2nd World Congress on

Targeting Microbiota

Towards Clinical Revolution



Special Session

Fecal Microbiota Transplantation: Practical Issues and Regulation

October 16-17, 2014

Institut Pasteur - Paris, France

www.microbiota-site.com

2nd World Congress on Targeting Microbiota

October 16-17, 2014 - Institut Pasteur, Paris, France



Day 1 - October 16, 2014

- 7h50 Welcoming & Registration of Attendees
- 9h00 Welcome Introduction by Targeting Microbiota 2014 Chair Persons
- **9h05 Opening of Targeting Microbiota World Congress on behalf of the President of Institut Pasteur,** by Prof. Philippe Sansonetti, Institut Pasteur, France

Session 1: Microbiota 2014: State-of-the-Art & Visions

- 9h10 Evolution, cooperation & conflicts Pierre-Henri Gouyon, National Museum of Natural History, France
- 9h40 Impact of human microbiome research on public health Stanislas Dusko Ehrlich, INRA, Metagenopolis, France
- **10h10** Interactions of segmented bacterium with the host immune system Nadine Cerf-Bensoussan, Institut Imagine, France

10h40 Break & Posters Session

11h10 Microbiota and intestinal epithelium: decrypting signals in the crypt Philippe Sansonetti, Institut Pasteur, France

Session 2: Mitochondria-Microbiota Crosstalk: The Intriguing Relationship

- **11h40 Mitochondria-microbiota: the intriguing relationship** Marvin Edeas, Targeting Mitochondria Task Force Group, France
- 12h10 Redox signaling mediated by gut microbiota: a mechanism of host-symbiont crosstalk Andrew Scott Neish, Emory University School of Medicine, USA

12h40 Lunch Break & Posters Session

- 14h00 The Enteropathogen *Listeria monocytogenes* alters host cell mitochondrial dynamics Fabrizia Stavru, Institut Pasteur, France
- 14h30 Novel strategies of mitochondria targeting by gastric pathogen *Helicobacter pylori* Laurent Chatre, Institut Pasteur, France

Session 3: Microbiota, Innovative Methods & Biomarkers: From Predictive to Personalized Medicine

14h40 Metaproteome display: a novel approach for biomarker discovery in inflammatory bowel disease Jonas Zantow, TU Braunschweig, Germany

Strain specific lactobacilli-mediated promotion of host juvenile growth: innovative technique brings new evidence from strains belonging to several lactobacilli species Mélanie Mitchell, IGFL, France

A fast and inexpensive flow cytometry-based approach to analyze the commensal microbiota Jakob Zimmermann, DRFZ Berlin, Germany

Microbiota regulation of fungal infectivity Melissa Palmieri, University of Perugia, Italy

Gut microbiota are related to parkinson's disease and clinical phenotype Filip Scheperjans, Helsinki University Central Hospital, Finland

Microbiota as reservoir for antibiotic resistance Dmitry Alexeev, RIPCM, Russian Federation

Specific distortions in gut microbiota related to chronic inflammation in response to iron and reactiveoxygen species Magdalena Strus, Jagiellonian University Medical College, Poland

15h30 Break & Posters Session

16h00 A single host-derived glycan arbitrates cooperation between host and microbe Julia Schwartzman, University of Wisconsin, USA

Alignment-free analysis of metagenomic data with machine learning: an alternative approach for studying microbiota

Xuegong Zhang, Tsinghua University, China

Use of two NGS approaches for studying the evolution of skin microbiota after application of exogenous compounds

Cyrille Jarrin, Libragen, France

KLAST: A new high-performance sequence similarity search tool for metagenome analysis Patrick Durand, Korilog, France

OMNIgene•GUT: A Novel Fecal Self-Collection, Stabilization and Transport System for Gut Microbiome Studies

Carlos Merino, DNA Genotek Inc., Canada

Metabiote[®]: Integrated solution for analyses of bacterial microbiota

Guillaume de Saint Martin, Genoscreen, France

Session 4: The Microbiota Role in Health & Diseases: The Mechanistic

- 16h45 Targeted modulation of the gut microbiota-host interaction reveals novel mechanisms involved in host response during obesity Patrice D. Cani, Louvain Drug Research Institute, Brussels, Belgium
- 17h15 A functional genomics approach to the understanding of gastro-intestinal colonization by the opportunistic fungal pathogen Candida albicans Christophe d'Enfert, Institut Pasteur, Paris, France

- **17h45** Gut microbiota modulate lung immunity against mycobacterial infection Chuan-Sheng Lin, Chang Gung University, Taiwan, Republic of China
- 17h55 Dysbiotic microbiota in liver cirrhosis relates to systemic inflammation Valerio lebba, University of Rome, Italy
- 18h05 Posters Session & Networking
- 19h00 End of First Day
- **20h30** Dinner between Speakers & Attendees in a French typical Restaurant If you are interested to take part to this dinner, please register online.

