International Society of Microbiota

4th World Congress on
Targeting Microbiota
Towards Clinical Revolution

October 17-19, 2016 - Institut Pasteur - Paris, France

Preliminary Agenda

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
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

11h10  The butyrate revival. Short chain fatty acids as key mediators of gut microbiota
Hervé Blottière, Micalis Institut, France

11h35  Bacteriocin from epidemic Listeria strains alters the host intestinal microbiota to favor infection
Juan-Jose Quereda, Institut Pasteur, France

12h00  Impact of microbiota on odorant detection and olfactory preferences in mice
Nicolas Meunier, Neurobiologie de l'Olfaction et Blosenseur (NBO), INRA, France

12h25  Functional redundancy-induced stability of gut microbiota subjected to disturbance
Pilar Francino, Valencian Region Foundation for the Promotion of Health and Biomedical Research, Spain

12h50  Lunch Break & Poster Session
14h00  Transition from an infant- to adult-like gut microbiota – where do the bacteria come from?
Ekaterina Avershina, Norway University of Life Sciences, Norway

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

14h50  Lung microbes and their effect on asthma
Muriel Thomas, INRA Jouy, France

15h15  Systemic immunity against selected gut microbes protects from atherosclerosis and western-diet-related inflammation
Filippo Canducci, San Raffaele Scientific Institute IRCCS, Italy

15h40  Lunch Break & Poster Session

16h30  Speed talks for session 1: submit your abstract - Among the abstracts already selected:

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

Intercepting host microbial signalling for prevention of chronic pathogen establishment in respiratory disease microbiomes
Fergal O’Gara, National University of Ireland, Ireland

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

Microbiota dysbiosis induced by defect of enteric antimicrobial activity triggers visceral hypersensitivity in young adult mice
Sandrine Ménard, INRA Toxalim Team 4, France

Cathelicidin promotes early innate defense against Salmonella enterica Typhimurium – implication in preventing dysbiosis?
Ravi Holani, University of Calgary, Canada

Chronic psychosocial stress in children and gut health
Nathalie Michels, Ghent University, Belgium

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

The effects of different physicochemical factors on growth and survival of human gut lactic acid bacteria
Diana Soghomonyan, Yerevan State University, Armenia

The gut microbiota mobilome in preterm infants with and without necrotizing enterocolitis
Anuradha Ravi, Norwegian University of Life Sciences, Norway

The role of the colon microbiota in the Mexican children obesity
Selvasankar Murugesan, Centro de Investigación y de Estudios Avanzados del Instituto Politécnico Nacional, Mexico

Living environment modifies the mouse microbiota and alleviates allergic inflammation
Noora Ottman, University of Helsinki, Finland

18h00  End of first day
Day 2 – Tuesday, October 18

8h55  Opening of the second day

**Session 2: Microbiota & Skin: Recent Advances & Perspectives**

9h00  Changing of skin and gut Microbiotas in ordinary life: cosmetics and bowel  
Lorenzo Drago, University of Milan, Italy

9h25  Faecalibacterium prausnitzii dynamics in the human gut microbiome underlying atopic dermatitis  
Heenam Stanley Kim, Korea University, Republic of Korea

9h50  Speed talks for session 2: submit your abstract

10h30  Coffee 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*

11h15  Microbiota & bioinformatics: strategic targets  
Sean Kennedy, Institut Pasteur, France

11h40  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, Norway University of Life Sciences, Norway

12h05  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

12h30  Lunch Break & Poster Session

14h00  Microbiota & mitochondria analysis in hemodialysed patients  
Pierre-Yves Durand, Echo Santé Vannes, France

14h25  Speed talks for session 3: submit your abstract - Among the abstracts already selected:

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

Revealing insights into the composition of the vaginal microbial community structure in Korean woman  
Sooyeon Lim, Korean Research Institute of Bioscience and Biotechnology, Republic of Korea

Transcriptional and functional analyses of the gene encoding anti-inflammatory peptides by faecalibacterium prausnitzii a2-165  
Sriti Burman, The University of Queensland Diamantina Institute, Australia
Associating a specific gut microbiome with kidney stone disease
Kelvin Paul Davies, Albert Einstein College of Medicine, USA

Identification of blood microbiota alteration associated with liver fibrosis in obese patients
Benjamin Lelouvier, Vaiomer, France

Session 4: Microbiota in the animals’ world: lessons & perspectives

15h00  Speed talks for session 4: submit your abstract- Among the abstracts already selected:

Structuring genetic and taxonomic diversity in gut microbes of lizards affected by a quick dietary change
Chloé Vigliotti, CNRS, France

Zebrfish gut as a house for human intestinal bacteria
Nerea Arias Jayo, Azti tecnalia, Spain

15h30  Coffee Break & Poster Session

Session 5: 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
Fecal transplantation

16h15  Bacteriophages for improving human health: from food additives to dietary supplements
Alexander Sulakvelidze, Intralytix, USA

16h40  Lactobacillus rhamnosus GG intake modifies preschool children’s intestinal microbiota, alleviates penicillin-associated changes and reduces antibiotic use
Katri Korpela, Helsinki University, Finland

17h05  Gut microbiota bone axis: recent advances and perspectives
Elena Comelli, University of Toronto, Canada

17h30  Speed talks for session 5: submit your abstract

Endotoxin-producing gut opportunistic pathogens as causative agents for human obesity
Na Fei, Micalis Institute, France

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
Steven Gundry, The International Heart and Lung Institute, USA

Probiotics supplementation modulates IFN-I/II response and their relationships with CSF-miRNAs levels in treated HIV-1 positive patients with suppressed viremia
Giuseppe Coroneo Scheri, Sapienza University of Roma, Italy

Improvement of intestinal mucosa after probiotic supplementation in HIV-1 patients
Ivan Schietroma, Sapienza University of Roma, Italy
Day 3 – Wednesday, October 19

8h55 Opening of the second day

Session 5: Challenges to control the diversity and variability of microbiota: From the basic research to the clinical studies (Part 2)

9h00 Sex steroid deficiency-associated bone loss is microbiota dependent and prevented by probiotics
Roberto Pacifici, Emory University School of Medicine, USA

9h25 Microbiota & nonalcoholic fatty liver disease: recent advances and perspectives
Gabriel Perlemuter, Hôpital Antoine-Bécclére, France

Session 6: Microbiota Innovations 2016
Part 1: The Fecal Microbiota Transplantation: Clinical & Practical Issues

Presentation of the recent scientific advances and perspectives of microbiota
What we need to know about FMT? The scientific data
Practical aspects to use FTM and practical protocols
General discussion about FMT

9h50 Emerging role of fecal microbiota therapy in the treatment of gastrointestinal diseases
Peter C. Konturek, Thuringia-Clinic Saalfeld, Germany

10h30 Coffee Break & Poster Session

11h40 Response of gut bacteria to host starvation: understanding the risk factors to develop an eating disorder
Serguei Fetissov, Rouen University, France

Part 3: Regulation issues & policy maker strategies

12h05 MyNewGut: insulin resistance - linking modulation of the gut microbiome to dietary recommendations and health claims to tackle obesity
Stoffer Loman, NutriClaim, The Netherlands

12h20 Speed talks for session 6: submit your abstract - Among the abstracts already selected:

12h45 Lunch Break & Poster Session
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 faces 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