

# NGM 2012

2012 Joint International Neurogastroenterology and Motility Meeting  
6 – 8 September 2012 // Bologna, Italy  
Nuovo Polo Congressuale, Palazzo dei Congressi and Sala Maggiore



Final Programme

[www.ngm2012.org](http://www.ngm2012.org)



European Society of Neurogastroenterology and Motility



American Neurogastroenterology and Motility Society / Functional Brain-Gut Research Group

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Comune di Bologna – Piazza Maggiore

### Photo credits

#### Front cover

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Dear Colleagues and Friends,

On behalf of the European Society of Neurogastroenterology and Motility (ESNM) and the American Neurogastroenterology and Motility Society – Functional Brain-Gut Research Group (ANMS), I would like to welcome you to the Joint International Neurogastroenterology and Motility Meeting September 6 – 8, 2012 in Bologna, Italy (NGM2012).

The purpose of this meeting is to bring together leading experts and emerging young investigators actively involved in Neurogastroenterology, digestive motility and functional gastrointestinal diseases from all around the world to discuss cutting-edge research. The meeting is also aimed at attracting physicians and health care professionals with an interest in these common pathological conditions whose diagnosis and treatment require updated knowledge in this rapidly growing area of Medicine.



Vincenzo Stanghellini

The scientific committee has produced an exciting and comprehensive program. Attention has been paid to address basic, translational and clinical aspects of hot topics of Neurogastroenterology including: molecular and environmental factors influencing neuromuscular and other components of the gut wall, stress mechanisms of gastrointestinal functional and motility disorders, pain mechanisms, nutrient/microbiome sensing and function, epidemiological, pathophysiological and clinical aspects of functional esophago-gastro-intestinal disorders in different parts of the world, new technologies for the assessment of esophago-gastro-intestinal motility and perception, shortcomings and promises of current and future therapies.

Home of the oldest University of the world, Bologna maintains the elegance of a wealthy Medieval city. It is well connected to the rest of Europe by one of the largest airports in Italy and it is conveniently located in the heart of the Country, only 30 to 180 minutes away from other main cities such as Florence, Venice, Milan and Rome, by train.

September is a very pleasant period of the year in Italy and we hope you can enjoy the artistic and naturalistic beauties of the Country during the NGM2012.

We wish you an enjoyable NGM2012 and hope that your stay will be both enriching and educational.

Vincenzo Stanghellini  
*Chair Organising Committee*  
*on behalf of*

**ESNM Members:**

Inge Depoortere, David Grundy, Magnus Simrén, André Smout

**ANMS Members:**

Lin Chang, Satish Rao, Kenton Sanders, Terez Shea-Donohue

**LOCAL COMMITTEE Members:**

Giovanni Barbara, Roberto De Giorgio

## Host Organisers and Committees

### Hosting Societies

ESNM – European Society for Neurogastroenterology and Motility

► [www.esnm.eu](http://www.esnm.eu)



ANMS – American Neurogastroenterology and Motility Society

► [www.motilitysociety.org](http://www.motilitysociety.org)



endorsed by



ALMA MATER STUDIORUM  
UNIVERSITY OF BOLOGNA



THE AGA INSTITUTE

### ESNM Secretariat

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Email: [info@esnm.eu](mailto:info@esnm.eu)

### ANMS Secretariat

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Fax: +1-734-699 1136

Email: [admin@motilitysociety.org](mailto:admin@motilitysociety.org)

### Congress and Exhibition/Sponsor Office

**CPO HANSER**  
SERVICE

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► [www.cpo-hanser.de](http://www.cpo-hanser.de)

### Congress Venue

Nuovo Polo Congressuale

Palazzo dei Congressi and Sala Maggiore

Piazza della Costituzione N°4/a

40128 Bologna, ITALY

► [www.bolognacongressi.it](http://www.bolognacongressi.it)

### NGM 2012 Programme Committee

#### ESNM Members:

Chair: Vincenzo Stanghellini, Italy

Inge Depoortere, Belgium

David Grundy, United Kingdom

Magnus Simrén, Sweden

André Smout, The Netherlands

#### ANMS Members:

Lin Chang, USA

Satish Rao, USA

Kenton Sanders, USA

Terez Shea-Donohue, USA

#### Local Committee Members:

Giovanni Barbara, Italy

Roberto De Giorgio, Italy

### ESNM Steering Committee

President Fernando Azpiroz, Spain

Treasurer Paul Enck, Germany

Councillors Benoit Coffin, France

Inge Depoortere, Belgium

Dan Dumitrascu, Romania

Mark Fox, United Kingdom

Marcel Jimenez, Spain

Beate Niesler, Germany

Luis Novais, Portugal

Magnus Simrén, Sweden

André Smout, The Netherlands

Vincenzo Stanghellini, Italy

### ANMS Steering Committee

President Satish Rao, USA

President-Elect Lin Chang, USA

Treasurer John W. Wiley, USA

Secretary Carlo DiLorenzo, USA

Councillors Anthony J.M. Bauer, USA

Adil Bharucha, USA

Jiande Chen, USA

James J. Galligan, USA

Beverly Greenwood-Van Meerveld, USA

Margaret Heitkemper, USA

Gary M. Mawe, USA

Richard McCallum, USA

Bruce D. Naliboff, USA

Helen Raybould, USA

Reza Shaker, USA

Magnus Simrén, Sweden

Brennan Spiegel, USA

### Abstract Awards

The ESNM and the ANMS offer a limited number of Abstract Awards consisting of a free registration and EUR 500 to support scientists to attend the congress. The awardees have been selected based on the abstract quality raised during the review. The award ceremony will take place during the congress dinner on Friday, 7 September 2012.

### UEG e-learning

Selected lectures will be recorded and published at [www.e-learning.ueg.eu](http://www.e-learning.ueg.eu).

### CME Accreditation

The NGM Congress 2012 is accredited by the European Accreditation Council for Continuing Medical Education (EACCME) to provide the following CME activity for medical specialists. The EACCME is an institution of the European Union of Medical Specialists (UEMS). The 'Joint International Neurogastroenterology and Motility Meeting' is designated for a maximum of (or 'for up to') **15 hours** of European external CME credits.

Each medical specialist should claim only those credits that he/she actually spent in the educational activity. The EACCME is an institution of the European Union of Medical Specialists (UEMS), [www.uems.net](http://www.uems.net).

Through an agreement between the European Union of Medical Specialists and the American Medical Association, physicians may convert EACCME credits to an equivalent number of AMA PRA Category 1 Credits™. Information on the process to convert EACCME credit to AMAcredit can be found at [www.ama-assn.org/go/internationalcme](http://www.ama-assn.org/go/internationalcme).

Live educational activities, occurring outside of Canada, recognized by the UEMS-EACCME for ECMEC credits are deemed to be Accredited Group Learning Activities (Section 1) as defined by the Maintenance of Certification Program of The Royal College of Physicians and Surgeons of Canada.

The following points are given for each congress day:

CME points	Full day	Half day
6 September 2012		3 points
7 September 2012	6 points	3 points
8 September 2012	6 points	3 points

Participants interested in obtaining EACCME credits may contact the staff at the registration counter on the last day of attendance in order to receive a printed copy of their accreditation certificate.

### Information for Italian Delegates

FISMAD – The Italian Federation  
of Digestive Diseases Societies  
c/o GRUPPO SC  
Studio Congressi – Servizi per la Comunicazione  
Via Napoleone Colajanni, 4  
00191 Rome, ITALY  
Phone: +39 – 06 – 3290250  
Fax: +39 – 06 – 36306897  
► [www.grupposc.com](http://www.grupposc.com)

Visit the technical exhibition on level 1 of Sala Maggiore:

Friday,	7 September 2012	09:00 – 18:00
Saturday,	8 September 2012	09:00 – 18:00



# European Society of Neurogastroenterology and Motility

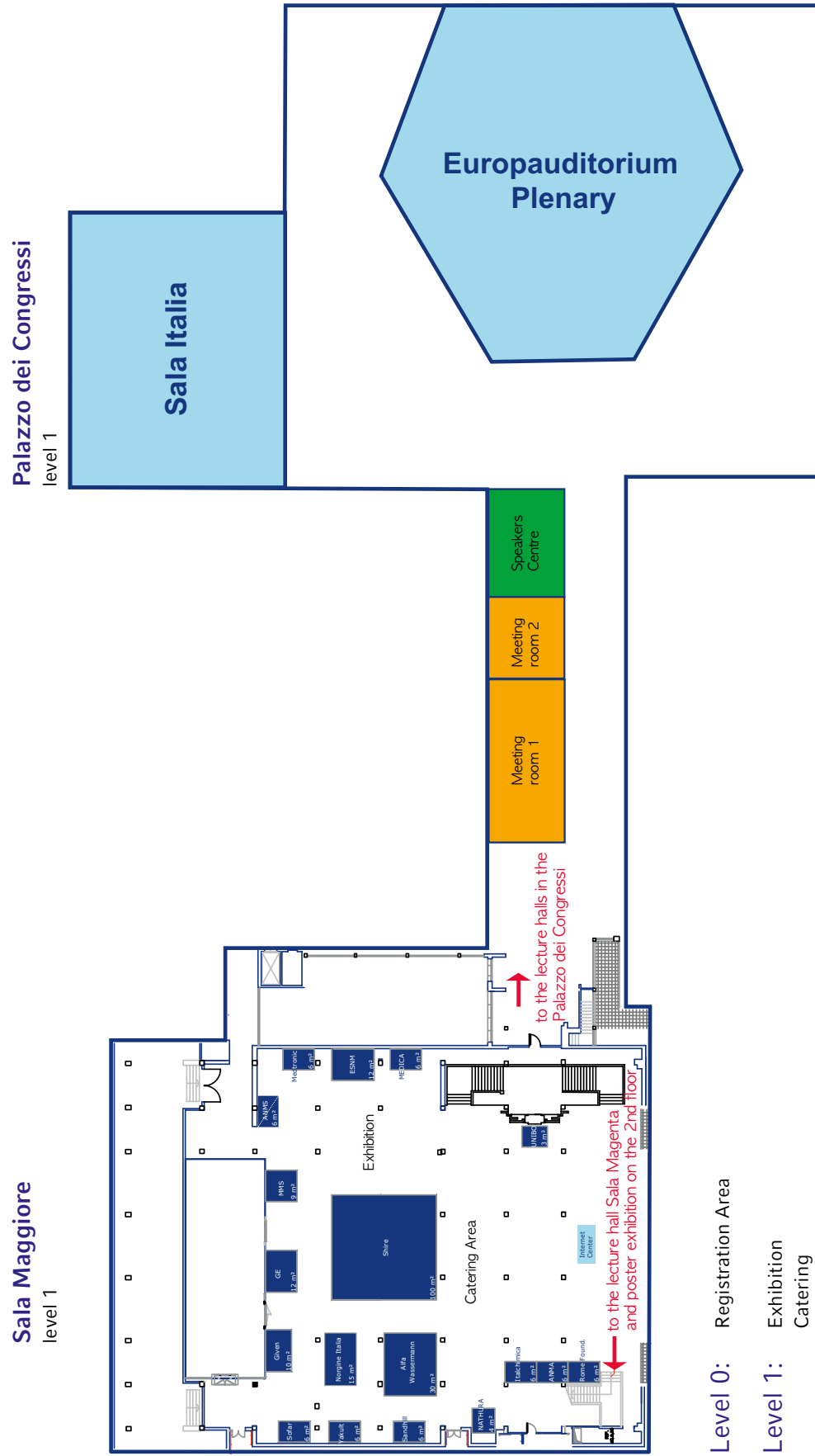
## THE MISSION

The mission of the European Society for Neurogastroenterology & Motility is to defend the interests of all professionals in Europe involved in the study of neurobiology and pathophysiology of gastrointestinal function.

## AIMS OF ESNM ARE

- \* To expand knowledge and interest in the field of neurogastroenterology and motility
- \* To educate the younger generation of physicians in basic and clinical aspects in the field
- \* To promote science and educational activities such as symposia, e-learning, and technical courses
- \* To encourage basic and clinical research in the field of neurogastroenterology and motility
- \* To establish the standards for good clinical practice and patient care

The congress venue consists of two buildings: The **Sala Maggiore** with the technical exhibition, poster exhibition, congress registration and lecture hall Sala Magenta on the 2nd level and the **Palazzo dei Congressi** with the main lecture halls Europauditorium and Sala Italia.



**Level 0:** Registration Area

**Level 1:** Exhibition  
Catering

**Level 2:** Sala Magenta (Session Room)  
Poster Exhibition

## Programme Overview – Thursday, 6 September 2012

### Abbreviations

L	Lectures
WS	Workshops
OP	Oral Presentations
PS	Poster Sessions
IG	Interest Groups
SA	Satellite Symposia

	Europauditorium	Sala Italia	Sala Magenta	Foyer
14:00				
15:00	WS-03 Stress mechanisms in GI functional and motility disorders	WS-14 Global and cross-cultural perspectives in FGID	WS-02 Controverses in smooth muscle electrophysiology	11:00 – 20:00 Registration on ground level of Sala Maggiore
16:00	Coffee Break			
17:00	OP-01 Sensory afferents and pain mechanisms in the GI tract	OP-02 Functional GI disorders	OP-03 Interstitial cells of Cajal	
18:00				
19:00		SA-01 Thinking differently: Neuro-gastroenterological perspectives in chronic constipation // <i>Shire Symposium</i>		
20:00	Opening Ceremony followed by L-00 The future of (Neuro) Gastroenterology			
21:00	20:30 – 22:00 Welcome Reception at the Europa Foyer in front of the Europauditorium			
22:00				



## Programme Overview – Friday, 7 September 2012

	Europauditorium	Sala Italia	Sala Magenta	Foyer
7:00				
8:00		IG-01 Rome Foundation	IG-02 Best of LBBB 2012	06:30 – 19:30 Registration on ground level of Sala Maggiore
9:00	L-01 Advances in clinical research			09:00 – 18:00 Exhibition and posters on level 1+2 of Sala Maggiore
	L-02 Advances in basic research			
10:00	OP-04 Clinical plenary session			
	L-03 Neural mechanism of visceral sensation			
11:00	Coffee Break			
12:00	OP-05 Basic and transnational plenary session			
13:00	Poster Sessions/Lunch Break PS-01 – PS-17			
14:00				
15:00	WS-01 Marcello Tonini contribution to the study of the intestinal peristalsis	WS-12 Shortcomings and promises of current and future therapies	WS-13 Molecular and environmental factors in enteric neuropathies	
16:00	Coffee Break			
17:00	OP-06 Pharmacotherapy, pharmacology and alternative therapies	OP-07 Esophageal physiology and pathophysiology	OP-08 Dietary factors, obesity, hormones and receptors	
18:00				
19:00	WS-07 Immune-nerve interactions	WS-09 Esophageal and swallowing disorders	WS-08 Rise and fall of the enteric nervous system	
20:15	Visit of Bologna University Museum			
21:15				
21:00	Congress Dinner at Palazzo Re Enzo			
24:00				

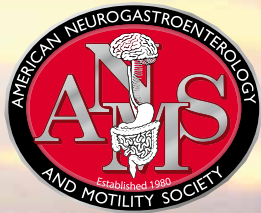
## Programme Overview – Saturday, 8 September 2012

	Europauditorium	Sala Italia	Sala Magenta	Foyer
7:00				
8:00		IG-03 Interstitial cells of Cajal (ICC)	IG-04 New diagnostic techniques	06:30 – 19:30 Registration on ground level of Sala Maggiore
9:00	Meeting Room 1 ESNM – General Assembly for members only			09:00 – 18:00 Exhibition and posters on level 1+2 of Sala Maggiore
10:00	OP-09 Barrier function and neuro- immune interactions	OP-10 IBS microenvironmental factors	OP-11 ENS and Glia: Physiology and pathophysiology	
11:00	Coffee Break			
12:00	SA-03 Identifying the IBS patient with bile acid malabsorption and diarrhoea – Optimising patient care through accurate and timely diagnosis // GE Healthcare	SA-02 Gut microbiome-brain axis // Danone		
13:00	Poster Sessions /Lunch Break PS-18 – PS-35			
14:00				
15:00	WS-06 Nutrient sensing and endocrine function in the GI tract	WS-04 Advances in structural biology, pathophysiology and diagnosis of the anorectum	WS-05 Pain mechanisms	
16:00	Coffee Break			
17:00	OP-12 Colonic intestinal and anorectal dysfunction	OP-13 Psychological factors and stress, human studies	OP-14 CNS and the brain-gut axis	
18:00				
19:00	WS-15 Pediatric Neurogastro- enterology	WS-11 Peripheral mechanisms of IBS	WS-10 Moving beyond nerves and muscle	

# Save the Date

## Huntington Beach, California

### September 20–22, 2013



## 8th Postgraduate Course on GI Motility & Neurogastroenterology in Clinical Practice

and 17th

## Neurogastroenterology & Motility Scientific Meeting



### Highlights

State-of-the-art lectures on diagnosis and management of motility disorders

### Tripuraneni Oration

Managing the Challenges of the Future: Lessons from Global Health

Tadataka Yamada

Executive Vice-President, Chief Medical and Scientific Officer, and Board Member  
Takeda Pharmaceuticals

### Workshops

Theme-based symposia

Scientific presentations

Abstract Deadline • March 15, 2013

More information • [www.motilitysociety.org](http://www.motilitysociety.org)



This educational activity is co-provided/co-sponsored by  
American Neurogastroenterology and Motility Society and  
University of Kansas Medical Center Continuing Education.



## Scientific Programme – Thursday, 6 September 2012

### WS-03 Workshop

14:30–16:00 Europauditorium

#### Stress mechanisms in GI functional and motility disorders

Chairs: L. Bueno, France  
E. Mayer, USA

001

#### 14:30 Epidemiology of acute and chronic stress on upper and lower FGID

L. van Oudenhove, Belgium

002

#### 14:50 Neurobiological mechanisms of stress and emotions in FGID

E. A. Mayer, USA

003

#### 15:10 Molecular mediators of stress in FGID

Y. Taché, USA

004

#### 15:30 Molecular basis of the relationship between early life stress and FGID

J. Cryan, Ireland

### WS-14 Workshop

14:30–16:00 Sala Italia

#### Global and cross-cultural perspectives in FGID

Chairs: E. Quigley, Ireland  
N. Talley, Australia

001

#### 14:30 Ethno-cultural and socio-economic perspectives of Irritable Bowel Syndrome (IBS) in Asia

K-A Gwee, Singapore

002

#### 14:50 Latin-America

M. Schmulson, Mexico

003

#### 15:10 Middle East

A. Sperber, Israel

004

#### 15:30 Rest of the World – A global perspective

N. Talley, Australia

### WS-02 Workshop

14:30–16:00 Sala Magenta

#### Controversies in smooth muscle electrophysiology

Chairs: J. Chen, USA  
J. Szurszewski, USA

001

#### 14:30 Introductory and historical notes

J. Szurszewski, USA

002

#### 14:40 Fact

G. O'Grady, New Zealand

003

#### 15:00 Artifact

K. Sanders, O. Bayguinov, G. Hennig,  
S. Ward, USA

004

#### 15:20 Electrogastrography: Is it valid?

A. Smout, The Netherlands

005

#### 15:35 Discussion

006

#### 15:55 Concluding remarks

J. Szurszewski, USA

### OP-01 Oral Presentation

16:30–17:45 Europauditorium

#### Sensory afferents and pain mechanisms in the GI tract

Chairs: F. Azpiroz, Spain  
S. Vanner, Canada

001

#### 16:30 Acid sensitivity in the spinal DRG nociceptors innervating the esophagus

M. Kollarik, F. Ru, S. Grobarcikova, USA

002

#### 16:45 A novel technique to retrogradely label and record from nociceptive nerve endings that detect noxious stimuli from specific targets sites in the gastrointestinal tract

N. Spencer, L. Travis, M. Kyloh, Australia

003

#### 17:00 P2Y mediated activation of mouse and human sensory nerves: Critical role for Nav1.9

J. Hockley, C. McGuire, G. Boundouki, C. Knowles,  
M. Baker, W. Winchester, D. Bulmer,  
United Kingdom

- 004  
**17:15 Functional evidence of ascending excitatory pathways in the human colon**  
 S. Carbone, P. Dinning, N. Spencer, S. Brookes, D. Wattchow, Australia
- 005  
**17:30 Cortical brain activation in anticipation of somatic pain in symptomatic diverticular disease**  
 J. Smith, L. Marciani, D. Humes, J. Scholefield, P. Gowland, S. Francis, R. Spiller, United Kingdom
- OP-02 Oral Presentation**  
 16:30–17:45 Sala Italia
- Functional GI disorders**  
 Chairs: G. Corazza, Italy  
 J. Tack, Belgium
- 001  
**16:30 Correlates of temporal variability of symptoms in gastroparesis**  
 W. Hasler, P. May, P. Pasricha, H. Parkman, T. Abell, K. Koch, R. McCallum, I. Sarosiek, L. Nguyen, W. Snape, J. Calles, G. Farrugia, J. Tonascia, L. Lee, A. Unalp-Arida, F. Hamilton, USA
- 002  
**16:45 Reconfiguring the Gastroparesis Cardinal Symptom Index (GCSI)**  
 H. Parkman, L. Wilson, P. Pasricha, K. Koch, W. Snape, T. Abell, W. Hasler, L. Lee, L. Nguyen, R. McCallum, I. Sarosiek, G. Farrugia, A. Unalp-Arida, J. Tonascia, F. Hamilton, USA
- 003  
**17:00 Gastrointestinal symptoms in the joint hypermobility syndrome**  
 A. Fikree, R. Aktar, R. Grahame, Q. Aziz, United Kingdom
- 004  
**17:15 Symptom severity of functional constipation is associated to work productivity costs: A nationwide Italian survey**  
 L. Neri, G. Basilisco, E. S. Corazziari, V. Stanghellini, R. Cuomo, Italy
- 005  
**17:30 Isolated intestinal transplant for CIPO on adults: Long term outcome from single center series**  
 C. Zanfi, S. Pellegrini, A. Lauro, G. Ercolani, M. Cescon, M. Del Gaudio, M. Ravaoli, A. Cucchetti, A. Dazzi, V. Stanghellini, L. Pironi, A. D. Pinna, Italy

- OP-03 Oral Presentation**  
 16:30–17:45 Sala Magenta
- Interstitial cells of Cajal**  
 Chairs: M. Faussone Pellegrini, Italy  
 S. Ward, USA
- 001  
**16:30 Genome-wide discovery of gene isoforms expressed in interstitial cells of Cajal**  
 S. Ro, C. Park, N. Gilding, R. Berent, S. Choe, T. Yu, H. Syn, K. Sanders, USA
- 002  
**16:45 Interstitial Cells of Cajal (ICC) mediate excitatory neurotransmission in vivo**  
 S. Klein, B. Seidler, M. Rohn, M. Schemann, A. Sibae, M. Strorr, R. M. Schmid, G. Schneider, D. Saur, Germany
- 003  
**17:00 Nitrgenic relaxation via ICC, FLC and SMC: Studies in mice lacking NO-sensitive guanylyl cyclase**  
 A. Friebe, P. König, B. Lies, D. Groneberg, Germany
- 004  
**17:15 Hyperplasia of gastric Interstitial Cells of Cajal (ICC) and ICC Stem Cells (ICC-SC) in obese diabetic Lepr(db/db) mice without Gastroparesis**  
 T. Ordog, H. Yujiro, M. Bardsley, Y. Toyomasu, J. Mason, D. Linden, J. Szurszewski, G. Farrugia, USA
- 005  
**17:30 Establishment of pacemaker activity in tissues allotransplanted with interstitial cells of Cajal**  
 S. Ward, C. McCann, S.-J. Hwang, Y. Bayguinov, K. Sanders, USA

## Scientific Programme – Thursday, 6 September 2012

### SA-01 Satellite Symposium

18:00–19:30 Sala Italia

#### Thinking differently: Neurogastroenterological perspectives in chronic constipation

Chairs: E. Corazziari, Italy  
C. Scarpignato, Italy

001

**18:00 Welcome and introduction**  
C. Scarpignato, Italy

002

**18:10 Burden of chronic constipation**  
E. Corazziari, Italy

003

**18:30 Pathophysiology of constipation**  
M. Camilleri, USA

004

**18:50 Chronic constipation: Current treatments and future perspectives**  
C. Scarpignato, Italy

005

**19:10 Questions from the audience and panel discussion**  
C. Scarpignato, Italy

006

**19:25 Closing remarks**  
E. Corazziari, Italy

A Shire organised and sponsored symposium.

