



UNIVERSITÀ DI PISA

GUT BARRIER 2026

The novel frontier
in digestive
and extra-digestive
diseases

July 9-10, 2026

Camera di Commercio di Pisa

P.zza V. Emanuele II, 5 - 56125 Pisa

PRESIDENTS

Nunzia Bernardini (*Pisa, Italy*)

Carmelo Scarpignato (*Msida, Malta*)

SCIENTIFIC COMMITTEE

Massimo Bellini (*Pisa Italy*)

Carolina Pellegrini (*Pisa Italy*)

Scientific Background

The intestinal barrier—comprising mucus layer, epithelial/mesenchimal and vascular/lymphatic barriers—has emerged as a critical determinant of health and disease. By regulating nutrient absorption and protecting against microbial translocation, the gut barrier represents a key interface between the host, the intestinal microbiota, and the immune and enteric nervous systems.

Growing evidence links intestinal barrier dysfunction to a broad spectrum of digestive and extra-digestive disorders, including inflammatory bowel diseases, irritable bowel syndrome, metabolic conditions, and neurological and neuropsychiatric diseases. These insights are opening new opportunities for the development of innovative diagnostics, biomarkers, therapeutics, and personalized interventions targeting the gut barrier.

The **GUT BARRIER 2026: The Novel Frontier in Digestive and Extra-Digestive Diseases** brings together leading experts from basic, translational, and clinical research. Through four focused sessions, the meeting will highlight cutting-edge discoveries and emerging technologies with direct relevance for industry, fostering dialogue on translational pathways, clinical validation, and future collaborations aimed at accelerating innovation and improving patient outcomes.

Topics

- Aging
- Alzheimer's disease
- Autism spectrum disorder
- Biofilm
- Cancer
- Depression
- Diabetes
- Drugs
- Enteric nervous system
- Enteric neuro-immune-vascular unit
- Gut inflammation
- Gut microbiota
- Gut-on chip
- Inflammatory bowel disease
- Intestinal immune system
- Intestinal organoids
- Irritable bowel syndrome
- Lymphatic barrier
- Microbiota
- Microbiota gut-brain axis
- Microbiota gut-liver axis
- Mucosal barrier
- Nutraceuticals
- Obesity
- Parkinson's disease
- Postbiotics
- Prebiotics
- Probiotics
- Vascular barrier
- Visceral pain2
- Vulvodynia

Endorsed by



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SIAI Società Italiana di
Anatomia e Istologia



DAY 1

- 13:00-13:30** Registration of Participants
- 13:30-14:00** Welcome Address, introduction to “GUT BARRIER 2026: The novel frontier in digestive and extra digestive diseases”
- 14:00-14:30** **Opening lecture**
Chaired by: Carmelo Scarpignato (Msida, Malta)
Leaky gut, leaky brain?
Giovanni Barbara (Bologna, Italy)

SESSION 1 GUT BARRIER: ADVANCES IN ITS ROLE IN PHYSIOLOGY AND PATHOLOGY

Chairpersons: Maria Cecilia Giron (Padava, Italy), Lorenzo Di Cesare Mannelli (Firenze, Italy)

- 14:30-15:00** How leaky is the gut in Parkinson's disease?
Carolina Pellegrini (Pisa, Italy)
- 15:00-15:30** Intestinal barrier at the crossroads between IBS and vulvodynia
Elena Lucarini (Firenze, Italy)
- 15:30-16:00** Opening the doors of precision medicine: novel tools to assess intestinal barrier in inflammatory bowel disease and colitis-associated neoplasia
Antonio Di Sabatino (Pavia, Italy)
- 16:00-16:30** *Coffee break*
- 16:30-17:00** **Keynote lecture**
Chaired by: Maria Raffaella Barbaro (Bologna, Italy)
Gut-on-a-chip platforms bridging in vitro and in vivo models for advanced gut research
Silvia Scaglione (Genova, Italy)

SESSION 2 METHODOLOGY TO STUDY THE LEAKY GUT

Chairpersons: Vincenzo Calderone (Pisa, Italy), Andrea Castagnetti (Bologna, Italy)

- 17:00-17:30** Assessing epithelial and vascular integrity and permeability
Maria Raffaella Barbaro (Bologna, Italy)
- 17:30-18:00** Multiomics approaches for gut barrier
Simone Guglielmetti (Milano, Italy)
- 18:00-18:30** Assessing gut microbiota-intestinal barrier interplay
Gianluca Ianaro (Roma, Italy)
- 18:30-18:45** Concluding remarks day 1

