The final symposium of the Microbiota cross-cutting program of Inserm will bring to an end the program launched in 2017. It will revisit the main scientific breakthroughs of the scientific community structured by the program, and address the determinant role of microbiota in health and disease.

**Introduction**: Didier SAMUEL, CEO Inserm, France

**Keynote Speakers**: Yasmine BELKAID, Institut Pasteur, France
Eran SEGAL, Weizmann Institute, Israël

**Invited Speakers**: Premysl BERCIK (McMaster University, Canada), Thomas CLAVEL (Aachen University, Germany), Maria Carmen COLLADO (National Research Council-Valencia, Spain), Mahesh DESAI (Luxembourg Institute of Health, Luxembourg), Sofia FORSLUND (Max Delbrück Center-Berlin, Germany), Andrew GEWIRTZ (Georgia State University, USA), Nicola SEGATA (University of Trento, Italy), Valentina TREMAROLI (University of Gothenburg, Sweden), Elena VERDU (Mc Master University, Canada)

**Inserm Program Members and Organizing Committee**: Nicolas BARNICH, Ivo BONECA, Anne-Marie CASSARD, Nadine CERF-BENSUSSAN, Benoit CHASSAING, Mathias CHAMAILLARD, Sylvie CLAEYSEN, Karine CLÉMENT, Gérard EBERL, Serguei FETISSOV, Valérie GABORIAU-ROUTHIAU, Nathalie GRIVEL, Évelyne JOUVIN-MARCHE, Antonin LAMAZIÈRE, Agnès LEHUEN, François LEULIER, Philippe LESNIK, Olivier MEILHAC, Michel NEUNLIST, Harry SOKOL, Nathalie VERGNOLLE, Hubert VIDAL

*With the support of the theme-based institutes of Inserm: Immunology, Inflammation, Infectious Diseases, Microbiology (I3M) and Pathophysiology, Metabolism, Nutrition (PMN)*

**Link to register and submit poster abstract** – free registration before September 15, 2024
### Session 1

**09:15 – 10:30**

- **09:15 – 10:00** **Keynote lecture** by Yasmine BELKAID  
  Paris, France – Bethesda, USA  
  *Microbiota control of tissue immunity and repair*

- **10:00 – 10:15** Renan CORREA  
  Paris, France  
  *Modeling early interactions of commensal bacteria with the gut immune system: the case of segmented filamentous bacteria*

- **10:15 – 10:30** Gérard EBERL  
  Paris, France  
  *Microbiota and immune Imprinting*

**10:30 – 11:00** Break

### Session 2

**11:00 – 12:35**

- **11:00 – 11:25** Elena VERDU  
  Hamilton, Canada  
  *Mechanisms through which duodenal microbiome impacts chronic inflammation: the example of celiac disease*

- **11:25 – 11:50** Maria Carmen COLLADO  
  Valencia, Spain  
  *To be determined*

- **11:50 – 12:05** Agnès LEHUEN  
  Paris, France  
  *MAIT cells and microbiota in type I diabetes*

- **12:05 – 12:20** Ivo BONECA  
  Paris, France  
  *The role of peptidoglycan in host physiology: from homeostasis to disease*

- **12:20 – 12:35** Marie-Paule GONTHIER  
  Saint-Denis, La Réunion, France  
  *Establishing the link between oral microbiota dysbiosis, inflammation and metabolic disorders during obesity*

**12:35 – 14:00** Lunch break and posters

### Session 3

**14:00 – 15:35**

- **14:00 – 14:25** Nicola SEGATA  
  Trento, Italy  
  *Meta-omics state of the art and perspectives*

- **14:25 – 14:50** Andrew GEWIRTZ  
  Atlanta, USA  
  *Microbiota and dietary fibers*

- **14:50 – 15:05** Tiphaine LE ROY  
  Paris, France  
  *Jejunal microbiota and metabolic diseases*

- **15:05 – 15:20** Cyrielle CAUSSY  
  Lyon, France  
  *NASH, bacterial metabolite signature*

- **15:20 – 15:35** Dragos CIOCAN  
  Paris, France  
  *Bile acid homeostasis and intestinal dysbiosis in alcoholic hepatitis*