### L-00 Plenary Lecture

19:45–20:30 Europauditorium

#### 19:45 Opening Ceremony

#### The future of (Neuro)Gastroenterology

Chair: V. Stanghellini, Italy

001

**20:00 Introduction**  
V. Stanghellini, Italy

002

**20:05 A look into the future of (Neuro) Gastroenterology**  
J. Malagelada, Spain

Followed by a Welcome Reception at the Europa Foyer in front of the Europauditorium.

Visit the poster exhibition on the 2nd level of Sala Maggiore in the foyer of Sala Magenta:

#### Poster exhibition times

Friday,	7 September 2012	09:00 – 18:00
Saturday,	8 September 2012	09:00 – 18:00

#### Poster presentation times

Friday,	7 September 2012	12:30 – 14:30
Saturday,	8 September 2012	12:30 – 14:30

Authors are present at their posters

**IG-01 Interest Group**

07:00–08:00 Sala Italia

**Rome Foundation**

**IG-02 Interest Group**

07:00–08:00 Sala Magenta

**Best of Little Brain Big Brain (LBBB) 2012**

Chairs: W. Boesmans, United Kingdom  
R. Farré, Belgium  
P. Janssen, Belgium  
L. van Oudenhove, Belgium

**L-01/L-02 Plenary Lecture**

08:15–09:15 Europauditorium

**Advances in Basic and Clinical Research**

Chairs: R. Corinaldesi, Italy  
M. Costa, Australia

001

**08:15 Advances in Clinical Research**

M. Simrén, Sweden

002

**08:45 Advances in Basic Research**

G. Farrugia, USA

**OP-04 Oral Presentation**

09:15–10:15 Europauditorium

**Clinical Plenary Session**

Chairs: M. Camilleri, USA  
R. Spiller, United Kingdom

001

**09:15 Fear conditioning in an abdominal pain model: Neural mechanisms of associative learning and extinction in healthy subjects**

S. Elsenbruch, J. Kattoor, S. Hofmann, V. Kotsis, S. Benson, C. Gramsch, N. Theysohn, E. Gizewski, Germany

002

**09:30 Randomized trial of gluten-free diet in IBS-Diarrhea: Effect on small bowel and colonic morphology and barrier function**

M. Camilleri, M. Vazquez-Roque, P. Carlson, J. Lamsam, D. D. Burton, J. A. Murray, J. O'Neill, T. C. Smyrk, A. R. Zinsmeister, D. Janzow, USA

003

**09:45 Relationship between 5-HT system polymorphisms, anxiety, depression and stressful life events in functional gastrointestinal disorders**

B. Niesler, C. Hammer, G. Sayuk, L. van Oudenhove, Germany

004

**10:00 Investigation of the afferent anorectal-brain neuromuscular axis in Irritable Bowel Syndrome (IBS) and Interstitial Cystitis (IC)**

E. Coss-Adame, J. Valestin, C. Bradley, K. Kreder, S. Rao, USA

**L-03 Plenary Lecture**

10:15–10:45 Europauditorium

**Neural mechanisms of visceral sensation**

Chairs: M. Camilleri, USA  
R. Spiller, United Kingdom

001

**10:15 Neural mechanisms of visceral sensation**

S. Brookes, Australia

**OP-05 Oral Presentation**

11:00–12:30 Europauditorium

**Basic and translational plenary session**

Chairs: J. Galligan, USA  
M. Simrén, Sweden

001

**11:00 TNF-alpha from gut homing memory T cells and monocytes sensitises colonic sensory afferents in IBS-D**

P. Hughes, D. Bird, S. Brierley, J. Persson, M. Moretta, L. A. Blackshaw, H. Zola, D. Krumbiegel, J. Andrews, Australia

002

**11:15 Duodenal low-grade inflammation and impaired mucosal integrity in functional dyspepsia patients**

H. Vanheel, M. Vicario, C. Martinez, T. Vanuytsel, N. Pardon, J. Santos, J. Söderholm, J. Tack, R. Farré, Belgium

- 003  
**11:30 Identification of genetic risk factors associated with idiopathic achalasia by a genetic candidate study**  
M. Wouters, D. Lambrechts, I. Cleynen, I. Gockel, J. Becker, J. Tack, A. Vigo, A. Ruiz de León, J. Pérez de la Serna, W. Rohof, V. Annese, A. Latiano, O. Palmieri, L. Laghi, M. Cancian, M. A. Businaro, G. Zaninotto, R. Cuomo, G. Sarnelli, M. M. Nöthen, S. Vermeire, M. Knapp, J. Schumacher, G. Boeckxstaens, Belgium
- 004  
**11:45 Mechanosensitive properties of isolated enteric neuronal networks**  
E. Kugler, F. Zeller, M. Schemann, G. Mazzuoli, Germany
- 005  
**12:00 Impaired gastrointestinal function caused by early defects in the wiring of the enteric nervous system**  
W. Boesmans, V. Sasselli, P. van den Berghe, V. Pachnis, United Kingdom
- 006  
**12:15 Obesity induced suppression of gastric satiety signals are only partially reversed by dietary change**  
A. Page, S. Kentish, T. O'Donnell, G. Wittert, Australia

### WS-01 Workshop

14:30–16:00 Europauditorium

#### Marcello Tonini contribution to the study of the intestinal peristalsis

Chairs: M. Costa, Australia  
M. Schemann, Germany

- 001  
**14:30 Contributions of Marcello Tonini to the study of peristalsis**  
M. Costa, Australia
- 002  
**14:50 Mechanisms of motor pattern in the colon**  
T. Smith, USA
- 003  
**15:10 What mediators are important in peristalsis**  
N. Spencer, Australia
- 004  
**15:30 Remodelling of peristalsis in inflammation**  
G. Mawe, USA

### WS-12 Workshop

14:30–16:00 Sala Italia

#### Shortcomings and promises of current and future therapies

Chairs: E. Corazziari, Italy  
R. Spiller, United Kingdom

- 001  
**14:30 Gastro-esophageal reflux disease**  
P. Kahrilas, USA
- 002  
**14:50 Functional dyspepsia**  
J. Tack, Belgium
- 003  
**15:10 Irritable Bowel Syndrome**  
M. Camilleri, USA
- 004  
**15:30 Functional constipation**  
W. Chey, USA

### WS-13 Workshop

14:30–16:00 Sala Magenta

#### Molecular and environmental factors in enteric neuropathies

Chairs: R. De Giorgio, Italy  
J. Wiley, USA

- 001  
**14:30 Genetics of human enteric neuropathies**  
N. Thapar, United Kingdom
- 002  
**14:50 Epigenetic regulation in GI neuromuscular function**  
J. Wiley, USA
- 003  
**15:10 GI involvement in CNS disorders**  
P. Derkinderen, France
- 004  
**15:30 A new classification for GI neuromuscular disorders**  
C. Knowles, United Kingdom



**OP-06 Oral Presentation**

16:30–17:45 Europauditorium

**Pharmacotherapy, pharmacology and alternative therapies**

Chairs: W. Chey, USA  
C. Scarpignato, Italy

001

**16:30 Ursodeoxycholic acid (UDCA) protects gallbladder smooth muscle function via activation of the PI3K-Akt signaling pathway**  
B. Lavoie, S. Spohn, A. C. Bartoo, O. B. Balemba, G. M. Mawe, USA

002

**16:45 Guanylate cyclase C receptor agonists, linaclotide and uroguanylin, modulate intestinal nociception**  
S. Brierley, J. Castro, A. Harrington, P. Hughes, C. Martin, A. Silos-Santiago, C. Kurtz, A. Blackshaw, Australia

003

**17:00 Does biofeedback therapy improve brain-gut axis in dyssynergic defecation?**  
E. Coss-Adame, S. Rao, J. Remes-Troche, A. Attaluri, J. Valestin, K. Tantiphlachiva, S. Hamdy, USA

004

**17:15 Improvement in abdominal symptoms rated as most severe by patients with Irritable Bowel Syndrome with Constipation (IBS-C): Results from two phase 3 trials of linaclotide**  
S. Rao, E. Quigley, S. Shiff, B. Lavins, C. Kurtz, H. Schneier, M. Currie, J. Johnston, USA

005

**17:30 The effect of liraglutide on Gastric Accommodation (GA) and Gastric Emptying (GE) in conscious rats**  
A. Rotondo, S. Verchueren, J. Tack, Italy

**OP-07 Oral Presentation**

16:30–17:45 Sala Italia

**Esophageal physiology and pathophysiology**

Chairs: R. Penagini, Italy  
D. Sifrim, United Kingdom

001

**16:30 Long-term sustainable symptom-free duration in Achalasia patients treated with pneumatic dilatation – A 42-year experience**  
M. Al-Beshir, M. Li, N. Diamant, L. Liu, Canada

002

**16:45 Three-dimensional volume of inverted impedance (3D-VII): A novel method to measure bolus transit using high-resolution impedance manometry**  
K.-W. Jung, S.-Y. Joo, H.-Y. Jung, S.-J. Myung, I.-J. Yoon, S.-Y. Seo, H.-S. Koo, K.-D. Choi, H.-J. Song, G.-H. Lee, J.-H. Kim, Republic of Korea

003

**17:00 Esophageal wall ischemia during esophageal contraction and transient lower esophageal sphincter relaxation in humans**  
R. K. Mittal, V. Bhargava, Y.-S. Kim, Y. Jiang USA

004

**17:15 Alterations in esophageal motility post-lung transplantation**  
Y. Nasser, M. Thakrar, D. Helmersen, M. Storr, C. Andrews, Canada

005

**17:30 Impact of deep brain stimulation on oesophageal motility: Result of a randomized cross-over study**  
G. Gourcerol, S. Derrey, N. Chastan, D. Maltete, E. Verin, P. Freger, A. M. Leroi, J. Weber, France

## Scientific Programme – Friday, 7 September 2012

### OP-08 Oral Presentation

16:30–17:45 Sala Magenta

#### Dietary factors, obesity, GI hormones and receptors

Chairs: R. Cuomo, Italy  
B. Spiegel, USA

001

**16:30 Loss of intestinal sweet taste receptor control in type 2 diabetes: A risk factor for postprandial hyperglycemia?**

R. Young, B. Chia, T. Wu, H. Michael, C. Rayner  
Australia

002

**16:45 The serotonin transporter (SERT) critically modulates serotonergic signaling in intestinal inflammation and motility: Effects of a gain-of-function mutation in SERT**

K. Gross Margolis, Z. S. Li, K. Stevanovic,  
R. Blakely, J. Veenstra-Vanderweele, Q. M. Yang,  
B. Zambrowicz, T. Oravec, M. Gershon, USA

003

**17:00 Comparative effects of intraduodenal lipid and protein on pyloric pressures, gut hormones, blood glucose and insulin and energy intake in healthy males**

C. Feinle-Bisset, A. Ryan, N. Luscombe-Marsh,  
A. Saies, M. Horowitz, S. Standfield, Australia

004

**17:15 Obesity causes a switch in the origin of phase III contractions of the migrating motor complex to reduce hunger feelings**

E. Deloosse, P. Janssen, M. Lannoo, B. v. der  
Schueren, I. Depoortere, J. Tack, Belgium

005

**17:30 Diet-induced obesity alters neurochemical code in enteric glial cells and injures enteric plexuses causing intestinal dysfunctions**

P. Brun, M. C. Giron, M. Quesari, L. Spagnol,  
D. Pizzuti, G. Palù, I. Castagliuolo, Italy

### WS-07 Workshop

18:00–19:30 Europauditorium

#### Immune-nerve interactions

Chairs: G. Barbara, Italy  
N. Vergnolle, France

001

**18:00 Immune modulation of visceral afferents**

D. Grundy, United Kingdom

002

**18:20 Immune modulation of the ENS**

M. Schemann, Germany

003

**18:40 Effects of ischemia / reperfusion on the enteric nervous system and intestine**

J. Furness, Australia

004

**19:00 Neuro-immune mechanisms: A translational view**

G. Boeckxstaens, Belgium

### WS-09 Workshop

18:00–19:30 Sala Italia

#### Esophageal and swallowing disorders

Chairs: M. Fox, United Kingdom  
P. Kahrilas, USA

001

**18:00 Swallowing-brain network in health and disease**

R. Shaker, USA

002

**18:20 Transcranial magnetic stimulation – A diagnostic and therapeutic tool in swallowing disorders**

S. Hamdy, United Kingdom

003

**18:40 Newer understanding of EUS function with high resolution manometry**

I. Cook, Australia

004

**19:00 Neonatal development of swallowing function & reflexes**

S. Jadcherla, USA

### WS-08 Workshop

18:00–19:30 Sala Magenta

#### Rise and fall of the enteric nervous system

Chairs: J. Bornstein, Australia  
P. Pasricha, USA

001

**18:00 Neuronal control of enteric neuronal development: Early neuronal activity sculpts subsequent Enteric Nervous System (ENS) development**

M. D. Gershon, USA

002

**18:20 Development and degeneration of specific subsets of enteric neurons**

H. Young, Australia

003

**18:40 Ongoing development of the ENS**

A. Burns, United Kingdom

004

**19:00 Enteric neurodegeneration in diabetes and obesity**

S. Srinivasan, USA

**IG-03 Interest Group**

07:00–08:00 Sala Italia

**Interstitial cells of Cajal (ICC)**

**IG-04 Interest Group**

07:00–08:00 Sala Magenta

**New diagnostic techniques**

**OP-09 Oral Presentation**

09:15–10:45 Europauditorium

**Barrier function and neuro-immune interactions**

Chairs: P. Vanden Berghe, Belgium  
N. Vergnolle, France

001

**09:15 Impaired intestinal barrier function precedes mucosal inflammation and myenteric ganglionitis in the BB-rat**

T. Vanuytsel, C. Vanormelingen, H. Vanheel, S. Salim Rasoel, J. Toth, L. Notari, T. Shea-Donohue, P. Vanden Berghe, T. Masaoka, R. Farré, J. Tack, Belgium

002

**09:30 PAR1 receptors mediate nerve activation by mucosal biopsy supernatants from Irritable Bowel Syndrome (IBS) but not from Ulcerative Colitis (UC) patients**

S. Bühner, K. Hartwig, Q. Li, S. Vignali, C. Pehl, T. Frieling, G. Barbara, G. Boeckstaens, I. E. Demir, M. Schemann, Germany

003

**09:45 Interleukin-6 receptor blockade mitigates late murine TLR4-triggered ileus but does not prevent endotoxin-associated mortality**

B. Buchholz, R. S. Chanthaphavong, T. R. Billiar, A. J. Bauer, Germany

004

**10:00 Inflammation induces modulation of contractile phenotype in human colonic smooth muscle**

A. Scirocco, C. Petitta, P. Matarrese, B. Ascione, G. D. Natale, W. Malorni, E. Corazziari, C. Severi, Italy

005

**10:15 Effects of colonic mucosal soluble factors on the enteric nervous system phenotype in Crohn's Disease and ulcerative colitis**

A. Bourreille, F. Soufflet, M. Biraud, B. Lardeux, M. Derkinderen, M. Le Rhun, E. Coron, M. Neunlist, France

006

**10:30 Free radical scavengers rescue decreased purinergic neuromuscular transmission in the inflamed colon**

J. Roberts, L. Durnin, K. Sharkey, V. Mutafova-Yambolieva, G. Mawe, USA

**OP-10 Oral Presentation**

09:15–10:45 Sala Italia

**IBS microenvironmental factors**

Chairs: G. Boeckstaens, Belgium  
R. Spiller, United Kingdom

001

**09:15 Transfer of IBS phenotype to GERM-free mice through microbiota transplantation**

P. Bercik, J. Lu, E. F. Verdu, Y. Deng, C. Wang, M. G. Surette, G. Bergonzelli, P. McLean, S. M. Collins, Canada

002

**09:30 The serotonin precursor 5-hydroxytryptophan induces rectal hyperalgesia in patients with Irritable Bowel Syndrome (IBS)**

D. Keszthelyi, F. Troost, D. Jonkers, J. Dekker, A. Masclee, The Netherlands

003

**09:45 Mucosal biopsy supernatants from patients with systemic mastocytosis and IBS with or without mast cell mediator syndrome have different enteric nerve activating potential**

S. Vignali, S. Buhner, M. Schemann, T. Frieling, Germany

004

**10:00 Elevated faecal serine proteases in Irritable Bowel Syndrome with Diarrhoea (IBS-D) correlate with whole gut transit**

K. Garsed, G. Singh, D. Tooth, C. Lam, R. Spiller, United Kingdom

005

**10:15 Postinfectious Irritable Bowel Syndrome (IBS): Follow-up at 16 year after a single outbreak of Salmonella gastroenteritis**

C. Cremon, F. Pallotti, L. Bellacosa, E. Fogacci, M. M. Marcellini, R. De Giorgio, R. Corinaldesi, V. Stanghellini, G. Barbara, Italy

006

**10:30 Clinically meaningful change benchmarks for IBS-C symptoms developed using data from two phase 3 trials of linaclotide**

B. M. R. Spiegel, G. Locke, C. M. Kurtz,  
V. S. L. Williams, L. M. Nelson, R. T. Carson,  
M. G. Currie, H. A. Schneier, J. M. Johnston, USA

OP-11

Oral Presentation

09:15–10:45

Sala Magenta

**ENS and Glia: Physiology and pathophysiology**

Chairs: J. Furness, Australia  
G. Mawe, USA

001

**09:15 Myenteric serotonergic nerve pathways excite submucosal neurons but inhibit surrounding glial cells**

T. Okamoto, B. MacKenzie, T. K. Smith, USA

002

**09:30 Glial heterogeneity in the enteric nervous system**

W. Boesmans, P. van den Berghe, V. Pachnis  
United Kingdom

003

**09:45 Activated glia is a hallmark of neuropathy in pancreatic cancer**

E. Tieftrunk, I. E. Demir, T. Kehl, H. Friess,  
G. O. Ceyhan, Germany

004

**10:00 Evidence of RET/GDNF-related apolipoprotein B (APOB) activation and altered expression in patients with chronic intestinal pseudo-obstruction (CIPO)**

F. Bianco, E. Bonora, R. Cogliandro, M. Vargiolu,  
F. Giancola, E. Boschetti, M. Seri, G. Barbara,  
R. Corinaldesi, V. Stanghellini, R. De Giorgio, Italy

005

**10:15 Functional and quantitative characterization of submucosal neurons in patients with functional dyspepsia**

C. Cirillo, T. Bessissow, H. Vanheel, J. Tack,  
P. Vanden Berghe, Belgium

006

**10:30 Full-Field Optical Coherence Microscopy (FFOCM) is a novel technique for imaging enteric ganglia in the gastrointestinal tract**

E. Coron, M. Neunlist, A. Pieretti, M. Mahé,  
E. Auksorius, G. Tearney, A. Goldstein,  
France

SA-03

Satellite Symposium

11:00–12:30

Europauditorium

**Identifying and managing the IBS patient with bile acid malabsorption and diarrhoea**

Chairs: E. Roda, Italy  
J. Walters, United Kingdom

001

**11:00 Welcome and introduction**

E. Roda, Italy

002

**11:05 Recognising and diagnosing bile acid diarrhoea (BAD)**

J. Walters, United Kingdom

003

**11:25 Management and treatment of BAD**

K.-A. Ung, Sweden

004

**11:45 The critical role of an accurate diagnosis Case Study Session**

Moderator: J. Walters, United Kingdom

**Case presentation and panel members:**

J. Guardiola, Spain and K.-A. Ung, Sweden

005

**12:15 Panel discussion and questions from the floor**

Moderator: J. Walters, United Kingdom

006

**12:25 Summary and close**

E. Roda, Italy

Meeting sponsored by GE Healthcare

**SA-02** **Satellite Symposium**

11:00–12:30 Sala Italia

**Gut microbiome-brain axis**

Chairs: F. Azpiroz, Spain  
P. Enck, Germany

- 001 **Gut microbiota as an organ of the host?**  
J. Dore, France
- 002 **Effect on gut motility, permeability and sensitivity**  
G. Barbara, Italy
- 003 **Effect of gut microbiota on CNS and behavior: Implications for gut functional disorders**  
P. Bercik, Canada
- 004 **Crosstalk between gut microbiota and the human brain: Possible implications for GI symptoms**  
E. Mayer, USA

Supported by an educational grant from Danone

**WS-04** **Workshop**

14:30–16:00 Sala Italia

**Advances in structural biology, pathophysiology and diagnosis of the anorectum**

Chairs: K. Bitar, USA  
P. Enck, Germany

- 001 **14:30 Structure and function in neuroregulation of the anorectum**  
K. Keef, USA
- 002 **14:50 Artificial anal sphincter: A biologic plausibility**  
K. Bitar, USA
- 003 **15:10 Pathophysiology of incontinence and dyssynergic defecation**  
A. Bharucha, USA
- 004 **15:30 High definition 3-D anorectal manometry – How useful?**  
S. Rao, USA

