

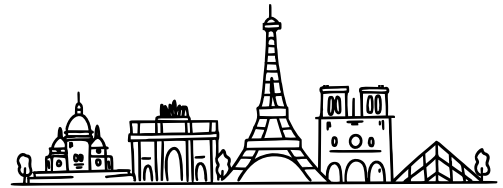
## Microbiota

### A Key Determinant In Health and Disease



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28–29 October 2024

Faculté Necker  
Université Paris Cité



160 rue de Vaugirard  
75015 Paris, France  
Grand amphithéâtre

 Métro Pasteur – Bus 70, 89 

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)*

# Program

## 28 October 2024

08:30 Opening

09:00 – 09:15 Introduction by **Didier SAMUEL**, CEO Inserm, France

### 09:15 – 10:30 Session 1

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

### 11:00 – 12:35 Session 2

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

### 14:00 – 15:35 Session 3

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

### 16:05 – 17:30 Session 4

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

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 personalized 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 targetsint 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 CLAVEL**

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 CNFI 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 faecichinchilleae  
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