



FONDAZIONE
INTERNAZIONALE
MENARINI

International Symposium on
**New Vistas on Gastrointestinal Motility:
from Physiology to Therapy**
Rome (Italy), September 28th – 29th, 2007

Organized by

DEPARTMENT OF PHARMACOLOGY AND
DEPARTMENT OF INTERNAL MEDICINE
CATHOLIC UNIVERSITY, ROME (ITALY)

FONDAZIONE INTERNAZIONALE MENARINI

FINAL PROGRAM

Auditorium
Catholic University
Largo F. Vito, 1



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Through the centuries, humans have had to fight with symptoms like nausea, vomiting, postprandial fullness, abdominal bloating, abdominal discomfort, heartburn, constipation and diarrhea. These symptoms are not always brought about by structural diseases of the gastrointestinal tract. They can, for example, be caused by alterations of gastrointestinal motility and/or sensation. These disorders affect an important percentage of the population and are therefore serious public health problems. Gastroparesis, gastro-esophageal reflux disease (GERD) and functional disorders [dyspepsia and irritable bowel syndrome (IBS)] are among the most important. Gastroparesis and GERD are disorders that are caused by defects of gastric or lower esophageal sphincter motility. Functional gastrointestinal disorders, like functional dyspepsia and IBS, are considered to be the clinical product of interacting psychosocial factors and altered gut physiology (abnormal motility, altered mucosal immunity, or visceral hypersensitivity) via the brain-gut axis.

The aim of this meeting, organized by the Department of Pharmacology and Department of Internal Medicine of the Catholic University of the Sacred Heart, and Fondazione Internazionale Menarini, is to cover a selected range of basic scientific and clinical topics in the field of gastrointestinal motility and neurogastroenterology. Many cutting-edge themes have been included in the program and the speakers have been chosen among leaders in research involving neurogastroenterology and gastrointestinal motility. We believe this meeting will contribute to improve understanding of the physiology and pathophysiology of neuromuscular behavior in the gastrointestinal tract and related pharmacological and clinical aspects of some motor and functional gastrointestinal disorders. It is therefore addressed to a vast audience - anatomists, physiologists, pharmacologists, pathologists, gastroenterologists and, also, general practitioners, surgeons and other clinicians.

The first session of the symposium will focus on providing a state-of-the-art picture of the physiology of gastrointestinal motility. It will lay the groundwork for a better understanding of current and new pharmacological treatments of some of the most important motor and functional gastrointestinal disorders. In particular, the treatment of novel aspects of the regulation of lower esophageal sphincter, stomach and colon motility will contribute to an in-depth analysis of new avenues in the pharmacological treatment of GERD, functional dyspepsia and IBS, topics discussed during the second and third sessions. New pharmacological targets for gastrointestinal disorders will be treated, including the endocannabinoid system, protease-activated receptors and ghrelin receptors, together with “old” pharmacological targets, including serotonergic and tachykinergic systems, motilin receptors and ion channels. A general picture outlining the pharmacological aspects of functional gastrointestinal diseases and current and new therapies of GERD, functional dyspepsia and IBS will be also offered during the second and third sessions. The general topic of gastroparesis will be treated, by talking about new avenues in the development of prokinetic drugs. And last, but not least, new approaches to the treatment of opioid-induced constipation will be discussed.

Hopeful that this symposium will arouse great interest within the scientific community, we will be very happy to welcome you to Rome at the end of September this year.

*Paolo Preziosi and Giovanni Gasbarrini
Co-Presidents of the Meeting*

Co-Presidents of the Meeting

Paolo Preziosi

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08.30 **Opening remarks by Prof. Paolo Magistrelli, Dean of the Faculty of Medicine and Surgery**

Session I - State-of-the-art physiology of gastrointestinal motility

Chairmen: **D. Currò** (Rome, I)
 P. Holzer (Graz, A)

08.45 **M. Costa** (Adelaide, AUS)
Lecture on “Architecture of enteric neural circuits involved in intestinal motility”

09.15 **L. Barthó** (Pécs, H)
Role of extrinsic afferent neurons in gastrointestinal motility

09.45 **K.M. Sanders** (Reno, USA)
Rhythmic electrical activity and regulation of gut motility

10.15 **S.J.H. Brookes** (Adelaide, AUS)
Structural basis of sensory nerve pathways from the gut

10.45 Coffee break

11.15 **L.A. Blackshaw** (Adelaide, AUS)
New insights in the neural regulation of the lower oesophageal sphincter

11.45 **M. Schemann** (Munich, D)
Gastric motor patterns

12.15 **S.K. Sarna** (Galveston, USA)
Novel aspects of enteric neural regulation of colonic motility

12.45 Conclusions of chairmen

13.00 Lunch

Session II - Emerging targets for gastrointestinal motor disturbances I

Chairmen: **M. Camilleri** (Rochester, USA)
S.K. Sarna (Galveston, USA)

- 14.45 **A. Lehmann** (Möln dal, S)
Novel treatments of GERD: focus on the lower oesophageal sphincter (LES)
- 15.15 **D. Grundy** (Sheffield, UK)
The 5-HT system in the gut: roles in the regulation of visceral sensitivity and motor functions
- 15.45 **J. Tack** (Leuven, B)
Current and emerging pharmacological therapies of functional dyspepsia
- 16.15 Coffee Break
- 16.45 **A. Lecci** (Florence, I)
Relevance of the tachykininergic system to gastrointestinal motility
- 17.15 **A. Gasbarrini** (Rome, I)
New insights into the pathophysiology of IBS: intestinal microflora, gas production and gut motility
- 17.45 **V. Stanghellini** (Bologna, I)
Overlapping functional syndromes: the way forward for medical therapy?
- 18.15 Conclusions of chairmen