**WS-06** **Workshop**

14:30–16:00 Europauditorium

**Nutrient sensing and endocrine function in the GI tract**

Chairs: F. Gribble, United Kingdom  
A. Page, Australia

- 001 **14:30 Taste receptors and signalling in the GI tract**  
C. Sternini, USA
- 002 **14:50 Nutrient sensing by enteroendocrine cells**  
H. Raybould, USA
- 003 **15:10 Metabolic effects of GI hormones**  
I. Depoortere, Belgium
- 004 **15:30 Therapeutic modulation of satiety**  
J. Tack, Belgium

**WS-05** **Workshop**

14:30–16:00 Sala Magenta

**Pain mechanisms**

Chairs: B. Greenwood-Van Meerveld, USA  
D. Grundy, United Kingdom

- 001 **14:30 Neural pathways of visceral pain**  
J. Wood, United Kingdom
- 002 **14:45 Peripheral mechanisms**  
A. Blackshaw, United Kingdom
- 003 **15:00 Peripheral mechanisms of visceral hyperalgesia**  
N. Vergnolle, France
- 004 **15:15 Central regulation of visceral perception**  
Q. Aziz, United Kingdom
- 005 **15:30 Genetics of visceral pain**  
M. Camilleri, USA

### OP-12 Oral Presentation

16:30–17:45 Europauditorium

#### Colonic GI and anorectal dysfunction

Chairs: G. Bassotti, Italy  
S. Rao, USA

001

**16:30 Length-tension property of the external anal sphincter and puborectalis muscle dysfunction in fecal incontinence patients: Correlation with anatomical abnormalities**

Y.-S. Kim, M. Ravinder, M. Weinstein, V. Raizada, Y. Jiang, V. Bhargava, People's Republic of Korea

002

**16:45 Rectal tone response after a high-caloric meal in patients with Irritable Bowel Syndrome (IBS) and healthy controls is influenced by rectal sensitivity**

H. Tornblom, L. van Oudenhove, J. Tack, M. Simrén, Sweden

003

**17:00 Colonic manometry demonstrates the mode of action of sacral nerve stimulation in patients with faecal incontinence**

V. Patton, P. Dinning, D. Z. Lubowski, J. W. Arkwright, D. W. King, Australia

004

**17:15 Characterization of Transient Anal Sphincter Relaxations (TASRs) in health using high resolution anorectal manometry: Redefining the sampling reflex?**

E. V. Carrington, A. Hobson, C. Knowles, P. Lunniss, M. Scott, United Kingdom

005

**17:30 Post-RAIR anal sphincter contractile response is impaired in fecal incontinence patients**

E. Coss-Adame, S. Rao, USA

### OP-13 Oral Presentation

16:30–17:45 Sala Italia

#### Psychological factors and stress, human studies

Chairs: L. Chang, USA  
Y. Taché, USA

001

**16:30 How positive and negative expectations shape the experience of visceral pain: An experimental pilot study in healthy women**

S. Elsenbruch, J. Schmid, M. Bäslér, E. Cesko, M. Schedlowski, S. Benson, Germany

002

**16:45 Psychophysiological markers and the brain processing of nausea in healthy humans using a novel virtual reality video**

K. S. Ng, P. Andrews, Y. C. Chua, V. F. Ban, M. Gresty, S. J. Coen, G. J. Sanger, S. C. Williams, G. Barker, Q. Aziz, United Kingdom

003

**17:00 Anxiety, depression and somatization influence the time course of the postprandial symptom response in irritable bowel syndrome**

L. van Oudenhove, H. Tornblom, S. Störsrud, J. Tack, M. Simrén, Belgium

004

**17:15 Different responses to psychological stress in the rectal mucosa of patients with irritable bowel syndrome and healthy volunteers**

L. Gerdin, S. Walter, Y. Braaf, M. Olsson, A.-C. Ericsson, J. D. Söderholm, Sweden

005

**17:30 The effect of psychophysiological autonomic modulation on human esophageal pain hypersensitivity**

C. Botha, C. Knowles, Q. Aziz, United Kingdom

### OP-14 Oral Presentation

16:30–17:45 Sala Magenta

#### CNS and the brain-gut axis

Chairs: Q. Aziz, United Kingdom  
A. Travagli, USA

001

**16:30 Importance of histone acetylation in chronic hyperalgesia and anxiety-like behavior induced by elevated amygdala corticosteroids**

L. Tran, J. Schulkin, B. Greenwood-Van Meerveld, USA

002

**16:45 The role of Nav1.9 in the activation of visceral afferent fibres by human inflammatory supernatants**

G. Boundouki, J. Hockley, C. McGuire, C. Knowles, Q. Aziz, M. Baker, D. Bulmer, United Kingdom

003

**17:00 Sacral parasympathetic input to guinea-pig colorectum**

S. Brookes, K. Hendy, J. Salvi, A. Wadey, P. Dinning, V. Zagorodnyuk, N. Spencer, Australia

004  
**17:15 The critical role of microbiota in the expression of altered behavior in mice subjected to maternal separation**  
 G. De Palma, P. Blennerhassett, J. Lu, A. J. Park, V. Philip, W. Green, M. Silva, E. Verdu, S. Collins, P. Bercik, Canada

005  
**17:30 Corticotropin-releasing hormone is associated with exaggerated brain activity and pituitary-adrenal response during colorectal distention in IBS**  
 Y. Tanaka, J. Morishita, M. Kano, M. Kanazawa, M. Tashiro, S. Fukudo, Japan

**WS-15 Workshop**

18:00–19:30 Europauditorium

**Pediatric neurogastroenterology**

Chairs: M. Benninga, The Netherlands  
 C. di Lorenzo, USA

001  
**18:00 Use of enteric nervous stem cells to treat motility disorders: Ready for prime time?**  
 N. Thapar, United Kingdom

002  
**18:20 Microbial signatures in pediatric IBS and relationship to symptoms**  
 R. Shulman, USA

003  
**18:40 Functional dyspepsia in children - New pathophysiology mechanisms and therapies**  
 A. Staiano, Italy

004  
**19:00 What keeps children constipated**  
 M. Benninga, The Netherlands

**WS-11 Workshop**

18:00–19:30 Sala Italia

**Peripheral mechanisms of IBS**

Chairs: L. Chang, USA  
 S. Collins, Canada

001  
**18:00 The putative role of the microbiome in Irritable Bowel Syndrome**  
 S. Collins, Canada

002  
**18:20 Intestinal gas: Mechanisms of symptom perception**  
 F. Azpiroz, Spain

003  
**18:40 Intestinal permeability**  
 J. Söderholm, Sweden

004  
**19:00 Immune activation**  
 R. Spiller, United Kingdom

**WS-10 Workshop**

18:00–19:30 Sala Magenta

**Moving beyond nerves and muscle**

Chairs: G. Farrugia, USA  
 J. Huizinga, Canada

001  
**18:00 Fibroblast-like cells in purinergic neurotransmission**  
 S. Ward, USA

002  
**18:15 Spontaneous electrical activity of fibroblast-like cells**  
 Y. Kito, Japan

003  
**18:30 Mast cells and macrophages**  
 T. Shea-Donohue, USA

004  
**18:45 Development and plasticity of ICC**  
 T. Ordog, USA

005  
**19:00 Blood-brain barrier of the little brain**  
 M. Neunlist, France

- PS-01** **Poster Session**  
12:30 - 14:30 Foyer Sala Magenta
- Basic and translational session: Glial and enteric neurons in health and disease**  
Discussants: G. Boeckstaens, Belgium  
S. Brookes, Australia  
C. Knowles, United Kingdom
- 001 In vivo neural regeneration and neurogenesis promoted by 5-HT4 receptor activation**  
M. Takaki, H. Kuniyasu, I. Kawahara, K. Goto, H. Matsuyoshi, Japan
- 002 Mechanosensitive myenteric neurons in the guinea pig gastric corpus**  
G. Mazzuoli, M. Schemann, Germany
- 003 Pancreatic cancer cells secrete CXCL12 which is chemoattractive upon peripheral neural glia: Reversal of a paradigm**  
I. E. Demir, K. Kujundzic, T. Kehl, H. Friess, G. O. Ceyhan, Germany
- 004 Alpha-synuclein is constitutively secreted from enteric neurons and impacts on intestinal epithelial barrier**  
S. Paillusson, M. Neunlist, P. Derkinderen, France
- 005 Expression of P2X3 subunit during ontogenic development of murine and guinea pig myenteric plexus**  
R. Loera Valencia, C. Barajas-López, R. Guerrero-Alba, E. C. Villalobos-Hernández, E. Hazael Juarez, R. Espinosa-Luna, J. D. Huizinga, Mexico, Canada
- 006 M3- and NK1-receptor facilitation of [3H]-acetylcholine release from myenteric motoneurons depends on extracellular adenosine accumulation acting on prejunctional A2a receptors**  
P. Marques, I. Silva, C. Vieira, M. Duarte-Araújo, F. Ferreirinha, T. Magalhães-Cardoso, P. Correia-de-Sá, Portugal
- 007 Enteric glial cells from patients with Crohn's Disease misreact to inflammation and induce intestinal epithelial cell permeability**  
M. Rolli-Derkinderen, T. Clairembault, S. Coquenlorge, B. Lardeux, J. Jaulin, M. Biraud, M. Neunlist, France
- 008 Glial cell line derived neurotrophic factor prevents high fat diet induced obesity**  
S. Mwangi, B. Nezami, B. Obukwelu, M. Anitha, S. Marri, P. Fu, M. Shanmugam, S. Sitaraman, F. Anania, S. Srinivasan, USA
- 009 Supernatant of human ulcerative colitis biopsies have pro-angiogenic properties: Role of enteric glial cells**  
M. Rolli-Derkinderen, I. Corre, R. Soret, M. Biraud, A. Boureille, M. Neunlist, France
- 010 Enteric neuroplasticity of seawater-adapted European eel "(*Anguilla anguilla*) experimentally induced to sexual maturation**  
R. Chiocchetti, C. Sorteni, O. Portnoy, R. Sirri, P. Clavenzani, O. Mordenti, A. Di Biase, A. Parmeggiani, R. De Giorgio, Italy
- 011 Pain and neural remodelling in pancreatic neuropathy are characterized by increased unmyelinated nerve fiber content and selective glial activation**  
I. E. Demir, G. O. Ceyhan, K. Wang, C. Waldbaur, H. Friess, Germany
- 012 Neurogenesis: Granulocyte colony-stimulating factor facilitates neural stem cell differentiation**  
A. Schuster, T. Schwab, R. Lilischkis, A. Schneider, K.-H. Schäfer, Germany
- 013 Apoptotic action of salsolinol on myenteric plexus neurons in the rat intestine**  
M. Kurnik, K. Gil, A. Bugajski, P. Thor, Poland
- 014 Effects of anti-cancer chemotherapy on gastrointestinal motility and enteric neurons in the mouse colon**  
K. Nurgali, L. Wafai, M. Taher, H. Jarra, R. McQuade, V. Jovanovska, C. R. Dass, Australia
- 015 Oxytocin hyperpolarizes cultured duodenum myenteric intrinsic primary afferent neurons by opening BKCa channels through IP3 pathway**  
C. Liu, T. Che, H. Sun, J. Li, W. Kunze, M. Zhang China, Canada
- 016 The appendix, a suitable and autologous neural stem cell source**  
C. Hagl, S. Heumüller, E. Wink, K. Kaiser, K.-H. Schäfer, Germany
- 017 Alterations of colonic cholinergic and tachykininergic motility in a rat model of Parkinson's Disease**  
C. Blandizzi, M. Fornai, C. Pellegrini, L. Antonioli, G. Levandis, R. Colucci, G. Giustarini, F. Blandini, Italy
- 018 A D-galactose mouse model of dysmotility: Spatiotemporal motility mapping and intrinsic primary afferent neuron function**  
W. Kunze, Y.-K. Mao, Y. Wu, B. Wang, Canada



- 019 Enteroglia derived S100B protein modulates differentiation, proliferation and nitrosative stress of human intestinal epithelial cells in a age-dependent manner**  
F. Turco, G. Sarnelli, I. Palumbo, T. Di Maio, A. D'Alessandro, R. Cuomo, Italy
- 020 Toxoplasma gondii increases the expression of S-100 and GFAP in rat colonic myenteric plexus**  
E. J. de Almeida Araujo, R. Gouveia, M. Biondaro Gois, A. Vieira da Silva, J. Nelisis Zanoni, D. d. Mello Gonçalves Santana, Brazil
- 021 Effects of quercetin supplementation on the myenteric neurons HuC/HuD immunoreactive in ileum of diabetic rats**  
M. A. Defani, C. R. Moreira, F. Ferrari, A. M. Alves Pereira, E. P. Belato Alves, Brazil
- 022 Enteric neuronal function and colonic motility in PINK1<sup>-/-</sup> mice: A model for Parkinson's Disease**  
P. Vanden Berghe, F. E. Martin Cano, M. Dondeyne, W. Boesmans, V. Morais, B. De Strooper, M. J. Pozo, Belgium, Spain
- 023 An unexpected role of the enteric nervous system on gastrointestinal smooth muscle differentiation**  
P. de Santa Barbara, S. Faure, J. McKey, A. Bourret, France
- 024 Histopathology of the severe effects induced by repeated cisplatin in rat digestive tissues**  
G. Vera Pasamontes, J. A. Uranga, M. I. Martin Fontelles, R. Abalo, Spain
- 026 Changes in colonic motility in a murine model of Alzheimer Disease**  
M. J. Pozo Andrada, F. E. Martin Cano, I. Morales, C. Camello, F. Barriga, M. C. Moreno, D. Hernandez, P. Camello, Spain
- 027 Cholera toxin has a sexually dimorphic effect on colonic migrating motor complexes in mice**  
J. Bornstein, G. Balasuriya, Australia
- 028 Nerve fibres containing enkephalin are reduced in colon from children with slow-transit constipation**  
B. Southwell, N.-A. Ijap, M. French, Y. I. Yik, P. Farmer, D. Bodemer, J. M. Hutson, Australia, Malaysia
- 029 Identification of different patterns of propagating motor activity in isolated human colon**  
T. C. Sia, M. Kyloh, N. Spencer, J. Arkwright, S. Brookes, D. Wattchow, P. Dinning, Australia
- 030 Psychosocial chronic stress induces intestinal dysmotility and changes in enteric nervous system in proximal colon**  
B. Lobo, M. Tramullas, B.-C. Finger, K. W. Lomasney, J. Santos, N. P. Hyland, T. Dinan, J. F. Cryan, Spain, Ireland
- 031 Non-invasive fluorescence imaging of intestinal motility**  
S.-K. Kwon, C. Davies-Venn, E. Sevick-Muraca, USA
- 032 High-throughput motility mapping of the whole murine small intestine and analysis with autocorrelation**  
S. Parsons, J. Huizinga, Canada
- 033 SmoothRec: A poor man's multiple channels recording system**  
W. Lammers, W. El Tahir, S. Dhanasekaran, M. Ljubisavljevic, United Arab Emirates
- 034 Angiotensin II positively modulates the spontaneous contractile activity of mouse and human colon via activation of AT1 receptors**  
R. Serio, M. Mastropaolo, M. Zizzo, F. Mule, Italy
- 035 γ-amino-butyric acid regulates submucosal cholinergic signalling and secretomotor function in mouse colon**  
K. Lomasney, J. Cryan, N. Hyland, Ireland
- 036 Microelectrode array analysis of spontaneous electric activity in the ileum of mice**  
S. Nakayama, M. Taniguchi, K. Sawamura, H. Shozib, Japan

PS-02

Poster Session

12:30–14:30

Foyer Sala Magenta

**Basic and translational session: Small intestine, colon and anorectum: Physiology and pathophysiology**

Discussants: M. Costa, Australia

P. Pasricha, USA

M. Schemann, Germany

- 025 Characterization of smooth muscle, enteric nerve, interstitial cells of Cajal, and fibroblast-like cells in the gastric musculature of the patients with diabetes mellitus**  
J.-G. Kwon, J. T. Jung, E. Y. Kim, H. G. Kim, K. S. Park, J. H. Park, I. S. Hwang, B. I. Jang, K. O. Kim, S. W. Jeon, S. R. Jee, Republic of Korea

## Poster Presentations – Friday, 7 September 2012

PS-03	Poster Session	PS-04	Poster Session
12:30–14:30	Foyer Sala Magenta	12:30–14:30	Foyer Sala Magenta
<b>Basic and translational session: Appetite regulation, satiety, obesity and nutrition</b>		<b>Basic and translational session: Gastric physiology, pathophysiology</b>	
Discussants: I. Depoortere, Belgium F. Gribble, United Kingdom H. Raybould, USA		Discussants: M. Costa, Australia P. Pasricha, USA M. Schemann, Germany	
<b>037</b>	<b>Restricted feeding induces inflammation: Role of ghrelin and clock genes?</b> J. Laermans, K. Beckers, T. Thijs, J. Tack, I. Depoortere, Belgium	<b>046</b>	<b>Apical NKCC2 in the gastric mucosa involves gastric acid secretion</b> T. Ji, L. Zheng, H. Xue, J. Zhu, China
<b>038</b>	<b>Impact of diet-induced obesity on motor functions and myenteric neurons in mice distal colon</b> F. Reichardt, R. Moriez, L. Gruber, G. Mazzuoli, C. Baudry, C. Scherling, H. Daniel, D. Haller, M. Neunlist, M. Schemann, Germany, France	<b>047</b>	<b>A novel rat stomach model based on 3D shape context method based strain analysis</b> D. Liao, J. Zhao, H. Gregersen, Denmark
<b>039</b>	<b>Circadian variations in gastric vagal afferent mechanosensitivity and satiety signalling</b> S. Kentish, G. Wittert, E. Symonds, D. Kennaway, A. Page, Australia	<b>048</b>	<b>The effect of administration of probiotic bacteria on the composition of the mucosal gut microbiota in IBS patients</b> J. Sundin, J. R. Brummer, W. d. Vos, S. Fuentes, I. Rangel, Sweden
<b>040</b>	<b>Detection of the ghrelin activating enzyme ghrelin-O-acyltransferase (GOAT) in the human circulation and expression dependent on body weight</b> A. Stengel, M. Goebel-Stengel, T. Hofmann, U. Elbelt, P. Kobelt, N. Lambrecht, B. Klapp, Germany	<b>049</b>	<b>In vitro and in vivo studies on the effects of oxytocin in a rat model of functional dyspepsia</b> R. A. Travagli, T. Babic, G. M. Holmes, K. N. Browning, USA
<b>041</b>	<b>Peripheral Glucagon-like peptide 2 administration inhibits food intake in mice: Analysis of the mechanism of action</b> S. Baldassano, A. Bellanca, R. Serio, F. Mulè, Italy	<b>050</b>	<b>A biomagnetic technique to evaluate the effects of partial gastrectomy on gastric emptying and gastrointestinal transit time in rats</b> M. Americo, M. F. F. Calabresi, J. F. Matos, J. R. V. Graça, C. C. Quini, O. Baffa, R. B. Oliveira, J. R. A. Miranda, Brazil
<b>042</b>	<b>Evaluation of the effects of elsiglutide on the toxicity and histological damage induced by Irinotecan in normal fischer rats</b> Y. Rustum, S. Cao, F. Durrani, K. Toth, E. Lovati, C. Pietra, USA, Switzerland	<b>051</b>	<b>Long term kaolinite ingestion decreased gastric emptying rate as a consequence of duodenal mucosa remodeling</b> C.-H. Malbert, S. Guérin, G. Randuineau, F. Angel, France
<b>043</b>	<b>Cardiac autonomic regulation and cortisol profiles during 48-hour zero-calorie fasting</b> P. Enck, N. Mazurak, F. Grau, A. Guenther, E. R. Muth, S. Zipfel, Germany	<b>052</b>	<b>Age-induced changes in gastric myoelectrical activity and the effect of nicotine in ICR mice</b> H.-C. Wang, N. Percie Du Sert, J. Rudd Hong Kong SAR, China, United Kingdom
<b>044</b>	<b>Diet and irritable bowel syndrome</b> I. Chirila, F. D. Petrariu, I. Ciortescu, C. Mihai, V. L. Drug, Romania	<b>053</b>	<b>Identification of the major site of action for motilin-induced contraction within the suncus stomach</b> S. Aizawa, R. Kobayashi, M. Nagasaka, A. Mondal, I. Sakata, T. Sakai, Japan
<b>045</b>	<b>Ghrelin and glucose homeostasis in perinatal low birth weight and normal weight piglets</b> S. Willemen, M. d. Vos, V. Huygelen, C. Casteleyn, S. v. Cruchten, C. v. Ginneken, Belgium	<b>054</b>	<b>Up-regulated <math>\beta</math>1-adrenoceptor mediates the inhibition of norepinephrine on the gastric contractility in 6-OHDA rats</b> J. Song, L. Zheng, J. Zhu, China

- 055** The influence of monosodium glutamate on the stability of gastric mucosa to the stress action in rats  
T. Falalyeyeva, I. Savchenko, T. Beregova, Ukraine
- 056** Transcranial direct current stimulation (TDCS) can modulate esophageal motility in gastroesophageal reflux disease (GERD) patients  
S. Vigneri, S. Bonventre, A. Inviati, F. Brighina, G. Cosentino, G. Giglia, P. Paladino, B. Fierro, Italy