**15:35 – 16:05** Break

### Session 4

**16:05 – 17:30**

- **16:05 – 16:30** Premysl BERCIK  
  Hamilton, Canada  
  *Microbiota, neuroenteric system and intestinal inflammation*

- **16:30 – 16:45** Nathalie VERGNOLLE  
  Toulouse, France  
  *Host epithelium-microbiota interactions as major regulators of visceral pain*

- **16:45 – 17:00** Michel NEUNLIST  
  Nantes, France  
  *Fecal microbiota from adults with autism spectrum disorder alters behavior and digestive functions in recipient mice*

- **17:00 – 17:15** Sylvie CLAEYSEN  
  Montpellier, France  
  *Microbiota and Alzheimer’s disease*

- **17:15 – 17:30** Serguei FETISSOV  
  Rouen, France  
  *Proteomic identification in the Lactobacillus and functional validation of an oxytocin mimetic protein and its relevance to autism*

**17:30 – 19:30** Posters and discussion

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20:00 Speakers’ dinner
Program  
29 October 2024

08:30 Opening

09:00 – 10:30 Session 5

09:00 – 09:25 Karine CLÉMENT
Paris, France
Nutrition, microbiome and cardiometabolic diseases

09:25 – 09:50 Benoit CHASSAING
Paris, France
Diet-microbiota interactions... 
A personnolized point of view

09:50 – 10:05 Hang NGUYEN
Clermont-Ferrand, France
Impact of environmental factors on host – E. coli interaction in chronic intestinal diseases: from better understanding to therapeutic targets int of view

10:05 – 10:20 Jean-Paul MOTTA
Toulouse, France
Proteolytic tension at the host-gut biofilm interface: a role in emergence of pathobionts

10:20 – 10:30 Tribute to Nicolas BARNICH

10:30 – 11:00 Break

11:00 – 12:35 Session 6

11:00 – 11:25 Thomas CLA VEL
Aachen, Germany
We will soon know them all! Functional microbiome research using cultivation

11:25 – 11:50 Mahesh DESAI
Luxembourg, Luxembourg
Diet-assisted engineering of the gut microbiome: from mechanisms to translation

11:50 – 12:05 Nathalie ROLHION
Paris, France
In vitro tools for human gut microbiota culture and studies

12:05 – 12:20 Adeline SIVIGNON
Clermont-Ferrand, France
Cooperation between symbiotic bacteria and pathobionts in the intestinal mucosa?

12:20 – 12:35 Emmanuel LEMICHEZ
Paris, France
The CNF1 toxin from Escherichia coli pathobionts: role in gut colonization and colorectal cancer

12:35 – 14:00 Lunch break

14:00 – 15:35 Session 7

14:00 – 14:25 Sofia FORSLUND
Berlin, Germany
Measuring the medicated holobiont

14:25 – 14:50 Harry SOKOL
Paris, France
Therapeutic intervention on microbiota

14:50 – 15:05 François LEULIER
Lyon, France
Microbial influence on juvenile growth

15:05 – 15:20 Philippe LESNIK
Paris, France
Deciphering the role of microbiota in shaping the immuno-oncogenic potential of statins

15:20 – 15:35 Mathias CHAMAILLARD
Lille, France
Postprandial bacterial signatures linking fasting, epithelial barrier and glucose metabolism

15:35 – 16:05 Break

16:05 – 17:55 Session 8

16:05 – 16:30 Valentina TREMAROLI
Gothenburg, Sweden
Development of next-generation probiotics

16:30 – 16:45 Anne-Marie CASSARD
Paris, France
Probiotics protection against ALD and NAFLD

16:45 – 17:00 Hubert VIDAL
Lyon, France
Gut commensal Bacteroides faecichinilleae is a novel candidate of next-generation probiotics targeting type 2 diabetes

17:00 – 17:45 Final keynote lecture by Eran SEGAL
Rehovot, Israël
Multomics & prediction risk of pathology in a general cohort

17:45 – 17:55 Conclusion by Emmanuelle MAGUIN and Évelyne JOUVIN-MARCHE
Paris, France
Moving to the National Program Food Systems, Microbiomes and Health

17:55 – 18:00 Posters prizes