Special Lecture – A window on history

08.40 **M. Balestrero** (Rome, I)
The evolution of Western-European eating habits

Session III - Emerging targets for gastrointestinal motor disturbances II

Chairmen: **V. Stanghellini** (Bologna, I)
 J. Tack (Leuven, B)

09.00 **P. Holzer** (Graz, A)
New approaches to the treatment of opioid-induced constipation

09.30 **A.A. Izzo** (Naples, I)
Marijuana and the gut: the gastrointestinal endocannabinoid system

10.00 **L. Bueno** (Toulouse, F)
Protease-activated receptors as drug targets

10.30 Coffee break

11.00 **T.L. Peeters** (Leuven, B)
Old and new targets for prokinetic drugs: motilin and ghrelin receptors

11.30 **G. Farrugia** (Rochester, USA)
Ion channels as targets for treatment of gastrointestinal motility disorders

12.00 **M. Camilleri** (Rochester, USA)
Lecture on “New therapeutic approaches in irritable bowel syndrome”

12.30 Concluding remarks

13.00 Lunch

GENERAL INFORMATION

Meeting venue

The venue for the Meeting will be:

Auditorium, Europe Congress Centre, Catholic University, Largo F. Vito, 1
I-00168 Rome (Italy). Phone +39 06 30511.51-71.

Secretariat during the Meeting

The Secretariat will be open at the following times:

Friday, September 28th, from 08.30 a.m. to 06.30 p.m.

Saturday, September 29th, from 08.30 a.m. to 01.00 p.m.

Official language

The official language of the Meeting will be English.

CME Credits

CME Credits have been applied for from the Italian Health Authorities.

Technical facilities

Facilities will be available for computer presentations and overhead projections. A business center with PC (Powerpoint for Windows) will be available for check and preview of presentations. It is essential that speakers take their CD to the business center at least one hour before the session starts.

The center will be open at the following times:

Friday, September 28th, from 08.30 a.m. to 06.30 p.m.

Saturday, September 29th, from 08.30 a.m. to 01.00 p.m.

Lunches and coffee breaks

Lunches and coffee breaks will be served in the Meeting area.

Abstracts book

Participants will receive the Abstract book at the Meeting.

LIST OF CHAIRMEN, SPEAKERS, CO-PRESIDENTS OF THE MEETING AND SCIENTIFIC SECRETARIAT

Monica BALESTRERO

Rome (Italy)

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University Medical School of Pécs
Pécs (Hungary)

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Nerve Gut Research Laboratory
Department of Gastroenterology and Hepatology
Royal Adelaide Hospital
Hanson Institute
Adelaide (Australia)

Simon H. BROOKES

Department of Physiology and Centre for Neuroscience
Flinders University
Adelaide (Australia)

Lionel BUENO

Neurogastroenterology Unit INRA
Toulouse (France)

Michael CAMILLERI

Atherton and Winifred W. Bean Professor
Professor of Medicine and Physiology
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University of Nevada School of Medicine
Reno (NV, USA)

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Division of Gastroenterology
Departments of Internal Medicine, Neurosciences and Cell Biology
The University of Texas Medical Branch at Galveston
Galveston (TX, USA)

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Technical University Munich
Munich (Germany)

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University of Bologna
Bologna (Italy)

Jan TACK

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Catholic University Leuven
Leuven (Belgium)

Gastrointestinal Physiology, Johnson - Free ebook download as PDF File (.pdf), Text File (.txt) or read book online for free.

Gastrointestinal Physiology, Johnson. Peptide YY also inhibits intestinal motility, and this effect is believed by some investigators to enhance luminal nutrient digestion and absorption. The enteroglucagons are products of the same gene processed in the pancreatic alpha cell to form glucagon. The intestinal L cell makes three forms of glucagon, one of which, glucagon-like peptide-1 (GLP-1), may have important physiologic actions. This 30-amino acid peptide is a potent insulin releaser, even in the absence of hyperglycemia, and it also inhibits gastric secretion and emptying. Functional gastrointestinal disorders (FGIDs), the most common diagnoses in gastroenterology, are recognized by morphologic and physiological abnormalities that often occur in combination including motility disturbance, visceral hypersensitivity, altered mucosal and immune function, altered gut microbiota, and altered central nervous system processing. History of the Functional Gastrointestinal Symptoms and Disorders and the Role of Psychosocial Factors. ABSTRACT Probiotics are nonpathogenic microorganisms that, when ingested, exert a positive influence on the health or physiology of the host. They can influence intestinal physiology either directly or indirectly through modulation of the endogenous ecosystem or immune system. The results that have been shown with a sufficient level of proof to enable probiotics to be used as treatments for gastrointestinal disturbances are 1) the good tolerance of yogurt compared with milk in subjects with primary or secondary lactose maldigestion, 2) the use of *Saccharomyces boulardii* and *Enterococcus faecium*. View Gastrointestinal motility Research Papers on Academia.edu for free. As the present study revealed the presence of a new colonic motor pattern (pan-colonic pressurizations) in healthy subjects, three additional studies were conducted: the first and the second to exclude that this motor event results from an artifact due to abdominal wall contraction and to confirm its modulation by cholinergic stimulation, and the third, as pilot study, to test the hypothesis that.