PS-05

Poster Session

12:30–14:30

Foyer Sala Magenta

**Basic and translational session: Probiotics, pharmacotherapy, pharmacogenomics and pharmacology**

Discussants: I. Depoortere, Belgium  
H. Raybould, USA  
C. Scarpignato, Italy

- 057** Facilitation of cholinergic activity in human isolated stomach by metoclopramide and by the selective motilin receptor agonist GSK962040, but not by domperidone  
J. Broad, A. Goralczyk, G. Dukes, G. Sanger, United Kingdom, USA
- 058** A probiotic treatment attenuates Hypothalamic-Pituitary-Adrenal (HPA) axis response to chronic psychological stress through improvement of cellular proliferation and changes of gene expression in the brain  
A. Ait-Belgnaoui, A. Colon, V. Braniste, L. Ramalho, C. Cartier, C. Harkat, E. Houdeau, T. Tompkins, F. Durmont, V. Theodorou, France
- 059** Effect of erythromycin and sumatriptan on meal induced gastric accommodation and maximum nutrient tolerance assessed by a novel nutrient drink test  
E. Altan, S. Verschueren, A. Rotondo, P. Janssen, J. Tack, Belgium
- 060** Serotonin transporter gene influence on effectiveness of cognitive behavioral therapy for patients with Irritable Bowel Syndrome (IBS)  
M. Jarrett, K. Cain, R. Kohen, S.-E. Jun, K. Reading, M. Heitkemper, USA
- 061** Local transdermal delivery of phenylephrine using hollow microneedles as a treatment of fecal incontinence  
J.-H. Park, J.-H. Park, H. Jeon, C. Sohn, J. H. Kim, Republic of Korea
- 062** Granisetron prevents alterations of gastrointestinal motility in rats repeatedly treated with cisplatin: Radiographic study  
G. Vera Pasamontes, P. A. Cabezos, A. E. Lopez, M. I. Martin Fontelles, R. Abalo, Spain
- 063** Novel anti-inflammatory functions for the herbal drug STW 5: A link between cytokine regulation and gastrointestinal inflammation  
K. Nieber, S. Michael, U. Voß, S. Hoser, H. Abdel-Aziz, D. Weiser, O. Kelber, Germany
- 064** Effect of DA-9701, a novel prokinetic agent, on delayed gastric emptying induced by stress in rats  
K.-J. Lee, H. S. Lee, Y.-S. Jung, Republic of Korea
- 065** Effect of hyoscine butylbromide (Buscopan®) on cholinergic pathways in the human intestine  
D. Krüger, K. Michel, S. Allam, F. Zeller, I. E. Demir, G. O. Ceyhan, T. Weiser, M. Schemann Germany
- 067** Long-term effects of otilonium bromide on tachykinin receptors, substance P and NOS expression in the rat colon muscle coat  
M.-S. Faussonne-Pellegrini, C. Traini, G. Cipriani, S. Evangelista, P. Santicioli, M. G. Vannucchi, Italy
- 068** Effects of Butylscopolamine Bromide on nicotinic acetylcholine receptors in cultured Guinea pig enteric neurons  
T. Weiser, N. Wronna, U. Kraushaar, Germany
- 069** Analysis of fecal microbiota and effectiveness of a probiotic, VSL#3 in patients with functional constipation: A Korean multicenter study  
S.-E. Kim, S.-C. Choi, K.-S. Park, M.-I. Park, J.-E. Shin, T.-H. Lee, K.-W. Jung, H.-S. Koo, S.-J. Myung, Republic of Korea
- 070** Effects of TAK-480, a novel tachykinin NK2 receptor antagonist, on visceral hypersensitivity in rabbits and ricinoleic acid-induced defecation in guinea-pigs  
T. Tanaka, A. Tanaka, A. Nakamura, K. Matsushita, A. Imanishi, S. Matsumoto-Okano, N. Inatomi, K. Miura, M. Toyoda, G. Mizojiri, Y. Tsukimi, Japan

**PS-06** **Poster Session**

12:30–14:30 Foyer Sala Magenta

**Basic and translational session: Neuro-immune mechanisms**

Discussants: J. Furness, Australia  
N. Vergnolle, France

- 071** **Role of 5-HT7 in intestinal muscle function and host defense in an enteric parasitic infection**  
J. Kim, H. Wang, T. Zaman, P. B. Hedlund, J.-E. Ghia, W. I. Khan, Canada, USA
- 072** **An investigation of the therapeutic potential of chymase-containing mast cells in a preclinical model of irritable bowel syndrome and their translational relevance**  
N. Hyland, S. Carroll, S. Heuston, E. Quigley, J. Cryan, Ireland
- 073** **Eosinophils and eosinophil-regulatory molecules as therapeutic targets for the treatment of intestinal inflammation**  
K. Nurgali, L. Edmunds, M. Taher, V. Jovanovska, M. Ellis, J. C. Bornstein, Australia
- 074** **UC patients in remission have an altered balance between forskolin and carbachol-stimulated chloride secretion in the proximal colon despite a macroscopically normal mucosa**  
H. Sjövall, J. Gustafsson, G. C. Hansson, Sweden
- 075** **Do rats and mice differ regarding intestinal muscularis macrophage activation?**  
H. Mikkelsen, S. Kirkeby, Denmark
- 076** **Pannexin expression in human colon: Alterations in Inflammatory Bowel Disease (IBD)**  
L. Liu, E. Diezmos, S. Sandow, P. Bertrand, Australia
- 077** **Immune factors in Irritable Bowel Syndrome plasma activate rat myenteric neurons**  
M. Buckley, T. G. Dinan, D. O'Malley, Ireland
- 078** **Involvement of jejunal mucosal immunoglobulin production and plasma cell-nerve proximity in the pathogenesis of diarrhea-irritable bowel syndrome**  
M. Vicario, J. Santos, A. M. Gonzalez Castro, M. Pigrau, C. Martinez, B. Lobo, M. Guilarte, E. Salvo-Romero, C. Frias, C. Alonso, I. De Torres, F. Azpiroz, Spain
- 079** **Role of A2B receptors in the control of colonic cholinergic motility in the presence of bowel inflammation**  
C. Blandizzi, L. Antonioli, M. Fornai, R. Colucci, G. Giustarini, C. Pellegrini, M. Tuccori, M. Qesari, I. Castagliuolo, p. brun, C. Giron, C. Scarpignato, Italy
- 080** **Changes in the intestinal wall and myenteric plexus of jejunum in rats induced by the infection by oocysts of *Toxoplasma Gondii***  
D. d. Mello Gonçalves Sant'ana, L. M. Zaniolo, M. B. Gois, A. V. Da Silva, J. N. Zandoni, E. J. de Almeida Araújo, Brazil
- 081** **Proinflammatory cytokines from patient's with Chron's disease affect cultured enteric neurons**  
C. Hagl, S. Häuser, S. Heumüller, E. Wink, K.-H. Schäfer, Germany
- 082** **The expression of immediate early genes of herpes simplex virus type 1 contributes to the neuroplasticity induced by viral infection on the enteric nervous system**  
M. C. Giron, P. Brun, M. Qesari, F. Galeazzi, G. Zaninotto, P. Marconi, R. Manservigi, G. Palù, I. Castagliuolo, Italy
- 083** **Up-regulation of IL-6-expressing macrophages in human colonic mucosal biopsies**  
D. O'Malley, E. Quigley, J. Cryan, T. Dinan, Ireland
- 084** **Proinflammatory cytokine gene polymorphisms in Greeks with irritable bowel syndrome**  
G. Karamanolis, M. Gazouli, N. Viazis, N. Anagnou, D. Karamanolis, Greece
- 085** **Neuronal plasticity of lumbosacral DRG in a model of post-infectious gut dysfunction in rats**  
F. Jardí, J. A. Fernandez-Blanco, V. Martinez, P. Vergara, Spain
- 086** **Role of immune-mediated mechanisms in psychological stress-induced colonic barrier dysfunction**  
P. Hattay, L. Tran, B. Greenwood-Van Meerveld, USA
- 087** **Impairment of the adenosine fine-tuning control of acetylcholine release from myenteric motoneurons in the inflamed rat ileum**  
C. Vieira, J. Oliveira, P. Marques, T. Magalhães-Cardoso, M. Duarte-Araújo, P. Correia-de-Sá, Portugal

**088** **Connective remodelling in the colonic neuromuscular compartment of patients with ulcerative colitis**  
N. Bernardini, C. Segnani, C. Ippolito, M. Chiarugi, P. Bucciatti, M. Castagna, C. Blandizzi, A. Dolfi, Italy

**089** **Pancreatic Polypeptide (PP) delays Gastric Emptying (GE) of a radio-opaque liquid meal in conscious rats**  
S. Verschueren, P. Janssen, J. Tack, Belgium

**PS-07** **Poster Session**

12:30–14:30 Foyer Sala Magenta

**Basic and translational session: Brain-gut-axis and stress mechanisms**

Discussants: A. Blackshaw, United Kingdom  
B. Greenwood-Van Meerveld, USA  
A. Travagli, USA

**090** **Chronic intermittent stress-induced visceral pain: Evidence for region- and cell-specific epigenetic regulation of Glucocorticoid Receptor (GR) in nociceptive DRG neurons**  
S. Hong, G. Zheng, J. Wiley, USA

**091** **Corticotropin-releasing hormone receptor 2 activation in mesenteric adipose tissue leads to activation of MAP kinases and release of proinflammatory cytokines**  
J. Hoffman, C. Fink, I. Karagiannidis, K. Bakirtzi, J. Bugni, C. Pothoulakis, USA

**092** **Acute water avoidance stress induces visceral analgesia when tested non-invasively—differential role of opioid-dependent mechanisms in male and female rats**  
M. Larauche, A. Mulak, Y.-S. Kim, M. Million, Y. Tache, USA, Poland

**093** **Anxiety and sympathetic nervous system activation are associated with the development of human esophageal pain hypersensitivity**  
C. Botha, C. Knowles, Q. Aziz, United Kingdom

**094** **Chronic stress potentiates descending inhibition to colonic circular smooth muscle of mice and humans**  
Y. Zhang, M. Beyak, A. Lomax, H. MacDonald, W. Paterson, S. Vanner, Canada

**095** **Gastrointestinal inflammation and environmental enrichment alter stress-induced activation of the corticolimbic system**  
F. Reichmann, E. Singewald, P. Holzer, Austria

**096** **Enteric intrinsic primary afferent neurons may modulate the gut-brain axis by synaptic transmission to extrinsic mesenteric afferent fibres**  
A. Perez-Burgos, W. Kunze, Canada

**097** **Perinatal high fat diet modulates GABAergic transmission in central brainstem circuits regulating gastric functions**  
K. Browning, Z. Reagan, USA

**098** **Sexually dimorphic effects of unpredictable early life adversity on visceral pain in a rodent model: Importance of estradiol**  
A. Chaloner, B. Greenwood–Van Meerveld, USA

**099** **Microstructural brain changes in patients with Diabetes Mellitus and gastrointestinal symptoms**  
J. B. Frøkjær, L. W. Andersen, C. Brock, M. Simrén, M. Ljungberg, E. Søfteland, G. Dimcevski, H. Gregersen, A. M. Drewes, Denmark, Sweden, Norway

**100** **Psychological stress induces anxiety and pain hypersensitivity through glucocorticoid and CRF-Mediated Mechanisms in the Amygdala**  
A. Johnson, L. Tran, B. Greenwood-Van Meerveld, USA

**101** **Changes in peptidergic neurotransmission with VIP and Substance P during postoperative ileus in rat are associated with c-Fos immunoreactivity in the brainstem**  
M. S. Kasperek, B. Goetz, P. Benhaqi, J. Glatzle, M. E. Kreis, Germany

**102** **Longitudinal assessment of colitis in the adoptive transfer mouse model using colonoscopy and  $\mu$ PET/CT**  
M. Heylen, J. d. Man, S. Staelens, S. Deleye, P. Pelckmans, T. Moreels, B. d. Winter, Belgium

**103** **An equivalent of Hypothalamic–Pituitary–Adrenal (HPA) axis exists in the colon: Expression, cellular location and regulation in mice**  
P.-Q. Yuan, L. Wang, C. Kiank, Y. Tache, USA

**104** **Stress reactivity in children with functional abdominal pain and healthy controls**  
K. Weimer, M. D. Gulewitsch, A. A. Schlarb, P. Enck, Germany

**105** **Restraint stress elevates CRF expression and increases CRF release in the rat stomach**  
S. Liu, N. Long, G. Talhouarne, K. Beckwith, S. Cooper, USA

**106 The effect of high caloric food on chronic stress responses in rat**

H.-S. Ryu, Y. S. Kim, S. C. Choi, E. S. Choi,  
M. Y. Lee, Republic of Korea

**PS-08**

**Poster Session**

12:30–14:30

Foyer Sala Magenta

**Basic and translational session: Extrinsic neural pathways, hypersensitivity and pain**

Discussants: M. Beyak, Canada

D. Grundy, United Kingdom

A. Travagli, USA

**107 Serum from diet induced obese mice inhibits excitability of mouse vagal afferent neurons**

M. Beyak, S. J. Park, Canada

**108 Identification of the classes of spinal afferents activated during spontaneous motor activity of the murine large intestine**

V. Zagorodnyuk, M. Kyloh, S. Brookes, N. Spencer,  
Australia

**109 Mechanical and chemical stimulation of human visceral afferents**

C. McGuire, G. Boundouki, J. Hockley, M. Peiris,  
A. Blackshaw, C. Knowles, D. Bulmer,  
United Kingdom

**110 Ageing and gastrointestinal sensory function: Altered colonic mechanosensory and chemosensory function in the aged mouse**

C. Keating, L. Nocchi, Y. Yu, D. Grundy  
United Kingdom

**111 Neurophysiological, cellular and environmental regulation of visceral hypersensitivity in ulcerative colitis like inflammation**

S. Sarna, J. Chen, J. Winston, USA

**112 Dose-dependent antihyperalgesic effect of somatostatin (sst) receptor subtype agonists in a rodent model of visceral hypersensitivity induced by repeated noxious colorectal distension**

M. Larauche, A. Mulak, M. Million, J. Rivier,  
Y. Tache, USA, Poland

**113 TRPV1 receptors and visceral hypersensitivity in colitis-induced motility and sensitivity disorders**

H. de Schepper, W. Vermeulen, J. d. Man,  
P. Pelckmans, B. d. Winter, Belgium

**114 Involvement of the spleen in the anti-inflammatory effect of vagus nerve stimulation in a rat model of colitis**

C. Picq, V. Sinniger, J.-F. Mayol, D. Clarençon,  
B. Bonaz, France

**115 Effects of DA-9701 on responses of substance P, c-Fos and pERK in spinal cord and dorsal root ganglion to colorectal distension in Sprague-Dawley rats**

S.-P. Lee, K.-N. Lee, O.-Y. Lee, D.-W. Jun, H.-L. Lee,  
B.-C. Yoon, H.-S. Choi, W. Sohn, Republic of Korea

**116 Associations between visceral and somatic pain in healthy volunteers**

P. Enck, B. Horing, H. Kugel, V. Brenner, Germany

**117 TRPA1 activation leads to the murine small mesenteric afferent signaling**

W. Jiang, Y. Yu, D. Grundy, United Kingdom

**PS-09**

**Poster Session**

12:30–14:30

Foyer Sala Magenta

**Basic and translational session: Microbiota in health and disease**

Discussants: I. Depoortere, Belgium

F. Gribble, United Kingdom

C. Scarpignato, Italy

**118 Stimulation of colonic Toll-Like Receptors induces a local immune response without histological signs of inflammation or changes in bacterial wall adherence in rats**

M. Aguilera, J. Estévez, P. Vergara, V. Martinez,  
Spain

**119 Microbial colonization of germ-free mice induces marked change in behaviour that is independent of bacterial diversity**

V. Philip, J. Lu, E. F. Verdu, K. McCoy, M. G. Surette, S. M. Collins, P. Bercik, Canada,  
Switzerland

**120 Local activation of Toll-like Receptor 7 (TLR7) enhances colonic epithelial barrier function in rats**

J. Estévez, M. Aguilera, R. Paricio, J. A. Fernández-Blanco, P. Vergara, V. Martinez, Spain

**121 Up-regulated expression of TLR4 and TLR9 in small bowel mucosa of patients with Irritable Bowel Syndrome (IBS)**

G. Lindberg, A. Dlugosz, N. Acevedo,  
K. Zakikhany, M. d'Amato, Sweden

- 122 Intestinal microbiota in the neuro-immune regulation of behaviour: Exploring role of vagal-microbiota signalling**  
P. G. McLean, B. Berger, N. Porta, M. Perrot, C. Ngom-Bru, S. M. Collins, P. Bercik, E. F. Verdue, G. E. Bergonzelli, Switzerland, Canada
- 123 Non-absorbable oral antibiotic treatment in mice affects multiple levels of the microbiota-gut-brain axis**  
A. Farzi, G. Gorkiewicz, P. Holzer, Austria
- 124 Role of gastrointestinal dysmotility on intestinal bacterial overgrowth and translocation following burn injury**  
H. Sallam, P. Urvil, T. Savidge, J. Chen, USA

**PS-10**

**Poster Session**

12:30–14:30 Foyer Sala Magenta

**Basic and translational session: Signalling: Hormones, neurotransmitters, receptors, channels, secondary messengers**

Discussants: H. Akbarali, USA  
M. Neunlist, France  
P. Vanden Berghe, Belgium

- 125 Mechanism of opioid tolerance in bowel dysfunction**  
H. Akbarali, T. Smith, H. Maguma, W. Dewey, USA
- 126 Inhibition of Fatty Acid Amide Hydrolase (FAAH) activity by PF-3845 reduces diarrhoea and alleviates abdominal pain in mice**  
J. Fichna, J. Stuart, A. Cygankiewicz, P. Zakrzewski, A. Mokrowiecka, M. Salaga, A. Janecka, E. Malecka-Panas, H. Bradshaw, K. Ahn, M. Storr, Poland, USA, Germany
- 127 Achalasia in mice lacking NO-sensitive guanylyl cyclase**  
D. Groneberg, E. Zizer, M. Wagner, B. Lies, A. Friebe, Germany
- 128 Comparison of peptidergic neuromuscular transmission in the wildtype and VIP-/- murine internal anal sphincter**  
K. Keef, S. Saxton, C. Cobine, R. Kaminski, R. McDowall, USA
- 129 Dopaminergic signaling in mouse duodenum and postnatal developmental changes**  
M. Zizzo, M. Mastropaolo, G. Cavallaro, F. Mule, R. Serio, Italy

- 130 The involvement of sympathetic nerve activation in decreased ghrelin production and secretion in urocortin-1 induced stress model**  
K. Yakabi, S. Ohno, M. Ochiai, K. Takayama, S. Ro, Y. Harada, T. Hattori, Japan
- 131 Influence of CORM-A1 and resveratrol on TNF-a-induced oxidative stress and apoptosis in murine MODE-K intestinal epithelial cells**  
D. Babu, O. d. Backer, S. Soenen, K. Raemdonck, G. Leclercq, R. Motterlini, R. Lefebvre, Belgium, France
- 132 Mechanisms underlying hydrogen sulphide relaxation in the rat colon**  
V. Gil, S. Parsons, D. Gallego, J. Huizinga, M. Jimenez, Spain, Canada
- 133 Assessing the molecular target for hydrogen sulphide in the mouse small intestine and sensory ganglia**  
W. Jiang, L. Nocchi, D. Grundy, United Kingdom
- 134 Purinergic (P2Y1) and Nitrgergic neuromuscular transmission in the human small intestine**  
D. Gallego, C. Malagelada, A. Accarino, R. De Giorgio, J. R. Malagelada, F. Azpiroz, M. Jimenez, Spain, Italy
- 135 Absence of purinergic neuromuscular transmission in the antrum and caecum of P2Y1 knocked out mice**  
V. Gil, M. Jimenez, D. Gallego, Spain
- 136 Early gastrointestinal motor disturbances induced by Lipopolysaccharide (LPS) in sheep may be initiated through activation of COX-2 in pulmonary and hepatic macrophages**  
M. A. Plaza Carrion, A. Gimeno, M. Castro, L. F. Martínez, E. Latorre, L. Grasa, A. I. Alcalde, J. E. Mesonero, M. P. Arruebo, M. D. Murillo, Spain, France

**PS-11**

**Poster Session**

12:30–14:30 Foyer Sala Magenta

**Basic and translational session: Smooth muscle and ICC in health and disease**

Discussants: S. Bhattacharya, USA  
J. Huizinga, Canada  
S. Ward, USA

- 137 Regulation of excitation-contraction and excitation-transcription coupling by caveolin-1 via microRNA133a and transcription factors, Foxo4 and Elk1 in gastrointestinal smooth muscle**  
K. Murthy, S. Bhattacharya, S. Mahavadi, S. Rajagopal, R. Zhou, J. Grider, USA

- |     |  | PS-12   | Poster Session  |
|-----|--|---|---|
| 138 | <b>Platelet-Derived Growth Factor Receptor a positive (PDGFRa+) cells in mice colonic smooth muscles are the primary site of purinergic inhibitory motor neurotransmission</b><br>M. Kurahashi, S.-D. Koh, S. M. Ward, K. M. Sanders, USA                                | 12:30–14:30   | Foyer Sala Magenta  |
| 139 | <b>Functional characterization of Ca<sup>2+</sup>-activated Cl<sup>-</sup> conductance in murine colonic ICC</b><br>S. D. Koh, H. Zheng, J.-H. Kim, B. Clark, N. Horowitz, K. Sanders, USA   | <b>Clinical session: Esophagus: Clinical</b><br>Discussants: F. Baldi, Italy<br>P. Kahrilas, USA<br>D. Sifrim, United Kingdom |   |
| 140 | <b>Changes of enteric nerve, interstitial cells of Cajal, and fibroblast-like cells with age in the human stomach</b><br>J.-G. Kwon, J. T. Jung, E. Y. Kim, J. Han, H. G. Kim, K. S. Park, J. H. Park, I. S. Hwang, B. I. Jang, K. O. Kim, S. W. Jeon, Republic of Korea | 147   | <b>A comparison of multichannel intraluminal impedance and pH monitoring in patients with gastroesophageal reflux related laryngitis and non erosive reflux disease</b><br>A. Çelebi, D. Koc, Y. Temi, U. Korkmaz, G. Sirin, A. E. Duman, G. Dindar, H. Yilmaz, O. Senturk, S. Hulagu, Turkey         |
| 141 | <b>Activation of Ca<sup>2+</sup> transients by purines in Platelet Derived Growth Factor Receptor a positive (PDGFRa+) cells in situ</b><br>S. Abu Baker, A. Salter, S. Ward, K. Sanders, USA  | 148   | <b>Altered taste perception in patients with gastroesophageal reflux disease</b><br>V. Verlezza, G. Sarnelli, L. Vozzella, F. De Giorgi, P. Andreozzi, F. P. Zito, E. Cantone, M. Pesce, R. Cuomo, Italy  |
| 142 | <b>Sensory nervous system input into small intestine ICC-MP calcium transients</b><br>Y.-F. Zhu, X.-Y. Wang, B.-J. Lowie, S. P. Parsons, E. J. White, J. D. Huizinga, Canada   | 149   | <b>Modulation of oesophageal afferent pathways by 5-HT<sub>3</sub> receptor inhibition</b><br>M. Szczesniak, S. Fuentealba, T. Zhang, I. Cook, Australia  |
| 143 | <b>Effect of age on mucosal serotonin signalling and circular muscle contractions in the murine rectum</b><br>B. Patel, L. Parmar, S. Fidalgo, C. Wang, R. Ranson, J. Saffrey, M. Yeoman, United Kingdom   | 150   | <b>Detection of laryngopharyngeal reflux (LPR) using 24-hour esophageal and pharyngeal impedance-pH monitoring: Normal values off and on PPIs and inter-observer reproducibility</b><br>F. Zerbib, S. Roman, S. Bruley des Varannes, G. Gourcerol, B. Coffin, A. Ropert, P. Lopicard, F. Mion, France |
| 144 | <b>Effects of transient receptor potential channel blockers on pacemaker activity in interstitial cells of Cajal from mouse small intestine</b><br>B.-J. Kim, I.-S. So, Republic of Korea  | 151   | <b>Sensitivity of high resolution manometry for detection of esophageal motility disorders: Comparison with 24H-manometry</b><br>J. Keller, V. Andresen, P. Layer, Germany  |
| 145 | <b>Toward the biophysical basis of monophasic and biphasic slow wave extracellular potentials</b><br>P. Du, N. Paskaranandavadivel, A. Beyder, G. Farrugia, L. Cheng, G. O'Grady, New Zealand, USA   | 152   | <b>Modality specific alterations of esophageal sensitivity caused by longstanding diabetes mellitus</b><br>C. Brock, J. Brun, J. B. Frøkjær, E. Söfteland, M. Simrén, H. Gregersen, A. M. Drewes, Denmark, Sweden, Norway, China  |
| 146 | <b>The effect of aging on proximal and distal colonic muscle contractility in F344 rat</b><br>N.-Y. Kim, H.-J. Kim, Y.-S. Kim, M.-Y. Lee, J.-W. Kim, H.-J. Jo, C.-M. Shin, Republic of Korea   | 153   | <b>Silent aspiration after Traumatic Brain Injury (TBI)</b><br>L. Candeloro, D. Badiali, I. Biviano, E. S. Corazzari, F. I. Habib, Italy  |
|     |  | 154   | <b>Neuronavigated repetitive magnetic cerebellar stimulation induces long-lasting changes in human swallowing motor pathways</b><br>D. Vasant, S. Mistry, V. Jayasekeran, E. Michou, S. Hamdy, United Kingdom   |
|     |  | 155   | <b>Distension evoked motor response analysis in human esophagus</b><br>D. Liao, G. Villadsen, H. Gregersen, Denmark   |