Day 2 - October 17, 2014

Session 5: New Challenges to Prevent & Treat: Metabolic Diseases, Cancer, Neurodegenrative Diseases Liver, Kidney, Lung, Skin Diseases & all Inflammation Related Diseases

- 9h00 Uncultivated bacterial symbionts: a rich resource for drug development Joern Piel, ETH Zürich, Switzerland
- 9h30 RORgt + cells & symbiotic microbiota: regulation of intestinal immunity Gerard Eberl, Institut Pasteur, France
- **10h00** The new paradigm of tissue microbiota to intestinal immune defense in metabolic disease Rémy Burcelin, INSERM, France

10h30 Break & Posters Session

- **11h00** Modulation of the anticancer immune effects of cyclophosphamide by the intestinal microbiota Sophie Viaud, Institut Gustave Roussy, France
- **11h30** Commensal microbiota as a trigger of spontaneous autoimmune demyelination Gurumoorthy Krishnamoorthy, Max Planck Institute of Neurobiology, Germany
- 12h00 NOD2-mediated dysbiosis predisposition to transmissible colitis & colorectal cancer Mathias Chamaillard, Institut Pasteur, France

12h30 Lunch Break & Posters Session

- **13h30** The microbiome-to-host communication affecting pregnancy and fetal growth in early postnatal life Sven Pettersson, Karolinska Institute, Solna, Sweden
- 14h00 Mind-altering microorganisms: the impact of the gut microbiota on brain and behaviour Niall Hyland, University College Cork, Cork, Ireland
- 14h30 Gut microbiota modulated by Reg3alpha protects against lethal inflammatory bowel disease in mouse model

Jamila Faivre, Hôpital Paul Brousse, France

Gut microbial profile in patients with chronic kidney disease on conservative treatment: is there relationship with inflammation and markers of cardiovascular risk? Denise Mafra, Federal Fluminense University, Brazil Inhibition of hepatic alcohol toxicity by correcting intestinal dysbiosis in mice Gladys Ferrere, INSERM, France

Intestinal dysbiosis explains individual differences in the susceptibility to alcoholic liver disease Gabriel Perlemuter, AP-HP, Antoine-Béclère University Hospital, France

Altered gut microbial energy and metabolism in children with non alcoholic fatty liver disease Sonia Michail-Ramsy, USC and CHLA, USA

Early gut colonization with toxin-producing Staphylococcus aureus may protect against the development of eczema

Forough L. Nowrouzian, Gothenburg University, Sweden

The microbiota of gallstone patients is enriched with Oscillospira, and further modified by cholecystectomy, without changes in fecal bile acids Gophna Uri, Tel Aviv University, Israel

Molecular mimicry between proteins from gut bacteria and host peptide hormones at the origin of eating disorders

Sergueï Fetissov, Rouen University, France

D-Fagomine balances gut Bacteroidales and reduces weight gain in rats fed a high-fat high-sucrose diet Sara Ramos-Romero, Institute for Advanced Chemistry of Catalonia, Spanish Research Council (CSIC), Spain

Non digestible oligosaccharides modulate the gut microbiota to control the development of leukemia and associated cachexia

Laure Bindels, Université Catholique de Louvain, Belgium

15h35 Break & Posters Session

16h05 Polyphenols and a lectin-limited diet promote weight loss by altering the human gut microbiome Steven Robert Gundry, The Center for Restorative Medicine, USA

Effect of probiotics on gut microbiota and environmental toxins Gregor Reid, Lawson Health Research Institute, Canada

The Microbiota of the Long Living Naked Mole Rat Tewodros Debebe, Univerity of Leipzig, Germany

Special Session on Fecal Microbiota Transplantation: Practical Issues & Regulation

The aim of this special session is to discuss the last advances, practical issues, limits of the intestinal microbiota and Fecal microbiota transplantation in various pathologies.

- **16h30** Variation in bacterial community stability after fecal microbiota transplantation David Berry, University of Vienna, Austria
- **17h00** Juristical hurdles and possibilities for companies providing faecal transplant services Andreas Schwiertz, SymbioVaccin, Germany

Alterations of fecal microbiota and metabolic landscape iin response to oral or intravenous iron replacement therapy in patients with inflammatory bowel diseases Thomas Clavel, Technsiche Universität München, Germany

Transplantation of genetically and diet-induced obese gut microbiota in conventional mice blunts highfat diet-induced glucose homeostasis imbalance Matteo Serino, INSERM UMR1048-I2MC, France

Fecal microbiota transplantation for recurrent clostridium difficile infection in a child via a percutaneous gastrojejunostomy

Xavier Stephenne, Université Catholique de Louvain-Cliniques universitaires St Luc, Belgium

Fecal microbiota transplantation: A sui generis biological drug, not a tissue Pierre Bourlioux, Université Paris Descartes, France

17h45 Discussion & Conclusion of Targeting Microbiota 2014 In presence of Targeting Microbiota organizers, speakers & scientific committee members

Targeting Microbiota 2014 Awards:

- ✓ Scientific Contribution Award 2014
- ✓ Young Scientific Contribution for Oral and Poster Contribution

Conclusion Remarks by Marvin Edeas & Miria Ricchetti

18h15 End of Targeting Microbiota 2014

For all request concerning demonstrations, exhibition and general information, please contact:

John Edwards

Targeting Microbiota 2014 Institut Pasteur 28 rue du Dr. Roux 75015 Paris <u>www.microbiota-site.com</u> Microbiota@microbiota-site.com



www.microbiota-site.com