

Scientific Programme

2nd International Symposium on Bifidobacterial Biology (ISBB)

17th-19th September 2026, Parma, Italy

Wednesday, September 16

6:00 pm-7:00 pm Registration

University of Parma, Via Università 12

Thursday, September 17

8:00 am-9:00 am Registration and poster set-up

Via Università 12, University of Parma

9:00 am-9:20 am Welcome and introduction

“Aula Magna”, Via Università 12, University of Parma

Prof: Marco Ventura (University of Parma)

9:20 am-10:20 am Opening Lecture

Prof. Douwe van Sinderen (University College of Ireland, Cork, Ireland)

Bifidobacteria: past, present and future of a group of beneficial human gut commensals

10:20 am-11:00 am Coffee and Poster viewing
Corridor next to the “Aula Magna”

Session I: Physiology and metabolism

“Aula Magna”, Via Università 12, University of Parma

11:00 am-11:40 am Plenary: Prof. Takane Katayama (Kyoto University, Japan)
Enzymatic adaptations of bifidobacteria to the host
intestinal environment

11:40 am-12:05 pm Prof. Alexandra Zhernakova (University of Groningen, The
Netherlands)
Bifidobacteria and their bacteriophages in the LLNEXT
birth cohort: origin and dynamics

12:05 pm-12:30 pm Prof. Moran Yassour (University of Jerusalem, Israel)
Uncovering the hidden diversity of *Bifidobacterium*
longum: discovery of a new subspecies in global infant
populations and its role in the infant gut

12:30 pm-12:55 pm Dr. Fred Warren (Quadram Institute Bioscience, UK)
Carbohydrate utilisation by bifidobacteria in health and
disease

12:55 pm-2:30 pm Lunch and poster viewing
Corridor next to the “Aula Magna”

Session II: Genomics & omics approaches

“Aula Magna”, Via Università 12, University of Parma

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| 2:30 pm-3:10 pm | Plenary Lecture: Dr. Trevor Lawley (Wellcome Sanger Institute, UK):

Making medicines from the human microbiome |
| 3:10 pm-3:35 pm | Prof. Gabriele Andrea Lugli (University of Parma, Italy)

Host specialization and coevolution of bifidobacteria in the human gut microbiome |
| 3:35 pm-4:00 pm | Coffee and Poster viewing

“Corridor next to the “Aula Magna” |
| 4:00 pm-4:25 pm | Dr. Francesca Bottacini (Muster Technological University, Cork, Ireland)

Virome diversity in the first two months of life |
| 4:25 pm-4:50 pm | Dr. Hilary Browne (University College of Ireland, Cork, Ireland)

Adaptation of early-life bifidobacteria to human lifestyles in High-Income settings |
| 4:50 pm-6:00 pm | Poster presentations to be selected from the submitted abstracts |

Friday, September 18

Session III: Technological challenges, novel tools and applications

“Aula Magna”, Via Università 12, University of Parma

- 9:00 am-9:40 am Plenary Lecture: Prof. KC Huang (Stanford University, USA)

Functional genetic analyses of *Bifidobacterium* physiology
- 9:40 am-10:05 am Dr. Janbo Zhang (University of Amsterdam, The Netherlands)

Innovative *in vitro* anaerobic gut-microbiome-on-a-chip platform enables causative infant host-microbiome research
- 10:05 am-10:30 am Prof. Rodolphe Barrangou (North Carolina State University, USA):

CRISPR-based editing of bifidobacteria
- 10:30 am-11:00 am Coffee and Poster viewing**

Corridor next to the “Aula Magna”

Session IV: Ecology and microbiota

“Aula Magna”, Via Università 12, University of Parma

11:00 am-11:40 am Plenary Lecture: Prof. Catherine Stanton (Teagasc Food Research Centre, Cork, Ireland)

Bifidobacteria as biomarker of microbiome age and health

11:40 am-12:05 pm Prof. Bo Yang (Jiangnan University, China)

Bifidobacterium regulates intestinal immunity through fatty acid isomerization and gut microbiota modulation

12:05 pm-12:30 pm Prof. Philipp Engel (University of Lausanne, Switzerland)

Specialised gut microbiota-host interactions in social bees

12:30 pm-12:55 pm Prof. Qixiao Zhai (Jiangnan University, China)

Endogenous glycans-mediated cross-feeding between *Bacteroides* and *Bifidobacterium* accelerates post-antibiotic gut microbiome recover

12:55 pm-2:30 pm Lunch and poster viewing

Corridor next to the “Aula Magna”

Session V: Health promoting activity, mechanisms of action

“Aula Magna”, Via Università 12, University of Parma

2:30 pm - 3:10 pm Plenary Lecture: Prof. Lindsay Hall (University of Birmingham, UK)

From colonisation to function: mechanisms of *Bifidobacterium*-host interactions

3:10 pm-3:35 pm Prof. Omry Koren (Bar-Ilan University)
The role of the gut microbiome in the first 1000 days of life

3:35 pm-4:00 pm Dr. Miguel Gueimonde (IPLA, Spain)
Bifidobacteria: cornerstone for microbiota development and health

4:00 pm-4:25 pm Prof. Martin Frederik Laursen (National Food Institute, Technical University of Denmark)
HMO-utilizing *Bifidobacterium* species produce immunoregulatory aromatic amino acid metabolites in the gut of breastfed infants

4:25 pm-5:45 pm **Poster presentations to be selected from the submitted abstracts**

7:00 pm **Gala Dinner**

Saturday, September 19

Session VI: Prebiotics (HMOs and others)

“Aula Magna”, Via Università 12, University of Parma

- 9:00 am-9:40 am Plenary Lecture: Dr. Abelardo Margolles (IPLA, Spain)
From traditional to next-generation prebiotics: plant sources, scientific evidence, and applications
- 9:40 am-10:05 am Prof. Daniel Garrido (Pontificia Universidad Católica de Chile, Santiago, Chile)
Interaction dynamics of *Bifidobacterium* during the utilization of human milk oligosaccharides
- 10:05 am-10:30 am Prof. Christopher J Stewart (Newcastle University, United Kingdom)
HMO-microbiome-host interaction in preterm infant gut health
- 10:30 am-11:00 am Coffee and poster viewing**
Corridor next to the “Aula Magna”

Session VII: Clinical trials and probiotics

“Aula Magna”, Via Università 12, University of Parma

- 11:00 am-11:40 am Plenary Lecture: Prof. Sin-Hyeog Im (Pohang University, South Korea)

From mechanism to medicine: anti-inflammatory
Bifidobacterium and the path to live biotherapeutic
products

11:40 am-12:05 pm Sponsored lecture from Moringa (speaker TBD)

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