- 156 High-resolution impedance manometry criteria in the sitting position indicative of incomplete bolus clearance**  
G.-H. Bok, T.-H. Lee, J.-S. Lee, J.-Y. Cho, J.-O. Kim, H.-G. Kim, S.-R. Jung, W.-J. Kim, Republic of Korea
- 157 Esophageal contractions and transit in patients with excessive belching**  
R. Dantas, A. Silva, L. Aprile, Brazil
- 158 Diagnosis of Gastro-esophageal Reflux Disease (GERD): A prospective analysis based on prolonged, ambulatory pH-studies**  
M. Fox, R. Sweis, E. Tucker, J. Wright, K. Knowles, A. Anggiansah, T. Wong, D. Menne, United Kingdom, Germany
- 159 Comparative study for the high-resolution manometric observation in globus sensation, gastroesophageal reflux disease patients and normal controls**  
W.-S. Choi, T.-W. Kim, W.-J. Hur, Y.-G. Choe, J.-H. Park, S.-H. Lee, C.-I. Sohn, Republic of Korea
- 160 Prolonged, direct observation of esophagogastric junction opening patterns using capsule endoscopy for 12 hours**  
I.-K. Sung, M.-J. Hong, J.-H. Kim, S.-Y. Lee, H.-S. Park, C.-S. Shim, Republic of Korea
- 161 Role of the Esophago-Gastric Junction (EGJ) in GERD patients: Reflux esophagitis spectrum**  
R. Kuvaev, I. Ivanikov, S. Kashin, A. Senin, Russia
- 162 High resolution manometry and PH-impedance monitoring in patients after gastrectomy**  
O. Yanova, L. B. Lazebnik, O. S. Vasnev, V. A. Kim, D. S. Bordin, Russia
- 163 Role of upper esophageal sphincter and pharynx in the development of swallowing abnormalities in patients who received prolonged mechanical ventilation**  
K. Shetler, M. Singer, K. Ponting, E. Holt, C. Brown, H. Wang, W. J. Snape jr., USA
- 164 Utilizing intrabolus pressure and EGJ relaxation pressure to predict esophageal bolus transit in dysphagia patients**  
M.-I. Park, S.-H. Jeong, S.-J. Park, W. Moon, H.-H. Kim, S.-R. Choi, Republic of Korea
- 166 GERD symptoms severity is explained by familiar segregation independently of BMI**  
J. Chiu Ugalde, A. Reding Bernal, A. Lopez Colombo, J. L. Tamayo-de la Cuesta, G. Mateos, A. Vargas, J. C. Lopez Alvarenga, Mexico
- 167 Effect of an acidic bolus on oral, pharyngeal and esophageal transit in normal subjects**  
R. Dantas, L. Alves, M. Secaf, Brazil
- 168 The inclusion of solid boluses in high resolution manometry has high diagnostic yield**  
A. Thompson, C. M. Burgstad, R. Heddle, R. J. L. Fraser, Australia
- 169 Increased in recent years, the diagnosis of Eosinophilic Esophagitis in patients with Refractory Gastroesophageal Reflux**  
O. F. Beser, E. Celik, T. Erkan, T. Kutlu, F. Cullu Cokugras, Turkey
- 170 A 24-hour ambulatory simultaneous multichannel intraluminal impedance-pH monitoring in patients with doubtful laryngopharyngeal reflux**  
M.-I. Park, S.-E. Kim, H.-H. Kim, S.-J. Park, W. Moon, S.-R. Choi, Republic of Korea
- 171 An evidence of esophageal deconditioning in patients with achalasia in the view of its subtype**  
H.-J. Park, G. W. Rhee, Y. H. Youn, S. I. Lee, Republic of Korea
- 172 Nutritional profile of children with Acid Gastroesophageal Reflux Disease and its association with the severity of disease**  
C. Boggio Marzet, M. L. Deforel, S. Dozo, H. L. Gomez, C. Palacios Perez, Argentina
- 173 An unusual cases of laryngopharyngeal squamous cell carcinoma mistaken as globus**  
W.-S. Choi, W.-J. Hur, Y.-G. Choe, J.-H. Park, J.-I. Sohn, Republic of Korea
- 174 The epidemiology of achalasia of the lower esophageal sphincter in children in San Diego County, California**  
N. Tipnis, T. Ciecierrega, R. Cherry, W. Shapiro, USA
- 175 The pathogenetic implication of secondary oesophageal peristalsis impairments in patients with gastroesophageal reflux disease**  
A. Ledovskaya, O. A. Sablin, Russia
- 176 Segmental changes in smooth muscle contraction as a predictive factor of the response to high-dose proton pump inhibitor treatment in patients with functional chest pain**  
H. Lee, J.-H. Park, Y. C. Lee, Republic of Korea
- 177 Prevalence and characteristics of eosinophilic esophagitis in rural versus urban populations**  
R. Schey, Y.-J. Lee, J. Go, N. Frederickson, J. Valestin, M. Redd, USA

- 178 Impaired bolus transits and esophageal peristaltic dysfunction may play an important role in patients with globus**  
P.-L. Rhee, J.-Y. Park, D.-M. Jae, B.-H. Min, Republic of Korea
- 179 GERD symptoms and PPI response in the patients with erosive oesophagitis, non-erosive reflux disease or functional heartburn**  
N.-Y. Kim, H.-J. Kim, S.-Y. Jo, J.-W. Lim, D.-H. Lee, Republic of Korea
- 180 Impact of the manometric esophageal alterations and the exposure to acid in the incidence of Barrett's Esophagus**  
P.-A. Angeles, J. M. Rosales Zabal, M. C. Lopez Vega, F. Fernandez Cano, M. A. Romero Ordoñez, M. Gonzalez Barcenas, F. Rivas Ruiz, Spain
- 181 Esophageal combined multichannel intraluminal impedance-pH monitoring and its clinical value in the diagnosis of various types of gastroesophageal reflux disease**  
S. Morozov, M. Kukushkina, V. Isakov, Russia
- 182 Identification of esophageal dysfunction with combined impedance-manometry: A 6-year single-center experience**  
C.-L. Chen, C.-H. Yi, T.-T. Liu, Taiwan
- 183 Association between smoking and eosinophilic esophagitis**  
R. Schey, M. Redd, J. Go, Y.-J. Lee, N. Frederickson, J. Valestin, USA
- 184 Comparison of anxiety and depression in Gastroesophageal Reflux Disease (GERD) patients who failed Proton Pump Inhibitor (PPI) therapy versus those who fully responded to it**  
R. Dickman, M. Boaz, S. Aizic, R. Gingold-Belfer, A. Sperber, R. Fass, Y. Niv, Israel, USA
- 185 Short term treatment of achalasia by dark chocolate**  
Y. Ron, R. Dekel, N. Hershkovits, V. Motin, M. Rosenberg, E. Santo, Z. Halpern, Israel
- 186 Use of GpH-MII/pH for the evaluation of GERD in patients with refractory symptoms. How to optimize the PPI treatment?**  
O. Teramoto, S. Sobrino, J.-C. Soto, J.-A. Vargas, A. Gollas, J.-C. Lopez, M.-E. Hernández, A. Orozco, Mexico
- 187 The long-term outcome in patients with primary achalasia according to the balloon dilatation or intrasphincteric botulinum toxin injection**  
H.-E. Jung, J. S. Lee, J. O. Kim, S. J. Hong, T. H. Lee, H. G. Kim, S. R. Jeon, Republic of Korea

**PS-13 Poster Session**

12:30–14:30 Foyer Sala Magenta

**Clinical session: Stomach: Clinical**

Discussants: M. Camilleri, USA

R. Cuomo, Italy

C. Tosetti, Italy

- 189 Digestive, cognitive and hedonistic responses to meal ingestion**  
C. Malagelada Prats, S. Mendez, A. Accarino, L. Molne, J.-R. Malagelada, F. Azpiroz, Spain
- 190 Gastroparesis: An emerging epidemic**  
S. Parasa, A. R. Mahankali Sridhar, K. Olden, USA
- 191 A psychological status analysis in patients with functional dyspepsia**  
J. Bochkareva, Russia
- 192 Effects of RM-131 in healthy volunteers and type 2 diabetics with documented delayed gastric emptying: Pharmacokinetics and pharmacodynamics**  
M. Camilleri, A. Shin, I. Busciglio, D. Burton, S. A. Smith, A. Vella, A. R. Zinsmeister, E. Stoner, P. Noonan, USA
- 193 Use of erythromycin and related macrolides for the treatment of gastroparesis: Systematic review**  
D. T. Wijeratne, N. Wijeratne, P. S. Shah, J. Beyene, W. Paterson, Canada

**PS-14 Poster Session**

12:30–14:30 Foyer Sala Magenta

**Clinical session: Small bowel: Clinical**

Discussants: F. Azpiroz, Spain

R. Cogliandro, Italy

A. Smout, The Netherlands

- Mitochondropathy: A rare case of selective enteric myopathy**  
V. Stanghellini, R. d'Alessandro, R. Cogliandro, C. Frisoni, R. Rinaldi, V. Gabusi, I. Pareo, A. Fucili, A. Antonucci, G. Barbara, R. De Giorgio, R. Corinaldesi, Italy
- 197 High prevalence of carbohydrate malabsorption in patients with unclear abdominal discomfort**  
M. Goebel-Stengel, A. Stengel, M. Schmidtman, I. van der Voort, H. Mönnikes, Germany

- 198** **Diagnosis of enteric dysmotility: Are manometric disturbances predicable of histopathological findings?**  
A. M. Accarino Garaventa, R. De Giorgio, R. Cogliandro, C. Malagelada, A. Gori, J. R. Malagelada, V. Stanghellini, F. Azpiroz, Spain, Italy
- 199** **Impaired gastrointestinal motility in a novel cluster of patients with familial mediterranean fever**  
P. Portincasa, L. Bonfrate, V. Ruggiero, G. Scaccianoce, G. Palasciano, Italy
- 200** **Neuroradiological and neurometabolic characterisation of CIPO patients**  
C. Tonon, R. Rinaldi, L. L. Gramegna, M. Amadori, M. L. Valentino, G. Cenacchi, R. Liguori, L. Pironi, V. Stanghellini, R. Lodi, R. De Giorgio, Italy
- 201** **An epidemiologic survey of chronic intestinal pseudo-obstruction (CIPO) and evaluation of the newly proposed diagnostic criteria**  
H. Ohkubo, E. Yamada, E. Sakai, T. Higurashi, Y. Sekino, H. Iida, H. Endo, H. Takahashi, M. Inamori, A. Nakajima, Japan
- 202** **Morphological differences in jejunum mucosa between patients with IBS and healthy controls**  
G. Mohammadian-Kermani, A. Dlugosz, G. Morgan, B. Veress, G. Lindberg, Sweden
- 203** **The clinical characteristics and natural history of colonic pseudo-obstruction in Korea: Based on nationwide multicenter database**  
K.-W. Jung, K.-J. Lee, H.-J. Kim, N.-Y. Kim, Y.-H. Yoon, C.-I. Sohn, J.-E. Shin, Y.-K. Cho, S.-J. Hong, H.-K. Jung, K.-S. Park, Republic of Korea
- 206** **Upregulation of wide dynamic range afferent pathways in hypersensitive patients with Irritable Bowel Syndrome (IBS): A role for psychosocial factors?**  
C. Grinsvall, H. Tornblom, L. van Oudenhove, J. Tack, M. Simrén, Sweden, Belgium
- 207** **Ileocolorectal inflammation and psychopathological status in patients with diarrhea-predominant functional bowel disorders**  
R. Cantarini, E. S. Corazziari, A. Marcheggiano, A. Covotta, C. Iannoni, D. Badiali, P. Nadia, D. Piacentino, M. Biondi, Italy
- 208** **Regional grey matter volume in right Brodmann's Area 40 correlates with symptom severity and GI specific anxiety in patients with Irritable Bowel Syndrome (IBS)**  
C. Grinsvall, F. Kurth, M. Ljungberg, C. Ashe-McNalley, M. Elam, E. Mayer, M. Simrén, Sweden, USA
- 209** **Altered white matter integrity in Irritable Bowel Syndrome (IBS)**  
K. Tillisch, B. Ellingson, E. Mayer, C. Ashe-McNalley, J. Labus, USA
- 210** **Cookie Test: An easy, reliable cheap alternative method for measuring of colonic transit time**  
R. Vardar, N. Gulsen Unal, N. Ozkutuk, S. Bor, Turkey
- 211** **Gastrointestinal transit patterns from nuclear transit scintigraphy (NTS) of paediatric chronic constipation**  
B. Southwell, Y. I. Yik, D. J. Cook, D. M. Veysey, C. F. Tudball, B. S. King, K. A. Morris, T. M. Cain, J. M. Hutson, Australia, Malaysia
- 212** **Symptomatic spectrums of chronic constipation: Multi-centered stratified clinical study in China**  
X. Fang, J. Zhang, J. Gao, S. Liu, Y. Xiao, J. She, L. Zhu, X. Hou, Z. Li, P. Hu, M. Ke, China
- 213** **Increased number of double positive CD3+ CD8+ CD4+ lamina propria T lymphocyte in gut mucosa of post infectious IBS patients compared to healthy controls**  
J. Sundin, R. Brummer, E. Hultgren-Hörnquist, I. Rangel, Sweden
- 214** **Effects of linaclotide on abdominal and bowel symptoms over the first seven days of treatment in patients with Irritable Bowel Syndrome (IBS) with constipation**  
L. Chang, A. Lembo, S. Shiff, J. Shao, B. Lavins, K. Shi, H. Schneier, M. Currie, J. Johnston, USA

PS-15

Poster Session

12:30–14:30

Foyer Sala Magenta

**Clinical session: Large bowel: Clinical**

Discussants: M. Bellini, Italy  
W. Chey, USA  
M. Simrén, Sweden

**204** **Characterization of bowel habit in IBS patients using the Bristol Stool Form Scale**

E. Almquist, D. Guyonnet, H. Törnblom, L. van Oudenhove, J. Tack, M. Simrén, Sweden, France, Belgium

**205** **The clinical course of postinfectious Irritable Bowel Syndrome (IBS) after shigellosis: A 10-year follow-up study**

Y.-H. Youn, S.-Y. Park, C.-I. Park, H.-C. Lim, J.-H. Kim, H.-J. Park, S.-I. Lee, Republic of Korea

## Poster Presentations – Friday, 7 September 2012

- |     |   | PS-16   | Poster Session  |
|-----|---|---|---|
| 215 | <p><b>A pooled analysis of two phase 3 trials to determine the effects of linaclotide treatment on patient-reported ratings of change for symptoms of Irritable Bowel Syndrome with Constipation (IBS-C)</b><br/>G. Locke, W. Chey, C. Kurtz, R. Carson, M. Baird, M. Currie, H. Schneier, J. Johnston, USA</p>                     | 12:30–14:30   | Foyer Sala Magenta  |
| 216 | <p><b>Management of pediatric patients with refractory constipation who fail cecostomy</b><br/>S. Bonilla, A. Flores, B. Orkin, W. Chwals, C.-C. Jackson, B. Gilchrist, USA</p>   | <p><b>Clinical session: Anorectal: Clinical</b><br/>Discussants: G. Basileisco, Italy<br/>G. Bazzocchi, Italy<br/>S. Rao, USA</p> |   |
| 217 | <p><b>Factor analyses of patient-reported outcome measures in Irritable Bowel Syndrome with Constipation (IBS-C): Results from two randomized, double-blind, placebo-controlled phase 3 trials of linaclotide</b><br/>V. S. L. Williams, L. M. Nelson, R. T. Carson, M. J. Baird, C. D. Coon, S. E. Fehnel, J. M. Johnston, USA</p> | 222   | <p><b>External Anal Sphincter (EAS) muscle morphology reassessed using Ultrasound (US), Magnetic Resonance Imaging (MRI) and Diffusion Tensor Imaging (DTI)</b><br/>V. Bhargava, R. Mittal, M. Ledgerwood, S. Sinha, USA</p>                            |
| 218 | <p><b>Home-based transcutaneous electrical stimulation (TES) improved symptoms and reduced laxative use in children with slow-transit constipation (STC)</b><br/>B. Southwell, Y. I. Yik, K. A. Ismail, J. M. Hutson, Australia, Malaysia</p>   | 223   | <p><b>Distensibility of the anal canal in patients with systemic sclerosis: A study with the functional lumen imaging probe</b><br/>L. Fynne, F. Luft, H. Gregersen, S. Buntzen, L. Lundbye, F. Lundager, S. Laurberg, K. Krogh, Denmark, China</p>     |
| 219 | <p><b>Laparoscopically assisted subtotal colectomy for slow transit constipation</b><br/>X. Cao, J. Jiang, J. Suo, China</p>  | 224   | <p><b>Evaluation of anorectal function in healthy adults with 3-D high definition manometry (HDAR-3D)</b><br/>E. Coss-Adame, M. Nguyen, K. Tantiphlachiva, J. Valestin, K. Meduri, S. Rao, USA</p>  |
| 220 | <p><b>A pooled analysis of two phase 3 trials assessing the percentage of days linaclotide improved abdominal symptoms and stool frequency in patients with IBS-C</b><br/>S. Rao, L. Chang, X. Hao, B. Lavins, S. Shiff, X. Cao, H. Schneier, M. Currie, J. Johnston, USA</p>   | 225   | <p><b>Do IBS patients without rectal hypersensitivity adapt to repeated aversive rectal distensions?</b><br/>M. Larsson, K. Tillisch, E. Mayer, B. Naliboff, M. Ström, M. Engström, S. Walter, Sweden, USA</p>  |
| 221 | <p><b>Multidisciplinary management of chronic pediatric abdominal pain: Initial single center experience</b><br/>R. Sanghavi, A. Farrow-Gillespie, A. Haag, G. Noble, USA</p>   | 226   | <p><b>Assessment of obstructive defecation by high resolution anorectal manometry compared to magnetic resonance defecography</b><br/>H. Heinrich, M. Fox, M. Sauter, D. Weishaupt, W. Schwizer, M. Fried, H. Fruehauf, Switzerland, United Kingdom</p> |
|     |   | 228   | <p><b>Prevalence and risk factors of fecal incontinence in male gulf-war veterans</b><br/>A. Tuteja, N. Talley, M. Samore, G. Stoddard, N. Verne, USA, Australia</p>  |

- 229** **Prospective comparison of balloon expulsion, anorectal manometry and evacuation proctography for the diagnosis of evacuatory dysfunction**  
S. Palit, N. Thin, C. Knowles, S. M. Scott, P. J. Lunniss, United Kingdom
- 230** **The spinal anal-external sphincter continence reflex**  
P. Broens, F. Penninckx, E. Heineman, J. Boix Ochoa, The Netherlands, Belgium, Spain
- 231** **Obesity does not impact the prevalence of dyssynergic defecation in adults with chronic constipation**  
R. Saad, J. Baker, W. Chey, USA
- 232** **New high-resolution anorectal manometry parameters for predicting balloon expulsion in patients with chronic constipation on the basis of a three-dimensional integrated pressurized volume of spatiotemporal plot**  
K.-W. Jung, S.-Y. Joo, S.-J. Myung, D.-H. Yang, J.-W. Kim, K.-J. Kim, B.-D. Ye, J.-S. Byeon, H.-Y. Jung, S.-K. Yang, J.-H. Kim, Republic of Korea
- 233** **Ano-rectal Dysfunction (ARD) in Functional Bowel Disorders (FBD): A systematic bio-mechanical evaluation–Clinical pilot study**  
P. Basu, T. Nair, L. Ang, S. Farhat, M. Jafri, S. Foustin, N. James Shah, USA
- 234** **Normative anatomy of anal sphincter detected by 3D-endoanal ultrasonography: A study in Thai population**  
K. Tantiphlachiva, J. Pattanaarun, C. Sahakitrungruang, A. Rojanasakul, Thailand
- 235** **Prevalence of dyschezia in healthy infants 0 to 6 months**  
C. Boggio Marzet, M. T. Basaldua, Argentina
- 236** **Recto-anal manometry: Comparison between type 2 diabetics and healthy individuals**  
J. Xavier Jorge, C. Almeida, F. Delgado, M. Simoes, A. Coelho, A. Silva, Portugal
- 237** **Medium term outcomes following sacral nerve stimulation in patients with severe rectal evacuatory dysfunction allied to rectal hyposensitivity**  
N. Thin, S. M. Scott, C. Knowles, United Kingdom
- 238** **Top down medical treatment for dis-impaction of patients in emergency department setting**  
J. Jordan-Ely, J. Hutson, B. Southwell, Australia

