



2<sup>nd</sup> World Congress on

### Targeting Microbiota

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

Final Agenda

Day 1 - October 16, 2014

Welcoming & Registration of Attendees
 Welcome Introduction by Targeting Microbiota 2014 Chairpersons
 Opening of Targeting Microbiota World Congress on behalf of the President of Institut Pasteur, by Prof. Philippe Sansonetti, Institut Pasteur, France
 Aim and objective of Microbiota 2014. Why ISM ? Remarks and points of view Marvin Edeas, Targeting Mitochondria Task Force Group, France

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

Chaired by Marvin Edeas & Miria Ricchetti

**9h40 Evolution, cooperation & conflicts**Pierre-Henri Gouyon, National Museum of Natural History, France

**10h10** Impact of human microbiome research on public health Stanislas Dusko Ehrlich, INRA, Metagenopolis, France

10h40 Break & Posters Session

11h10 Interactions of segmented bacterium with the host immune system Nadine Cerf-Bensoussan, Institut Imagine, France

11h40 Microbiota and intestinal epithelium: decrypting signals in the crypt Philippe Sansonetti, Institut Pasteur, France

#### Session 2: Mitochondria-Microbiota Crosstalk: The Intriguing Relationship

Chaired by Fabrizia Stavru & Miria Ricchetti

**12h10 Mitochondria-Microbiota: The intriguing relationship**Marvin Edeas, Targeting Mitochondria Task Force Group, France

12h15 Redox signaling mediated by gut microbiota: a mechanism of host-symbiont crosstalk Andrew Scott Neish, Emory University School of Medicine, USA

12h45 Group Picture - 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

Chaired by Stanislas Dusko Erhlich & Jörn Piel

14h40 Metaproteome Display: A novel approach for biomarker discovery in Inflammatory Bowel Disease Jonas Zantow, TU Braunschweig, Germany

# OCIETY OF STREET

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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

#### 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

Chaired by Nadine Cerf-Bensoussan & Rémy Burcelin

### 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

#### 20h00 Dinner between Speakers & Attendees in a French typical Restaurant



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### 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

Chaired by Patrice Cani & Marvin Edeas (from 9:00 to 12:30)

Chaired by Serguei Fetissov & Andrew Scott Neish (from 13:30 to 16:20)

9h00	Uncultivated bacterial symbionts: a rich resource for drug development
	Jörn 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 Group Picture - 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

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



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**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

Polyphenols and a Lectin-Limited Diet Promote Weight Loss By Altering the Human Gut Microbiome Steven Robert Gundry, The Center for Restorative Medicine, USA

#### 15h35 Break & Posters Session

#### 16h05 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, University of Leipzig, Germany

#### **Special Session on Fecal Microbiota Transplantation:**

Practical Issues & Regulation

Chaired by David Berry & Gurumoorthy Krishnamoorthy

#### 16h20 Variation in bacterial community stability after fecal microbiota transplantation

David Berry, University of Vienna, Austria

#### 16h50 Juristical Hurdles and Possibilities for Companies providing Faecal Transplant Services

Andreas Schwiertz, SymbioVaccin, Germany

# Alterations of Fecal Microbiota and Metabolic Landscape iln 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 High-Fat 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

#### 17h35 Discussion & Conclusion of Targeting Microbiota 2014

In the presence of Organizers & Speakers from scientific committee

#### **Targeting Microbiota 2014 Awards:**

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

Concluding Remarks by Marvin Edeas & Miria Ricchetti

#### 18h00 End of Targeting Microbiota 2014