo, Sichuan Agricultural University, China

15h45  Coffee Break & Poster Session

16h30  Discussion: Microbiota & the medicine of tomorrow

Targeting Microbiota 2016 Awards:
* Scientific Contribution Award 2016
* Young Scientific Contribution for Oral and Poster Contribution

18h00  End of Targeting Microbiota 2016

Details about the session on fecal transplantation

Part 1: Short historic view on the fecal microbiota transplantation (FMT)

Part 2: Role of fecal microbiota transplantation in the treatment of the recurrent Clostridium difficile-infection

✓ Presentation of some interesting clinical cases
✓ Clinical efficacy of the fecal microbiota transplantation in treatment of inflammatory bowel disease: a new important area of investigation: Clinical case presentation
✓ Fecal microbiota transplantation as the therapy option in irritable bowel disease: hype or hope?: Clinical case presentation
✓ Fecal microbiota transplantation and liver cirrhosis: first clinical observations

Part 3: Fecal microbiota transplantation - methodology

✓ Donor selection and screening (blood and fecal tests)
✓ Preparation of donor feces
✓ Preparation of patient
  i. Pretreatment with antibiotics before fecal microbiota transplantation
  ii. Preparation of donor feces
  iii. Frozen vs fresh fecal microbiota transplantation
  iv. Infusion of feces by intestinal tube, push and pull-enteroscopy or colonoscopy. Which way is the best one in fecal microbiota transplantation?
  v. First 24 hours after fecal microbiota transplantation: what is important?
  vi. Donor management in a public stool bank

Part 4: Risks and long term safety aspects of fecal microbiota transplantation

Part 5: Public perception of fecal microbiota transplantation

Part 6: Effectiveness of fecal-derived microbiota transfer using orally administered capsules for recurrent C. difficile infection

Part 7: Fecal microbiota transplantation: future directions