**PS-17**

**Poster Session**

12:30–14:30

Foyer Sala Magenta

**Clinical session: Miscellaneous**

Discussants: E. Corazziari, Italy  
A. Fikree, United Kingdom  
J. Tack, Belgium

- 239** **Autonomic dysfunction and gastrointestinal symptoms in the joint hypermobility syndrome**  
A. Fikree, R. Aktar, R. Grahame, Q. Aziz, United Kingdom
- 240** **Clinical dimensions of bloating in functional gastrointestinal disorders**  
J.-I. Ryu, H.-K. Jung, E.-M. Song, H.-I. Kim, S.-Y. Yoon, K.-J. Kwon, S.-E. Kim, K.-N. Shim, S.-A. Jung, S. Y. Yi, J.-S. Kim, Republic of Korea
- 241** **Patients with chronic constipation attending outpatient clinics in India and China may present as functional dyspepsia and receive inappropriate treatment**  
K.-A. Gwee, N. Pratap, M. Chen, L. Xiong, K. Siah, U. Ghoshal, W. Whitehead, Singapore, India, China, USA
- 242** **The effect of acute axos colonic fermentation on the interdigestive upper gi-tract motility and hunger ratings in man**  
E. Scarpellini, E. Deloosse, R. Vos, I. Francois, J. Delcour, W. Broekaert, K. Verbecke, J. Tack, Belgium
- 243** **Cerebral cortical excitability is abnormal in patients with painful chronic pancreatitis**  
S. Schou Olesen, T. M. Hansen, C. Graversen, M. Valeriani, A. Drewes, Denmark, Italy
- 244** **Maladaptive brain changes contribute to gastrointestinal symptoms in diabetes mellitus patients**  
C. Brock, C. Graversen, J. B. Frøkjær, E. Softeland, M. Valeriani, A. M. Drewes, Denmark, Norway, Italy
- 245** **Gastrointestinal dysfunctions in Parkinson's Disease and other parkinsonian disorders**  
C.-M. Shin, J.-Y. Lee, T.-J. Kim, D.-H. Kim, N. Kim, Republic of Korea

- 246** **Overlapping upper and lower gastrointestinal symptoms suggestive of additional functional gastrointestinal disorders in IBS: Rome II versus Rome III**  
M. Simrén, M. Sheikhi, I. Posserud, H. Törnblom, Sweden
- 247** **Generalized transit delay, hypomotility, and absent gut reflex activity with spinal cord injury: Comparison to controls and slow transit constipation using wireless motility capsules**  
W. Hasler, J. Baker, G. Rodriguez, USA
- 248** **Impairment of gastrointestinal motility and evacuation in patients with liver cirrhosis of different aetiologies**  
G. Gusmanova, Russia
- 250** **Change in functional bowel symptoms after prostatectomy: A case-control study**  
A. Toghiani, P. Adibi, H. Mazdak, A. Derakhshande, Islamic Republic of Iran
- 251** **Influence of immunosuppressive therapy on gastrointestinal transit after renal transplantation evaluated by AC Biosusceptometry**  
M. Americo, M. d. Carmo B. Teixeira, I. R. Wanderley, O. Baffa, J. R. A. Miranda, R. B. Oliveira, L. A. Corá, Brazil
- 251a** **High frequency of overlap between functional dyspepsia, irritable bowel syndrome and overactive bladder**  
H. Suzuki, J. Matsuzaki, Y. Fukushima, K. Hirata, S. Fukuhara, S. Okada, T. Hibi, Japan

**PS-18** **Poster Session**

12:30–14:30 Foyer Sala Magenta

**Basic and translational session: Glial and enteric neurons in health and disease**

Discussants: N. Spencer, Australia  
S. Srinivasan, USA  
H. Young, Australia

- 252 Identification of purinergic signaling in the esophageal enteric neurons**  
H. Dong, Y. Jiang, J.-W. Kim, R. K. Mittal, USA
- 254 TRPV4 channel activation stimulates enteric glia in the mouse colonic myenteric plexus**  
B. Gulbransen, C. Altier, K. Sharkey, Canada
- 255 Distribution of TMEM100, a novel marker of the mouse and human enteric nervous system**  
G. Farrugia, S. Eisenman, S. Gibbons, R. D. Singh, M. Sarr, M. Kendrick, D. Larson, E. Dozois, K. R. Shen, USA
- 256 High fat diet induces murine colonic neuronal cell loss and enteric dysmotility: Role of macroautophagy and ER-stress**  
B. Nezami, S. M. Mwangi, S. Srinivasan, USA
- 257 Mechanisms involved in the therapeutic properties of mesenchymal stem cells on colon damages: Application to radiotherapy side effects**  
A. Semont, N. Mathieu, C. Durand, C. Demarquay, M. Benderitter, France
- 258 Endothelial and neural stem cells in the gut: A successful team**  
S. Schrenk, A. Schuster, T. Schwab, M. W. Laschke, M. D. Menger, K.-H. Schäfer, Germany
- 259 Wnt pathway in post-natal enteric nervous system**  
T. Bertalot, A. Schuster, R. Di Liddo, T. Schwab, R. Medert, P. Reischmann, J. Apfel, S. Rajendran, P. P. Parnigotto, M. T. Conconi, O. Müller, K.-H. Schäfer, Italy, Germany
- 260 Myenteric intrinsic primary afferent neuron function correlates with altered motility in aged mice**  
W. Kunze, B. Wang, Y.-K. Mao, A. Stanis, Y. Wu, Canada
- 261 Myogenic and neurogenic properties of three independent motor patterns in the whole rat colon**  
J. Chen, Q. Zhang, K. Li, Y. Yu, J. D. Huizinga, China

- 262 Evidence for negative effects of Ethanol upon the enteric nervous system during pregnancy and in the regenerating postnatal gut**  
K.-H. Schäfer, P. Kolbe, J. Schnepf, T. Schwab, Germany
- 263 Age-related change in cholinergic and nitrergic signaling in the mouse rectum**  
B. Patel, S. Fidalgo, R. Ranson, J. Saffrey, M. Yeoman, United Kingdom
- 264 Fast (kHz) imaging with improved sensitivity and spatial resolution reveals stepwise Ca<sup>2+</sup> increases in individual varicosities**  
M. Martens, P. van den Berghe, Belgium
- 265 Enteric glia mediate ion transport abnormalities in mouse colon during colitis**  
S. MacEachern, W. Mac Naughton, K. Sharkey, Canada
- 266 Effect of oxytocin on the chemical sensitivity of the mysenteric afferent fibers in rats in vitro**  
J. Li, B. Xue, K. Liu, C. Liu, China
- 267 Expression of PrPC in glial cells of the cat intestinal tract**  
C. Sorteni, M. De Angeli, P. Clavenzani, R. De Giorgio, C. Johnson, R. Chiocchetti, Italy, USA
- 268 Edema-induced PAK activation negatively regulates MLC phosphorylation and inhibits intestinal motility**  
K. Uray, J. Chu, R. Hetz, A. Olsen, C. Cox, USA
- 269 The influence amyloid- $\beta$  Protein upon Enteric Neurons- A possible diagnostic tool for early diagnosis in Alzheimer's disease**  
A. Braun, M. Bischof, M. Grimm, T. Hartmann, S. Krämer, A. Schönfeld, K.-H. Schäfer, Germany
- 270 Spatial analysis of the enteric nervous system of GFP-Nestin expressing mice**  
D. Grundmann, F. Markwart, K.-H. Schäfer, Germany
- 271 Effects of oral administration of rotenone on the enteric nervous system**  
M. Tasselli, S. Paillusson, T. Chaumette, P. Aubert, S. Hunot, M. Neunlist, P. Derkinderen, France
- 272 Differential regulation of 5-HT and neurotensin expression in rat colonic mucosal enteroendocrine cells by brain derived neurotrophic factor**  
J. Grider, Z. Bradley, C.-M. Xia, K. Murthy, J. Kuemmerle, L. Qiao, USA

- 273 Evolution of the postnatal phenotypical maturation of glial cells in the enteric nervous system**  
F. Cossais, M. Boudaud, E. Suply, R. Soret, P. de Vries, M. Neunlist, France
- 274 Glutathione promotes myenteric neuroprotection in the jejunum of diabetic rats**  
T. R. Santos Soares, C. Hermes Uliana, J. Nelisis Zanoni, Brazil
- 275 Myenteric neuron numbers are maintained in aging mouse distal colon**  
P. Gamage, R. N. Ranson, M. S. Yeoman, B. A. Patel, M. J. Saffrey, United Kingdom
- 276 Changes in the enteric stem cell niche of children with Hirschsprung's disease**  
C. Hagl, M. Theisen, E. Wink, K.-H. Schäfer, Germany
- 282 Esophageal biomechanical properties as indicator of impaired gastrointestinal function in diabetes patients**  
J. B. Frøkjær, C. Brock, J. Brun, M. Simrén, G. Dimcevski, A. M. Drewes, H. Gregersen, Denmark, Sweden, Norway
- 283 Principles of analysis of spatio-temporal mechanical events during neurogenic and myogenic activity in rabbit colon**  
L. Wiklendt, P. Dinning, J. Arkwright, S. Brookes, M. Costa, Australia
- 284 Intestinal motility and nematode-induced protection against development of murine model of type 1 diabetes (T1D)**  
L. Notari, R. Sun, S. Yan, J. Bohl, A. Zhao, J. F. Urban, Jr., T. Shea-Donohue, USA
- 285 The anorectal defecation reflex**  
P. Broens, F. Penninckx, E. Heineman, J. Boix Ochoa, The Netherlands, Belgium, Spain
- 286 Release of  $\beta$ -NAD and ATP upon activation of myenteric 5-HT<sub>3</sub> or nicotinic acetylcholine receptors in murine and primate colons**  
V. Mutafova-Yambolieva, L. Durnin, K. Sanders, USA
- 287 Properties of cholinergic and non-cholinergic submucosal neurons along the mouse colon**  
J. P. Pei Foong, J. C. Bornstein, Australia
- 288  $\beta$ -NAD and not ATP acting via P2Y<sub>1</sub> purinoreceptors is the purine that mediates inhibitory motor responses in the colon**  
S. Ward, S.-J. Hwang, P. Blair, L. Durnin, V. Mutafova-Yambolieva, K. Sanders, USA
- 289 Effect of acute ethanol exposure on the electrical and mechanical activities in the small intestine**  
W. Lammers, S. Subramanya, B. Stephen, K. H. Schäfer, United Arab Emirates, Germany
- 290 Mechano-sensory properties of hypertrophic intestine following chronic obstruction**  
J. Zhao, J. Yang, D. Grundy, H. Gregersen, Denmark, United Kingdom
- 291 Decrease in serotonin-induced tachykinin signaling can account for age: Related reductions in the amplitude and the frequency of Colonic Migrating Motor Complexes (CMMCS) in the murine distal colon**  
B. Patel, M. Yeoman, S. Fidalgo, P. Dhulia, I. Girdlestone, R. Ranson, J. Saffrey, United Kingdom
- 277 Ischemia/ reperfusion damage in human intestine involves inflammation and changed expression of nitric oxide synthases**  
T. Frugier, M. Nikfarjam, A. Testro, G. Venables, L. Pontell, R. Jones, J. B. Furness, Australia
- 278 Post-junctional cell types involved in inhibitory neuromuscular transmission in murine internal anal sphincter**  
C. Cobine, K. Sanders, S. Ward, K. Keef, USA
- 279 Analysis of changes in the cells of the mouse internal anal sphincter during aging**  
M. J. Saffrey, C. Wang, P. Gamage, H. Davies, F. Colyer, M. Houghton, B. Patel, M. Yeoman, R. Ranson, United Kingdom
- 280 The anal rectalfilling sensation receptor**  
P. Broens, F. Penninckx, E. Heineman, J. Boix Ochoa, The Netherlands, Belgium, Spain
- 281 Age-related changes in nitrergic and purinergic signalling in the mouse internal anal sphincter**  
B. Patel, S. Fidalgo, R. Ranson, J. Saffrey, M. Yeoman, United Kingdom

PS-19

Poster Session

12:30–14:30

Foyer Sala Magenta

**Basic and translational session: Small intestine, colon and anorectum: Physiology and pathophysiology**

Discussants: J. Chen, USA

T. Smith, USA



**292 Role of prostaglandins in the colonic motility in rat colon**

S.-I. Karaki, Y. Iizuka, R. Tanaka, A. Kuwahara, Japan

**293 Impacts of fungal alkaloids on intestinal motility in the isolated rat colon**

J. Dalziel, S. Finch, New Zealand

**294 The motility and biomechanical changes of rat small intestine after acute mesentery ischemia**

J. Zhao, H. Gregersen, Denmark

**295 Age-related changes in colonic motility, faecal output and the properties of faecal pellets in the mouse**

B. Patel, N. Patel, S. Fidalgo, R. Ranson, J. Saffery, M. Yeoman, United Kingdom

**296 Recto-anal manometry: Comparison between type 2 diabetics with normal or high morning glycemia**

J. Xavier Jorge, C. Almeida, F. Delgado, M. Simões, A. Silva, Á. Coelho, Portugal

**297 Study of the biological effects of single-walled carbon nanotubes (SWNTs) on rabbit small intestine**

L. Grasa Lopez, M. T. Martínez, A. Ansón Casaos, R. Albendea, C. Vergara, S. Gonzalo, M. D. Murillo, Spain

**298 Recto-anal manometric characteristics of healthy individuals according to their age and gender**

J. Xavier Jorge, C. Borges, C. Almeida, F. Delgado, M. Simoes, A. Silva, A. Coelho, Portugal

**299 Intestinal contractility is not altered by guanylate cyclase C activation or by non cell-permeant cGMP**

S. Jacobson, I. Silos-Santiago, C. Kurtz, M. Currie, USA

**PS-20**

**Poster Session**

12:30–14:30

Foyer Sala Magenta

**Basic and translational session: Appetite regulation, satiety, obesity and nutrition**

Discussants: L. Bueno, France

T. Shea-Donohue, USA

**300 Altered nutrient sensing in the transient receptor potential vanilloid 1 knockout mouse**

Y. Zhang, D. Grundy, United Kingdom

**301 Consequences of a diet-induced obesity on the plasticity of the Pancreatic Intrinsic Nervous System and the nervous control of pancreatic endocrine secretion in young mice**

S. Blat, M.-B. Saade, R. Moriez, P. Aubert, M. Neunlist, France

**302 Glucose modulates glutamate release from vagal afferent terminals via a protein kinase C (PKC)-dependent pathway**

K. Browning, USA

**303 MCH induced food intake in the NTS increases in obesity coinciding with increased MCH expression in vagal afferent neurons**

G. de Lartigue, H. Raybould, USA

**304 Glucagon-like Peptide-2 and mucosal changes induced by high fat diet in mouse small intestine**

S. Baldassano, A. Amato, A. Rotondo, A. Bellanca, F. Cappello, F. Rappa, F. Mulè, Italy

**305 Roux-en Y gastric bypass surgery-induced changes in enteroendocrine cell abundance and cytokine gene expression**

H.-R. Berthoud, M. Mumphrey, L. Patterson, H. Zheng, USA

**306 Weight regulating hormones correlate with parameters of the intestinal serotonergic system in obese individuals**

Y. Ritze, C. Mayr, B. Ernst, M. Thurnheer, B. Schultes, S. C. Bischoff, Germany

**307 The study of GLP-1R expression in enteric nerve system of type 2 diabetic rat after duodenal-jejunal bypass surgery**

M.-H. Qu, J.-M. Xu, C.-Y. Fang, T.-K. Zhao, H.-L. Han, China

**308 The effect of motilin on gastric contraction using a newly developed diabetes mellitus model of the house musk shrew (*Suncus murinus*)**

K. Nishina, T. Yoshinari, S. Aizawa, I. Sakata, T. Sakai, Japan

- 309** **Effects of kaolinite ingestion on regulation by leptin of intrinsic nitrergic neurons activity in jejunum and proximal colon in rats**  
F. Angel, F. Voinot, C. Fischer, C. Schmidt, C.-H. Malbert, France
- 310** **Palonosetron a serotonin-receptor-3-antagonist improves obesity-associated fatty liver disease in mice**  
Y. Ritze, V. Ehrmann, G. Bárdos, S. C. Bischoff, Germany

### PS-21

### Poster Session

12:30–14:30

Foyer Sala Magenta

#### Basic and translational session: Gastric physiology, pathophysiology

Discussants: K. Bitar, USA  
K. Keef, USA

- 311** **Decreased vagal cholinergic pathway and altered gastric monoaminergic system contribute to the gastroparesis in the rats with 6-OHDA injection of substantia nigra**  
L. Zheng, R. Fan, J. Song, J. Zhu, China
- 312** **Insulin-like Growth Factor 1 (IGF1) encodes memory of past food intake via pleiotropic effects on the gastric neuromuscular apparatus**  
T. Ordog, Y. Toyomasu, Y. Hayashi, A. Lorincz, M. Bardsley, L. Popko, D. Young, S. Gibbons, D. Linden, J. Szurszewski, G. Farrugia, USA
- 313** **Relaxation induced by guanosine in mouse stomach**  
F. Mulè, M. G. Zizzo, A. Amato, F. Maiorana, N. Belluardo, R. Serio, Italy
- 314** **P2Y1 purinoreceptors are essential for inhibitory neurotransmission in the murine gastric antrum**  
S. Ward, L. Shaylor, R. Delaney, P. Blair, S.-J. Hwang, K. Sanders, USA
- 315** **Relaxation induced by menthol on mouse gastric tone: Analysis of action mechanism**  
A. Amato, R. Serio, F. Mulè, Italy
- 316** **The effects of progesterone on gastric motility in pregnant rats: A bradygastric response**  
M. Americo, Y. Sinzato, D. Damasceno, J. Matos, R. Oliveira, L. Corá, J. R. Miranda, Brazil
- 317** **A simple method for measuring gastric emptying in pre-weaned rats in natural free-feeding conditions**  
M. Steven, R. Carachi, United Kingdom
- 318** **The effect of the GLP-1 receptor agonist, exendin-4 on blood glucose levels, emesis and gastric myoelectric activity, in the ferret**  
Z. Lu, N. Percie du Sert, G. Lin, D. T. Wai Yew, P. Andrews, J. Rudd, Hong Kong SAR, China, United Kingdom
- 319** **Dyspepsia and diet**  
I. Chirila, V. L. Drug, F. D. Petrariu, O. Barboi, M. Anwar, Romania
- 320** **Morphological and functional aspects of experimental toxic gastritis induced by enteral impact of lignite charcoal**  
I. Putintseva, A. A. Savchenko, E. A. Shinkarenko, Russia

### PS-22

### Poster Session

12:30–14:30

Foyer Sala Magenta

#### Basic and translational session: Probiotics, pharmacotherapy, pharmacogenomics and pharmacology

Discussants: A. Page, Australia  
C. Sternini, USA

- 321** **Piperine improves swallow response of patients with neurogenic dysphagia**  
L. Rofes, D. Álvarez, V. Arreola, F. Casamitjana, A. Enrique, P. Clavé, Spain
- 322** **Lactobacillus casei DG decreases LPS-induced nitric oxide and enteroglial-S100B secretion in human intestinal biopsies**  
F. Turco, G. Sarnelli, I. Palumbo, T. Di Maio, A. D'Alessandro, R. Cuomo, Italy
- 323** **Association between functional dyspepsia and neuronal nitric oxide synthase gene polymorphism**  
M.-G. Choi, J.-M. Park, M.-K. Baeg, C.-H. Lim, Y.-K. Cho, Republic of Korea
- 324** **Effect of clomipramine on abdominal pain and brain activation in response to colorectal distention**  
S. Fukudo, N. Itoh, M. Kanazawa, S. Watanabe, T. Hamaguchi, J. Morishita, M. Kano, M. Tashiro, Japan
- 325** **Effects of erythromycin on esophageal contractility in healthy volunteers: An advanced muscle contraction analysis**  
A. L. Krarup, D. Liao, F. H. Lundager, H. Gregersen, A. M. Drewes, Denmark

- |     |   | PS-23  | Poster Session  |
|-----|---|--|---|
| 326 | <b>Elucidation of the mechanisms underlying the potential usefulness of STW 5 in reflux esophagitis</b><br>H. Abdel-Aziz, G. Ulrich-Merzenich, O. Kelber, D. Weiser, M. T. Khayyal, Germany, Egypt  | 12:30–14:30  | Foyer Sala Magenta  |
| 327 | <b>Terminal restriction fragment length polymorphism analysis of the diversity of fecal microbiota in patients with Irritable Bowel Syndrome (IBS)</b><br>C.-H. Choi, B.-K. Cha, S.-K. Chang, B.-C. Kim, S.-A. Jung, K.-J. Kim, Republic of Korea | <b>Basic and translational session: Neuroimmune mechanisms</b><br>Discussants: S. Vanner, Canada<br>N. Vergnolle, France |   |
| 328 | <b>Mechanisms of action of Otilonium Bromide (OB) in human cultured smooth muscle cells and rat colonic strips</b><br>M. Jimenez Farrerons, M. Martinez-Cutillas, V. Gil, N. Mañé, D. Gallego, Spain  | 334  | <b>Attenuation of colitis by acetylcholinesterase inhibitor is mediated via the vagus nerve and the dendritic cells</b><br>J.-E. Ghia, H. Ji, B. Labis, M. Rabbi, V. Pavlov, K. J. Tracey, Canada, USA  |
| 329 | <b>Selective agonists of somatostatin receptor subtype 1 or 2 prevent visceral hyperalgesia induced by activation of peripheral CRF1 receptors with cortagine in mice</b><br>M. Larauche, A. Mulak, M. Million, J. Rivier, Y. Tache, USA, Poland  | 335  | <b>The influence of the immune environment and miRNA expression on colonic stem cell behavior in a parasitic infection</b><br>T. Vanuytsel, L. Notari, I. Farrance, S. Yan, A. Zhao, R. Sun, J. Urban, J. Tack, T. Shea-Donohue, Belgium, USA                                 |
| 330 | <b>Plecanatide, a superior analog of uroguanylin, as an oral drug candidate for treatment of gastrointestinal functional disorders and diseases</b><br>K. Shailubhai, A. Brancale, G. Jacob, USA, United Kingdom                                  | 336  | <b>HSV-1 infection of enteric nervous system evokes inflammation-mediated myenteric plexus injury</b><br>P. Brun, M. C. Giron, M. Quesari, L. Spagnol, G. Palù, I. Castagliuolo, Italy  |
| 331 | <b>The cannabinoid agonist WIN 55,212-2 at a low, analgesic dose does not alter gastrointestinal motor function in type 2 diabetic rats</b><br>G. Vera Pasamontes, A. E. Lopez, P. A. Cabezos, M. I. Martin Fontelles, R. Abalo, Spain            | 337  | <b>Modulation of the inflammatory response by mas-related gene receptor D during intestinal schistosomiasis</b><br>L. R. Avula, R. Buckinx, K. Alpaerts, D. Adriaensen, L. v. Nassauw, J.-P. Timmermans, Belgium  |
| 332 | <b>Secretory action of individual extracts of the herbal medicine STW 5 in human intestine</b><br>S. Allam, D. Krueger, O. Kelber, I. E. Demir, G. Ceyhan, F. Zeller, M. Schemann, Germany  | 338  | <b>Mucosal immune biological markers in patients with Irritable Bowel Syndrome (IBS)</b><br>C. Cremon, L. Zecchi, R. Barbaro, M. Fiorentino, A. Altimari, G. Carini, R. De Giorgio, R. Corinaldesi, V. Stanghellini, G. Barbara, Italy  |
| 333 | <b>A model of in vitro perfused mouse intestine suitable for pharmacological testing of antiinflammatory drugs</b><br>D. Schreiber, G. Erkel, K.-H. Schäfer, Germany  | 339  | <b>Altered unfolded protein response in inflamed biobreeding rats</b><br>T. Masaoka, S. Salim Rasoel, C. Vanormelingen, P. van den Berghe, J. Tack, Belgium   |
|     |   | 340  | <b>Cyclooxygenase inhibitors modulate pro-fibrotic signalling mediated by transforming growth factor beta in experimental colitis</b><br>R. Colucci, C. Ippolito, L. Antonioli, L. Mattii, M. Fornai, C. Blandizzi, N. Bernardini, Italy                                      |
|     |   | 341  | <b>Immunomodulatory role of Nociceptin/Orphanin FQ – NOP receptor system in a rat model of experimental colitis</b><br>C. Petrella, C. Giuli, H. Eutamene, C. Cartier, M. Leveque, A. Bedini, S. Spampinato, L. Bueno, V. Theodorou, M. Broccardo, S. Agostini, Italy, France |