DAY 2

9:00-9:30

Keynote lecture

Chaired by: Nunzia Bernardini (Pisa, Italy)

Gut vascular barrier: functions and disease implications

Paola Brescia (Milano, Italy)

SESSION 1 GUT BARRIER AND THERAPEUTICAL INTERVENTIONS

Chairpersons: Rocchina Colucci (Padova, Italy), Luca Antonioli (Pisa, Italy)

9:30-10:00

Gut microbiota in Pancreatic Diseases

Gabriele Capurso (Milano, Italy)

10:00-10:30

Gut microbiota in IBD: from pathogenesis to treatment

Piero Portincasa (Bari, Italy)

10:30-11:00

Gut microbiota biofilms: current status and therapeutic perspectives

Stefania Vetrano (Milan, Italy)

11:00-11:30

Coffee break

SESSION 2: GUT BARRIER AND CLINICAL IMPLICATIONS

Chairpersons: Massimo Bellini (Pisa, Italy), Flavio Caprioli (Milano, Italy)

11:30-12:00

Microbiota and prebiotics, probiotics and postbiotics for the protection of gut barrier

Patrizia Brigidi (Bologna, Italy)

12:00-12:30

The Early Biological Effects of Probiotics

Federica Facciotti (Milan, Italy)

12:30-13:00

Drugs and Gut Microbiota: Interactions and Clinical Consequences

Carmelo Scarpignato (Msida, Malta)

13:00-13:15

Concluding remarks

13:15

Lunch

Faculty

Luca Antonioli, *Pisa*
Giovanni Barbara, *Bologna*
Maria Raffaella Barbaro, *Bologna*
Massimo Bellini, *Pisa*
Nunzia Bernardini, *Pisa*
Paola Brescia, *Milan, Italy*
Patrizia Brigidi, *Bologna*
Vincenzo Calderone, *Pisa*
Flavio Caprioli, *Milan, Italy*
Gabriele Capurso, *Milano*
Andrea Castagnetti, *Bologna*
Rocchina Colucci, *Padova*
Lorenzo Di Cesare Mannelli, *Firenze*

Antonio Di Sabatino, *Pavia*
Federica Facciotti, *Milan, Italy*
Maria Cecilia Giron, *Padova*
Simone Guglielmetti, *Milano*
Gianluca Ianaro, *Roma*
Elena Lucarini, *Firenze*
Salvatore Metrangolo, *Pontedera (Pisa)*
Carolina Pellegrini, *Pisa*
Piero Portincasa, *Bari*
Silvia Scaglione, *Genova*
Carmelo Scarpignato, *Parma*
Stefania Vetrano, *Milano*

LOCATION

Camera di Commercio
Toscana Nord-Ovest M.A.C.C.
P.zza V. Emanuele II, 5
56125 Pisa

REGISTRATION

Registration to the Symposium can be performed on-line at the following link:
<https://webplatform.planning.it/gutbarrier2026/register>

REGISTRATION FEES

Regulars	150,00 €
Members of SIAI, GISN, AIGO, SIF, FISMAD, SINGEM	100,00 €
Fellows, PhD Students, Post Doc and Residents	Free of charge
Students	Free of charge

REGISTRATION WILL BE OPEN UNTIL JUNE 28, 2026

For further information: r.cantelli@planning.it

ITALIAN CONTINUING MEDICAL EDUCATION (CME)

Planning Congressi S.r.l. is a CME provider - identification code No 38 - and has assigned to the Meeting no. 38-xxxx No 5.6 credits for Pharmacists (Hospital Pharmacists and Community Pharmacists) as well as Physicians of the following disciplines: Clinical Pharmacology and Toxicology, General Medicine (Family Doctors), Internal Medicine, Gastroenterology, Dietetics and Nutrition, Surgery

EDUCATIONAL OBJECTIVE

Clinical documentation. Diagnostic and rehabilitation clinical care pathways, care profiles

ONLINE CME QUESTIONNAIRE

The ECM Planning Congress Provider has activated an online ECM questionnaire at the following address:
<https://ecm.planning.it/>.

In order to access the platform, it is necessary to insert the alphanumeric code which will be communicated at the end of the event.

It will be possible to fill in the questionnaire from one hour after the event until 15th July 2026 at 12 o'clock midnight. Credits will only be assigned after verification of presence.

Please be aware that for the acquisition of credits it is mandatory to have attended the 90% of the whole duration of the congress and selected at least the 75% of correct answers of the CME questionnaire.

ORGANIZING LOCAL COMMITTEE

Chiara Ippolito
Pisa, Italy

CME PROVIDER AND ORGANIZATION SECRETARY



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