- 342 Mast cell and enterochromaffin cell distribution in the aged human bowel**  
Y. Yu, I. Adam, P. Kitsanta, A. Shorthouse, D. Grundy, W. Jiang, United Kingdom
- 343 Enteric nervous system activity inhibits TNF $\alpha$  but potentiates IL6 productions induced by LPS in a p38 and ERK independent manner**  
S. Coquenlorge, J. Chevalier, E. Duchalais, F. Cossais, M. Rolli-Derkinderen, M. Neunlist, France
- 344 Involvement of COX-2 derived from cerebral perivascular macrophages in the early gastrointestinal motor disturbances induced by Lipopolysaccharide (LPS) in sheep**  
M. A. Plaza Carrion, A. Gimeno, M. Castro, L. F. Martínez, E. Latorre, L. Grasa, A. I. Alcalde, J. E. Mesonero, M. P. Arruebo, M. D. Murillo, Spain, France
- 345 Modulation of inflammation in IBD: Alpha7nAChR expression and role of nicotine**  
F. Galeazzi, G. Girardin, A. Grillo, P. Brun, R. D'Incà, M. Codato, M. Martinato, M. C. Giron, E. Savarino, G. C. Sturniolo, I. Castagliuolo, Italy
- 346 Muscular and nerve-mediated responses associated with inflammation in human gallbladder**  
M. A. Maselli, P. Trisolini, A. Ignazzi, M. L. Caruso, R. Laviano, D. Lorusso, F. Pezzolla, F. Crema, F. de Ponti, Italy

PS-24

Poster Session

12:30–14:30

Foyer Sala Magenta

**Basic and translational session: Brain-gut-axis and stress mechanisms**

Discussants: Y. Taché, USA  
J. Wiley, USA

- 347 Acute psychological stress induces an immediate naloxone-independent visceral analgesia to colorectal distension in mice**  
M. Larauche, H. Duboc, A. Mulak, Y. Tache, USA, Poland
- 348 Strain differences in visceral nociception, anxiety and depression-like behaviour: Responses of 12 mouse strains**  
R. D. Moloney, T. G. Dinan, J. F. Cryan, Ireland

- 349 Changes in  $\alpha$ - and  $\beta$ -adrenergic neurotransmission during postoperative ileus in rat**  
M. S. Kasparek, B. Goetz, B. Stoklas, P. Benhaqi, M. E. Kreis, Germany

PS-25

Poster Session

12:30–14:30

Foyer Sala Magenta

**Basic and translational session: Extrinsic neural pathways, hypersensitivity and pain**

Discussants: Y. Taché, USA  
J. Wiley, USA

- 350 Perivagal capsaicin alters the morphological, physiological and pharmacological characteristics of vagal motoneurons**  
R. A. Travagli, K. N. Browning, G. M. Holmes, E. Swartz, USA
- 351 Reduced sensory neuron activity in the aged mouse**  
J. Donovan, D. Grundy, United Kingdom
- 352 Developmental origins of functional dyspepsia like gastric hypersensitivity in rats**  
S. Sarna, J. Winston, USA
- 353 Electrical vagus nerve stimulation reduces plasma cholesterol and triglycerides levels in rats**  
K. Gil, A. Bugajski, M. Kurnik, P. Thor, Poland
- 354 Isomalto-oligosaccharides reverts visceral hypersensitivity and intestinal epithelial damage induced by water avoidance stress in rats**  
H. Xin, W. Wang, X. Fang, L. Zhu, G. Fei, H. Dou, F. Liu, D. Huang, X. Sun, M. Ke, China
- 355 Oxytocin hyperpolarizes cultured duodenum myenteric intrinsic primary afferent neurons by opening BKCa channels through IP3 pathway**  
T. Che, H. Sun, J. Li, X. Yu, D. Zhu, B. Xue, K. Liu, M. Zhang, W. Kunze, C. Liu, China, Canada
- 356 Characterisation of a radio-induced colorectal chronic pain model**  
C. Durand, H. Eutamène, R. Daudin, N. Mathieu, C. Demarquay, M. Benderitter, S. Pezet, A. Sémont, France
- 357 5HT2B receptor mRNA expression throughout the brain-gut axis is unaltered in the maternally separated rat**  
V. D. Felice, T. G. Dinan, J. F. Cryan, S. M. O'Mahony, Ireland

- 358** **Effect of DA-9701, new prokinetic, on colonic function of spinal cord injured rat model**  
Y.-S. Kim, H.-S. Ryu, M.-C. Joo, J.-T. Oh, E.-S. Choi, S.-C. Choi, M.-Y. Lee, Republic of Korea
- 359** **Changes in the modulation of spinal pain processing are related to severity in irritable bowel syndrome**  
J.-M. Sabate, X. Moisset, P. Jouet, H. Duboc, B. Coffin, D. Bouhassira, France
- 360** **Analysis of CGRPergic, nitrergic, and VIPergic myenteric innervation after 2% L-glutamine supplementation in the ileum of diabetic rats**  
R. Pereira Caldeira, D. R Linden, J. Nelisis Zanoni, Brazil, USA

**PS-26** **Poster Session**

12:30–14:30 Foyer Sala Magenta

**Basic and translational session: Microbiota in health and disease**

Discussants: L. Bueno, France  
T. Shea-Donohue, USA

- 361** **Age-associated remodeling of the intestinal epithelial barrier**  
L. Tran, B. Greenwood-Van Meerveld, USA
- 362** **The microbiome-gut-brain axis as a regulator of serotonergic neurotransmission and behaviour**  
G. Clarke, S. Grenham, P. Scully, P. Fitzgerald, R. Moloney, F. Shanahan, T. Dinan, J. Cryan, Ireland
- 364** **A novel mechanism for barrier dysfunction in mice on a high-fat diet**  
L. Stenman, R. Holma, R. Korpela, Finland
- 365** **Role of toll like receptors 2 and 4 in the serotonin-induced responses in mouse ileum and colon**  
L. Grasa Lopez, M. D. Murillo, A. I. Alcalde, J. Pardo, E. Latorre, J. E. Mesonero, M. P. Arruebo, M. A. Plaza, S. Gonzalo, Spain

**PS-27** **Poster Session**

12:30–14:30 Foyer Sala Magenta

**Basic and translational session: Signalling: Hormones, neurotransmitters, receptors, channels, secondary messengers**

Discussants: G. Mawe, USA  
S. Srinivasan, USA

- 366** **Endogenous H2S produced by CSE selectively modulates central cholinergic synaptic input in mouse superior mesenteric ganglion**  
L. Sha, D. Linden, G. Farrugia, J. Szurszewski, USA
- 367** **NO in the gastrointestinal tract: What it takes to relax**  
B. Lies, D. Groneberg, P. Koenig, D. Saur, A. Friebe, Germany
- 368** **Mechanisms underlying motility in the aged gut: A role for altered serotonin signalling processes**  
C. Keating, S. Kean, L. Nocchi, D. Grundy, United Kingdom
- 369** **Dynamics of purinergic fast inhibitory junction potentials in the human colon**  
N. Mañé, M. Martínez-Cutillas, V. Gil, P. Clavé, D. Gallego, M. Jiménez, Spain
- 370** **Glucose malabsorption in critical illness: A molecular defect in intestinal sweet taste sensing?**  
R. Young, A. Deane, B. Chia, M. Horowitz, R. Christopher, Australia
- 371** **Functional characterisation of human and mouse proximal colon as a site of nutrient sensing**  
M. Peiris, A. Masding, D. Bulmer, C. Knowles, L. A. Blackshaw, United Kingdom
- 372** **Expression of duodenal fatty acid receptors in humans is inversely related to body mass index**  
T. Little, R. Ott, R. Young, N. Isaacs, C. Rayner, M. Horowitz, C. Feinle-Bisset, Australia
- 373** **Distinct effects of mechanical stretch on gene expression of PGE synthase and PGF synthase in lumen dilation**  
Y.-M. Lin, F. Li, C. Wu, S. K. Sarna, X.-Z. Shi, USA
- 374** **Mast cells are involved in post-inflammatory visceral hypersensitivity and exert their effects partially through histamine H1 receptors**  
A. Deiteren, J. d. Man, T. Moreels, P. Pelckmans, B. d. Winter, Belgium

- 375 Adenosine modulates its own release through activation of A2A receptors on myenteric cholinergic nerve terminals of the rat ileum**  
M. Duarte-Araújo, P. Marques, C. Vieira, I. Silva, M. T. Magalhães-Cardoso, P. Correia-de-Sá, Portugal
- 376 The CB1-selective cannabinoid antagonist AM251 partially prevents gastrointestinal dysmotility induced by the antitumoral drug vincristine in the rat**  
G. Vera Pasamontes, A. E. Lopez, M. Martinez Villaluenga, P. A. Cabezos, M. I. Martin Fontelles, R. Abalo, Spain
- 378 Endocrine and smooth muscle responses of the bitter agonist, denatonium benzoate, in the stomach**  
B. Avau, T. Thijs, J. Laermans, J. Tack, I. Depoortere, Belgium
- 379 Selective gene expression by rat small and large bowel epithelia**  
M. Goebel-Stengel, A. Stengel, N. Lambrecht, G. Sachs, Germany, USA
- 380 Relationship between purinergic neurotransmission through P2Y1 receptors and the contractile effect of Orphanin FQ**  
M. Martin Ibanez, E. Tapia, P. Vergara, Spain
- 384 Intracellular Ca<sup>2+</sup> release from Endoplasmic Reticulum (ER) regulates slow wave currents and pacemaker activity of interstitial cells of Cajal**  
M. Zhu, S. D. Koh, K. Sanders, USA
- 385 Inhibitory neurotransmission to circular smooth muscle in Crohn's ileitis**  
W. Paterson, Y. Zhang, D. Hurlbut, S. Lourenssen, M. Blennerhassett, Canada
- 386 Development of a biophysically based model of the anoctamin 1 calcium-activated chloride channel**  
R. Lees-Green, L. Cheng, J. Sneyd, New Zealand
- 387 Functional roles of interstitial cells of Cajal in aganglionic/hypoganglionic intestines**  
N. Shimojima, T. Shimizu, H. Ishihama, T. Fujimura, M. Kano, H. Tomita, F. Takasato, Y. Nakamura, A. Fujino, K. Hoshino, T. Kuroda, Japan
- 388 Interstitial cells of Cajal and their association with enteric nerves in human gastro-duodenal junction**  
X. Wang, P. Bercik, L. Ruo, J. Ramsay, T. Aziz, Z. Muqtadir, S. Orr, M. Pistilli, J. D. Huizinga, Canada
- 389 Colonic interstitial cells of Cajal associated with the myenteric plexus harbour ion channels regulated by excitatory neurotransmitters**  
G. Wright, S. P. Parsons, J. D. Huizinga, Canada
- 390 'Real-time' high-resolution slow wave mapping using a novel analysis platform**  
G. O'Grady, S. Bull, L. Cheng, New Zealand
- 391 A virtual model of human gastric slow wave dysrhythmias**  
P. Du, G. O'Grady, L. Cheng, New Zealand
- 392 Slow wave conduction disturbances proximal and distal to ileal end-to-end anastomosis following ileocystoplasty**  
W. Lammers, F. Hammad, J. Rietbergen, B. Stephen, L. Lubbad, United Arab Emirates, The Netherlands
- 381 Voltage-gated sodium selective ion channel NaV1.5 mechanosensitivity is modulated by local anesthetics**  
G. Farrugia, A. Beyder, P. Strege, C. Bernard, USA
- 382 Restoring the density of interstitial cells of Cajal of the jejunum from diabetic rats after supplementation with quercetin**  
J. Nelisis Zanoni, D. Linden, S. J. Gibbons, C. Nonis Zucoloto, F. C. Vieira Frez, Brazil, USA
- 383 IL-10 reverses delayed gastric emptying, slow wave abnormalities and smooth muscle membrane potential gradient changes in diabetic NOD/ShiLtJ mice**  
G. Farrugia, K.-M. Choi, L. Sha, A. Beyder, P.-J. Verhulst, J. Mason, A. Bauer, T. Ordog, D. Linden, J. Szurszewski, P. Kashyap, S. Gibbons, USA

PS-28

Poster Session

12:30–14:30

Foyer Sala Magenta

**Basic and translational session: Smooth muscle and ICC in health and disease**

Discussants: T. Ordog, USA  
K. Sanders, USA

**PS-29** **Poster Session**

12:30–14:30 Foyer Sala Magenta

**Clinical session: Esophagus: Clinical**

Discussants: V. Annese, Italy  
R. Penagini, Italy

- 393 Kinetics of transient hiatus hernia during transient lower esophageal sphincter relaxations and swallows in healthy volunteers**  
Y.-Y. Lee, J. Whiting, E. Robertson, M. Derakhshan, A. Wirz, P. Connolly, K. McColl, United Kingdom
- 394 Postprandial changes in autonomic nervous system and frequency of transient lower oesophageal sphincter relaxation (TLOSR)**  
P. Kuo, I. Bravi, U. Marreddy, Q. Aziz, D. Sifrim, United Kingdom
- 395 Swallowing alterations after Traumatic Brain Injury (TBI) without brainstem involvement**  
L. Candeloro, D. Badiali, I. Biviano, E. S. Corazziari, F. I. Habib, Italy
- 396 Esophageal high resolution manometry (HRM) in achalasia: Evaluation of the classification in a French multicentric cohort**  
S. Roman, F. Zerbib, L. Quneherve, H. Clermidy, S. Bruley des Varannes, F. Mion, France
- 397 Esophageal motility abnormalities in patients with laryngo-pharyngeal symptoms: Preliminary reports from a study conducted with high resolution manometry and oropharyngeal pH monitoring**  
C. Vailati, G. Mazzoleni, S. Bondi, M. Bussi, P. A. Testoni, S. Passaretti, Italy
- 398 Assessment with the Functional Luminal Imaging Probe distinguishes oesophago-gastric junction distensibility in Barrett's oesophagus patients with hiatal hernias from healthy controls – A pilot study**  
C. Lottrup, J. Liu, P. Ejstrup, M. Ostapiuk, B. P. McMahon, A. M. Drewes, Denmark, China
- 399 Can intraluminal multichannel pH-impedance monitoring be limited to 3h: Comparison between 24h ambulatory and 3h post-prandial recording**  
G. Gourcerol, E. Verin, N. Bertiaux-Vandaele, A. M. Leroi, P. Ducrotté, France
- 400 Secretin level modulates the esophageal motor activity in type 2 diabetes mellitus**  
J. Xavier Jorge, C. Almeida, F. Delgado, M. Simões, Á. Coelho, A. Silva, Portugal
- 401 Value of a rapid drink challenge test in the diagnosis of esophageal motility disorders**  
I. Marin Fernandes, J. Contxa, J. Serra, Spain
- 402 Impact of bolus consistency and position on high-resolution manometric findings in patients**  
A. Ouyang, T. Yasin, F. Meng, D. Bethards, USA, China
- 403 Multiple rapid swallows using high resolution esophageal manometry for motor disorders of the esophagus**  
A. Sankineni, N. George, M. Harrison, H. Parkman, USA
- 404 Esophageal motor disorders and gastroesophageal reflux disease in lung transplanted patients**  
M. Di Stefano, F. Meloni, C. Mengoli, T. Oggionni, M. Bergonzi, R. Di Domenica, A. M. Zanaboni, E. Miceli, E. Pagani, L. Maurizio, G. R. Corazza, Italy
- 405 Lack of seasonal variation in the incidence of eosinophilic esophagitis**  
R. Schey, N. Frederickson, J. Go, J. Valestin, M. Redd, Y.-J. Lee, USA
- 406 Can the 3-dimensional animation plot be a 3rd diagnostic tool in high-resolution manometry?: Comparison to conventional linear and spatiotemporal plot**  
J.-H. Park, K.-W. Jung, S.-J. Myung, H.-Y. Jung, J. Kim, E. j. Chung, K. D. Choi, D.-H. Yang, Republic of Korea, People's Republic of Korea
- 407 Oesophagogastric junction relaxation in chagasic achalasia**  
R. Oliveira, G. Mota, G. Carmo, Brazil
- 408 The role of high gastroesophageal reflux monitoring in diagnosing of ear, nose, and throat (ENT) manifestations of GERD**  
S. Morozov, V. Isakov, L. Gibadullina, A. Epanchitseva, Y. Kucheryavy, Russia
- 409 Swallow induced acid and non-acid Gastroesophageal Refluxes (GERs) in patients who were suspected of GERD: The role of hiatal hernia**  
T. Patchararakul, C. Kriengkirakul, S. Gonlanchavit, Thailand
- 410 Use of impedance monitoring for the diagnosis of secondary oesophageal peristalsis impairment in patients with gastroesophageal reflux disease**  
A. Ledovskaya, O. A. Sablin, Russia

- 411 Preoperative esophageal manometry as a predictor of patient outcome following adjustable gastric banding**  
O. Landon-Cardinal, J. Côté-Daigneault, P. Leclerc, M. Bouin, Canada
- 412 Esophageal disorders and psychological disadaptation in patients with globus sensation**  
O. Yanova, L. B. Lazebnik, V. A. Kim, L. D. Firsova, D. S. Bordin, Russia
- 413 Effects of high-resolution esophageal manometry on oxygen saturation and hemodynamic function**  
V. Garrigues, V. Ortiz Bellver, G. Benavent, C. Vinaixa, B. Rodriguez, C. Castellano, J. Ponce, Spain
- 414 The influence of positional changes on upper esophageal sphincter pressure using high resolution esophageal manometry**  
R. Schey, N. Frederickson, S. Hashmi, J. Go, J. Valestin, USA
- 415 Factors associated with dysphagia symptoms in patients who were suspected of GERD: A high resolution esophageal manometry study**  
C. Kriengkirakul, T. Patcharatrakul, S. Gonlachanvit, Thailand
- 416 Is the reflux characteristic to provoke heartburn, chest pain and cough different? The study using multichannel impedance-pH monitoring in patient with positive symptom index**  
S. J. Cho, E. J. Kang, J. S. Lee, T. H. Lee, S. J. Hong, Y. Jung, H. H. Im, J. O. Kim, Republic of Korea
- 417 Diagnostic thresholds of proximal pH monitoring for ENT manifestations of GERD**  
S. Morozov, V. Isakov, L. Gibadullina, A. Epanchintseva, Y. Kucheryavyy, Russia
- 418 Esophageal contractile activity might re-appear after myotomy for achalasia**  
S. Roman, P. J. Kahrilas, F. Mion, T. Nealis, N. Soper, G. Poncet, F. Nicodeme, J. Pandolfino, France, USA
- 419 Transition zone defect as a negative prognosticator of the response to proton pump inhibitor treatment in patients with globus sensation**  
H. Lee, J.-C. Park, S.-K. Shin, S.-K. Lee, Y.-C. Lee, Republic of Korea
- 420 Different effects of esomeprazol on gastric and gastro-oesophageal junction PH**  
V. Boecxstaens, K. Blondeau, J. Tack, Belgium
- 421 Optimization of treatment efficacy for patients with various forms of gastroesophageal reflux disease**  
A. Osadchuk, M. G. Palushkina, I. L. Davydkin, Russia
- 422 The Gerd-Q is a useful tool for evaluating the patients' satisfaction and identifying the patients with "unmet medical needs"**  
S. Okada, H. Suzuki, J. Matsuzaki, S. Fukuhara, K. Hirata, T. Hibi, Japan
- 423 Otorhinolaryngological manifestations of gastroesophageal reflux disease and efficacy of their treatment**  
J. Bochkareva, A. V. Fedin, Russia
- 424 What factor associates with health-related quality of life in patients with gastroesophageal reflux disease under treatment with PPI?**  
T. Kamiya, M. Shikano, M. Tanaka, M. Ebi, T. Mizoshita, Y. Mori, S. Tanida, H. Kataoka, T. Joh, Japan
- 425 Correlation between the new oropharyngeal pH-monitoring with the Restech® probe for laryngo-pharyngeal reflux and responsiveness to anti-secretive therapy**  
C. Vailati, G. Mazzoleni, S. Bondi, M. Bussi, P. A. Testoni, S. Passaretti, Italy
- 426 Treatment of halitosis: Results of itopride hydrochloride therapy**  
O. Salamakhina, Russia
- 427 On the choice of prokinetic in the complex treatment of gastroesophageal reflux disease**  
A. Koshel, A. V. Karpovich, S. S. Klovov, T. V. Dibina, Russia



**PS-30** **Poster Session**

12:30–14:30 Foyer Sala Magenta

**Clinical session: Stomach: Clinical**

Discussants: M. Camilleri, USA  
R. Cuomo, Italy  
C. Tosetti, Italy

- 428 Development and validation of a mixed liquid/solid test meal for scintigraphic assessment of gastric function in clinical practice**  
H. Parker, E. Tucker, C. Hoad, N. Hudders, C. Costigan, L. Marciani, A. Perkins, E. Blackshaw, P. Gowland, M. Fox, United Kingdom
- 429 Performance characteristics of scintigraphic measurement of gastric emptying of solids in health**  
M. Camilleri, J. Iturrino, A. E. Bharucha, D. Burton, A. R. Zinsmeister, USA
- 430 Gastroparesis in the joint hypermobility syndrome**  
A. Fikree, C. O'Brien, R. Aktar, J. Jafari, N. Schaub, P. Kuo, D. Sifrim, Q. Aziz, United Kingdom
- 431 Prevalence and outcomes of gastroparesis among hospitalized patients in US**  
S. Parasa, A. R. Mahankali Sridhar, K. Olden, USA
- 432 Gallbladder and gastric motility in obese newborns, preadolescents and adults**  
A. Di Ciaula, P. Portincasa, D. Q.-H. Wang, Italy, USA
- 433 Functional dyspepsia syndrome is extremely frequent across the eating disorders**  
A. Santonicola, P. Iovino, S. Gallotta, A. Fortunato, L. Pellegrini, C. Ciacci, Italy
- 434 Comparison of Continuous Breath Test (CBT) versus Gastric Scintigraphy (GS) for Gastric Emptying Rate (GER) measurement in healthy and dyspeptic subjects**  
R. Dickman, T. Zilper, A. Steinmetz, L. Pakanaev, Y. Ron, H. Bernstine, D. Groshar, Y. Niv, H. Shirin, Israel
- 435 Upper functional gastrointestinal disorders in young adults**  
A. Toghiani, P. Adibi, E. Behzad, M. Shafieeyan, Islamic Republic of Iran
- 436 Upper gastrointestinal symptoms after laparoscopic sleeve gastrectomy for morbid obesity**  
M. Carabotti, G. Silecchia, L. Piretta, F. Leonetti, D. Capoccia, F. Coccia, F. Greco, E. Corazziari, C. Severi, Italy
- 437 Comparison of a breath test versus gastric scintigraphy for the measurement of gastric retention in healthy subjects**  
R. Dickman, T. Tsadok Perets, T. Zilper, A. Steinmetz, L. Pakanaev, Y. Ron, H. Bernstine, D. Groshar, Y. Niv, H. Shirin, Israel
- 438 Chronic transcutaneous electroacupuncture ameliorates dyspeptic symptoms in patients with diabetic gastroparesis: A placebo-controlled multicenter clinical trial using a newly developed microstimulator**  
J. Chen, I. Sarosiek, R. McCallum, T. Abell, Y. Sun, N. Moody, J. Chen, J. Yin, USA
- 439 Transcutaneous electrical stimulation (TES) therapy improves gastric emptying in children with slow-transit constipation – Implication for non-invasive treatment for delayed gastric emptying or gastroparesis**  
B. Southwell, Y. I. Yik, D. J. Cook, D. M. Veysey, B. S. King, K. A. Morris, C. F. Tudball, T. M. Cain, A. G. Catto-Smith, J. M. Hutson, Australia, Malaysia
- 440 Effects of the amino acid, glutamine, on gastric emptying and the glycaemic response to oral glucose in healthy young subjects**  
D. Gentilcore, S. Ahmad, K. Jones, J. Greenfield, D. Samocho-Bonet, R. McKinnon, Australia
- 442 Identification of novel domperidone metabolites in gastroparesis patients' plasma and urine**  
A. Youssef, M. Pathikonda, U. Argikar, H. Parkman, S. Nagar, USA
- 443 Improvement in the quality of life related to reflux symptoms after Helicobacter pylori eradication therapy**  
K. Hirata, H. Suzuki, J. Matsuzaki, T. Masaoka, Y. Saito, T. Nishizawa, E. Iwasaki, S. Fukuhara, S. Okada, T. Hibi, Japan
- 444 Alterations of body weight and hormones regulating food intake during a 1-year weight reduction program in obese outpatients**  
A. Stengel, A. Riedl, A. Ahnis, A. Figura, T. Hofmann, U. Elbelt, P. Kobelt, B. Klapp, Germany

## Poster Presentations – Saturday, 8 September 2012

### PS-31 Poster Session

12:30–14:30 Foyer Sala Magenta

#### Clinical session: Small bowel: Clinical

Discussants: F. Azpiroz, Spain  
R. Cogliandro, Italy  
A. Smout, The Netherlands

- 446 Gastrointestinal motility involvement of systemic sclerosis in Chilean patients**  
A. M. Madrid, L. Soto, G. Landskron, C. Defilippi, M. Cuchacovic, C. Defilippi, Chile
- 447 Duodenal mucosal lymphocyte subgroups in patients with persisting abdominal symptoms after Giardia lamblia infection**  
T. Hausken, V. Dizdar, K. Hanevik, O. D. Lærum, O. H. Gilja, J. G. Hatlebakk, N. Langeland, Norway
- 448 Impact of gastric electrical stimulation on duodenal motility**  
G. Gourcerol, E. Huet, A. M. Leroi, P. Ducrotté, France
- 449 Use of ambulatory simultaneous measurements of small bowel intra-luminal impedance and pressure to predict the efficacy of migration motor complex phase III**  
E. Yazaki, J. Jafari, Q. Aziz, D. Sifrim, United Kingdom
- 450 Double dissociation between severe CIPO, mild neurological, but severe neuroradiological findings: Presentation of 6 cases of Mitochondrial Neurogastrointestinal Encephalomyopathy (MNGIE)**  
C. Tonon, R. De Giorgio, R. Rinaldi, D. N. Manners, C. La Morgia, C. Testa, G. Rizzo, E. Boschetti, F. Gaincola, V. Stanghellini, R. Lodi, Italy
- 451 Assessment of cine-MRI as a novel diagnostic modality for chronic intestinal pseudo-obstruction (CIPO)**  
H. Ohkubo, E. Yamada, E. Sakai, T. Higurashi, H. Iida, Y. Sekino, H. Endo, H. Takahashi, M. Inamori, A. Nakajima, Japan
- 452 Small bowel motility disorders in vagotomized patients**  
A. M. Madrid, S. Ledesma, G. Landskron, R. Wolff, V. Leon, J. P. Miranda, C. Defilippi, Chile
- 453 Natural course of adult patients with chronic intestinal pseudo-obstruction exhibiting transition zones in Korea**  
J.-W. Kim, S.-J. Myung, S.-J. Park, M.-Y. Do, K.-W. Jung, B.-D. Ye, J.-S. Byeon, S.-K. Yang, J.-H. Kim, Republic of Korea

- 454 Prevalence and clinicoepidemiological features of chronic intestinal pseudo-obstruction in Japan: Findings from a nationwide epidemiological survey**

H. Iida, O. Hidenori, H. Sato, A. Nakajima, Japan

### PS-32 Poster Session

12:30–14:30 Foyer Sala Magenta

#### Clinical session: Large bowel: Clinical

Discussants: M. Bellini, Italy  
W. Chey, USA  
M. Simrén, Sweden

- 455 Automated cross-correlation analysis of pan-colonic manometry data clearly differentiates healthy controls from patients with constipation**  
P. Dinning, L. Wiklendt, S. Mohammed, M. Scott, Australia, United Kingdom
- 456 24 hour assessment of pancolonic motor activity in health and disease using solid-state technology: Comparison with traditional water-perfused catheters**  
S. Mohammed, N. Zarate, S. Preston, P. Lunniss, P. Dinning, S. M. Scott, United Kingdom, Australia
- 457 An evaluation of neuropsychological performance in Irritable Bowel Syndrome (IBS): Relationship between altered visuo-spatial memory function, salivary cortisol levels and tryptophan metabolism along the kynurenine pathway**  
P. Kennedy, G. Clarke, A. O'Neill, C. O'Mahony, J. A. Groeger, E. M. Quigley, F. Shanahan, J. F. Cryan, T. G. Dinan, Ireland
- 459 Investigation of the efferent spinofugal axis by trans-lumbar and trans-sacral magnetic stimulation in Irritable Bowel Syndrome (IBS) and Interstitial Cystitis (IC)**  
E. Coss-Adame, J. Velestin, C. Bradley, K. Kreder, S. Rao, USA
- 460 The relationship between colonic breath methane excretion and IBS symptoms: The role of colonic methane production**  
M. Di Stefano, C. Mengoli, M. Bergonzi, A. M. Zanaboni, E. Miceli, E. Pagani, G. R. Corazza, Italy
- 461 Lack of any correlation among colonic transit time, bowel motions frequency and stool form in patients with Spinal Cord Injury**  
G. Bazzocchi, A. Avogadri, E. Poletti, Italy

- 462 Functional diarrhoea is the most frequent diagnosis in patients with chronic diarrhoea**  
P.-O. Stotzer, M. Simrén, Sweden
- 463 Impact of functional dyspepsia, GERD, depression and anxiety on patients with Irritable Bowel Syndrome (IBS)**  
C.-H. Choi, J.-W. Kim, Y.-S. Kim, H.-J. Kim, J.-H. Park, Y.-H. Yoon, H.-K. Jung, S.-K. Chang, Republic of Korea
- 464 Use of antibiotics during infancy and childhood and risk of recurrent abdominal pain**  
A. Uusijärvi, M. Simrén, J. Ludvigsson, M. Wickman, I. Kull, J. Alm, O. Olén, Sweden
- 465 Nutritional profile and fiber intake in children with functional gastrointestinal disorders related to constipation**  
C. Boggio Marzet, M. L. Deforel, S. Dozo, V. Schuster, Argentina
- 466 Postinfectious irritable bowel syndrome after traveller's diarrhoea: Incidence and risk factors**  
J. Schwille-Kiuntke, P. Zanger, C. Kasper, D. Weinmann, A. Rilck, P. Enck, Germany
- 467 Prevalence of irritable bowel syndrome during pregnancy trimesters**  
A. Toghiani, S. Riyahinejad, M. Farhang, A. Arjmandpour, A. Sobhani, R. Rafiei, P. Adibi, N. Adibi, Islamic Republic of Iran
- 468 Intestinal symptoms and psychological status determined the quality of life for patients with Irritable Bowel Syndrome with Diarrhea (IBS-D)**  
L. Zhu, D. Huang, X. Fang, M. Chang, W. Chen, H. Xin, L. Shi, T. Xu, M. Ke, China
- 469 Design of studies with combined pharmacodynamic and clinical endpoints for colonic motility disorders: Clinical and statistical considerations**  
A. R. Zinsmeister, D. Burton, M. Camilleri, USA
- 470 Effect of chronic chili ingestion on postprandial gastrointestinal symptoms and rectal sensation in diarrhea predominant Irritable Bowel Syndrome (IBS): A randomized double-blinded crossover study**  
S. Gonlachanvit, S. Aniwan, T. Patcharatrakul, Thailand
- 471 Psychometric evaluation of patient-reported outcome measures for assessing IBS-C symptom severity and change: Results from two randomized, double-blind, placebo-controlled phase 3 trials of linaclotide**  
R. T. Carson, L. M. Nelson, V. S. L. Williams, S. E. Fehnel, S. Tourkodimitris, M. J. Baird, J. M. Johnston, USA
- 472 Effect of a synbiotic preparation on stool consistency, intestinal transit time and gut microbiota in patients with severe functional constipation: A double blind controlled trial**  
G. Bazzocchi, S. Turrone, P. Brigidi, Italy
- 473 Effects of sinusoidal modulated current on large intestine motility**  
A. ShklyaeV, Y. Gorbunov, A. Pantyukhina, A. Bessonov, I. Malakhova, E. Korobov, Russia
- 474 Psychometric evaluation of patient-reported outcome measures for assessing chronic constipation symptom severity and change: Results from Phase 2b and Phase 3 trials of Linaclotide**  
L. M. Nelson, V. S. L. Williams, S. E. Fehnel, S. Tourkodimitris, M. J. Baird, R. T. Carson, J. M. Johnston, USA
- 475 Efficacy of combination therapy with osmotic laxatives and bifid triple viable for the elderly persons suffering non-organic constipation**  
J. Huang, H. Song, Y. Shen, China
- 476 Mediation analysis suggests that linaclotide has a direct effect on relief of abdominal pain independent of constipation improvement**  
J. E. MacDougall, D. P. MacKinnon, B. J. Lavins, A. J. Lembo, S. J. Shiff, H. A. Schneier, X. Hao, M. G. Currie, J. M. Johnston, USA
- 477 Factor analyses of chronic constipation patient-reported outcome measures: Results from phase 2b and phase 3 trials of linaclotide**  
L. M. Nelson, V. S. L. Williams, R. T. Carson, M. J. Baird, C. D. Coon, S. E. Fehnel, J. M. Johnston, USA

## Poster Presentations – Saturday, 8 September 2012

### PS-33 Poster Session

12:30–14:30 Foyer Sala Magenta

#### Clinical session: Anorectal: Clinical

Discussants: G. Basileisco, Italy  
G. Bazzocchi, Italy  
S. Rao, USA  
B. Salvioli, Italy

**478 What is a clinically significant rectocele in functional constipation?: Relationship between rectal sensitivity, compliance, post-defecatory residue and rectocele size**

L. Candeloro, I. Biviano, D. Badiali, F. I. Habib, E. S. Corazziari, Italy

**479 How accurate is computerized analysis versus an expert analysis for evaluating anorectal function using 3-D high definition anorectal manometry**

E. Coss-Adame, J. Valestin, S. Rao, USA

**480 Fecal incontinence in patients with IBS**

A. Bajor, P. Jerlstad, G. Ringström, M. Simrén, Sweden

**481 High resolution anorectal manometry in the diagnosis of pelvic floor dyssynergia**

L. Novais, Portugal

**482 Simplified saline continence test for evaluation of anorectal capacity: Technique and normative data**

K. Tantiphlachiva, C. Sahakitrungruang, J. Pattanaarun, A. Rojanasakul, Thailand

**483 Randomized trial of biofeedback or medical treatment for fecal incontinence**

E. Johansson, S. Walter, A. Ingemansson, A.-K. Ryn, O. Hallböök, Sweden

**484 Surgical correction does not improve dyssynergic defecation in patients with rectal prolapse**

S.-Y. Park, H.-S. Kim, Y.-E. Joo, J.-S. Rew, H.-S. Ki, C.-H. Jun, K.-J. Park, K.-H. Lee, Republic of Korea

**485 Transcutaneous tibial nerve stimulation in the treatment of faecal incontinence: A randomised trial**

A.-M. Leroi, L. Siproudhis, I. Etienney, H. Damon, F. Zerbib, G. Amarenco, V. Vitton, J. L. Faucheron, M. Queralto, France

**486 Does deep brain stimulation modify anorectal motility?: Result of a randomized cross-over study**

G. Gourcerol, S. Derrey, N. Chastan, D. Maltete, P. Freger, A. M. Leroi, J. Weber, France

**487 Effect of biofeedback therapy in irritable bowel syndrome patients with intractable constipation**  
O. Krapivnaia, S. Alexeenko, Russia

**488 Top down medical treatment for dis-impaction of patients in aged-care setting**  
J. Jordan-Ely, J. Hutson, B. Southwell, Australia

**489 Home electric stimulation for women with fecal incontinence: Effectiveness and predictors of outcome**  
R. Dickman, I. Lambort, N. Cohen-Zubary, S. Aizic, S. Levy, Israel

**489a Quality of perception of the desire to defaecate and viscerosomatic referral patterns differ between patients with chronic constipation and healthy subjects**

R. Burgell, E. Carrington, S. Mohammed, P. Lunniss, M. Scott, United Kingdom

### PS-34 Poster Session

12:30–14:30 Foyer Sala Magenta

#### Clinical session: Miscellaneous

Discussants: E. Corazziari, Italy  
J. Tack, Belgium

**490 Transcutaneous electrical acupuncture therapy for severe gastroparesis and constipation in a diabetic patient**

I. Sarosiek, A. Alvarez, Y. Sun, J. Chen, R. McCallum, USA

**491 Translation and validation of the ROME-III questionnaires for the diagnosis of functional gastrointestinal disorders in Korea**

K. H. Song, H.-K. Jung, B. R. Keum, B.-H. Min, Y. H. Youn, K. D. Choi, K. C. Huh, Republic of Korea

**492 Probiotics for prevention of radiation induced bowel disease: New findings and updated meta-analysis**

A. Hamad, K. Fragkos, A. Forbes, United Kingdom

**494 Image guided radiation therapy (IGRT) reduces gastrointestinal (GI) sequelae compared with external beam radiation therapy (EBRT) in patients with carcinoma of the prostate (CaP)**

A. Di Matteo, R. Botten, J. Butters, R. Holloway, E. Yeoh, Australia

**495 Level of Acetylcholine and serotonin in patients with chronic pancreatitis and pain after eating**

L. Lazebnik, O. Knayzev, L. Vinokourova, I. Trubitsyna, E. Dubtsova, Russia

**496 Correlation between gastrointestinal**

- symptoms(GI) with clinical factors and the treatment with Metformin in Diabetes Type 2 (type2DM) patients**  
R. L. Salerno Soares, R. A. Cruz Filho, B. Parada, I. Bromonschenkel Brandão, A. Queiroz Micuci, C. Dias Gonçalves, Brazil
- 497 Does a westernised diet predispose to the development of FGIDs?**  
K. T. Ho Siah, R. K. Wong, K. Y. Ho, J. Y. Y. Wong, S. C. Fan, K.-A. Gwee, Singapore
- 498 Gastrointestinal contraction patterns and segmental transit times evaluated with ambulatory capsule tracking**  
A. M. Haase, T. Gregersen, L. Fynne, V. Schlageter, M. Demierre, P. Kucera, S. M. Scott, S. Laurberg, K. Krogh, Denmark, Switzerland, United Kingdom
- 499 Biliary tract motility in patients with chronic hepatitis C**  
E. Plotnikova, M. A. Shamray, M. V. Krasnova, E. A. Baranova, K. A. Krasnov, Russia
- 500 Cortical brain activation in response to somatic pain in symptomatic diverticular disease**  
J. Smith, L. Marciani, D. Humes, J. Scholefield, P. Gowland, S. Francis, R. Spiller, United Kingdom
- 003 A new rat model for enteric neurodegeneration**  
B. Ohlsson, E. Sand, U. Voss, O. Hammar, R. Alm, G. Nordin Fredrikson, E. Ekblad, Sweden
- 004 Irritable bowel syndrome impairs psychological well-being and gastrointestinal symptoms in patients with microscopic colitis**  
B. Roth, B. Ohlsson, Sweden
- 005 Use of a more specific inhibitor, T16Ainh-A, confirms a key role for Ano1 in the regulation of ICC proliferation**  
G. Farrugia, A. Mazzone, S. Eisenman, P. Strege, Z. Yao, T. Ordog, S. Gibbons, USA
- 006 Epidemiology of Chronic Constipation in Germany in 2012 (GECCO)**  
P. Enck, J. Schwille-Kiuntke, F. Junne, A. Joseph, J. Dibello, P. Hodgkins, J. Leinert, M. Smid, T. Koehler, Germany, Switzerland, USA
- 007 Effect of hypothermia on human colonic smooth muscle contractility**  
A. Altomare, M. P. L. Guarino, A. Gizzi, S. Cocca, C. Cherubini, R. Alloni, S. Filippi, M. Cicala, Italy
- 008 Exposure of human colonic mucosa to Lipopolysaccharide induces impairment of muscle cell contractility: Role of oxidative stress and mucosal translocation**  
A. Altomare, M. P. L. Guarino, R. Sessa, S. Cocca, M. Di Pietro, G. Schiavoni, R. Alloni, C. Severi, M. Cicala, Italy

PS-35

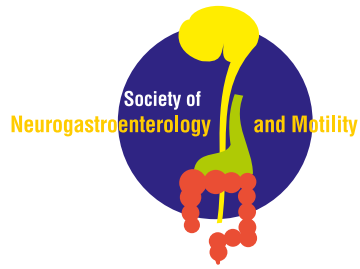
Poster Session

12:30–14:30

Foyer Sala Magenta

**Late breaking abstracts**

- 001 Expression and hierarchic role of serotonin receptors in the control of the guinea pig distal colon peristalsis**  
B. Balestra, R. Vicini, O. Pastoris, M. Costa, V. Stanghellini, G. Barbara, R. De Giorgio, M. Tonini, Italy, Australia
- 002 Impact of late anorectal dysfunction on quality of life after radiotherapy for prostate cancer**  
W. Hopman, R. Krol, R. J. Smeenk, E. van Lin, The Netherlands



## **Gut Microbiota & Health Section within ESNM**

Gut microbiota, and their role on human health and disease is a booming area of research, presenting a new paradigm full of opportunities for medical and food applications.

To raise recognition and expand knowledge & interest in this fast moving field, recently the Gut Microbiota & Health Section (within the European Society for Neurogastroenterology & Motility, ESNM) was created.

The purpose is to raise recognition and expand knowledge & interest in the field of Gut Microbiota & Health.

To achieve this, the section will:

- ▶ Stimulate & encourage research in the field of Gut Microbiota & Health
- ▶ Provide a forum for dissemination of novel discoveries
- ▶ Promote science & educational activities to widely disseminate the knowledge in this field

All Members of the ESNM are highly encouraged to become a member of the newly created GMFH Section to stay up-to-date on the latest findings in the field of Gut Microbiota & Health.

Please go to [www.esnm.eu](http://www.esnm.eu) and fill out the membership application form.

## **Gut Microbiota for Health Experts Exchange: An open participatory web platform**

The Section launched a web platform, called Gut Microbiota For Health Experts Exchange, to exchange news on links between Gut Microbiota and Health. It comprises selected summaries of the best content from a variety of quality sources (including links to the full articles), ranging from scientific literature and traditional media to social media run by professionals, private companies or governments.

This platform allows experts from all over the world to exchange information about the current status of research on the gut microbiota, including its effects on digestive and immune systems.

To access and fully benefit from all these tools, create your own profile and register on: [www.gutmicrobiotaforhealth.com](http://www.gutmicrobiotaforhealth.com)

UNITED EUROPEAN  
GASTROENTEROLOGY

# ueg education



UEG e-learning is a unique, universal resource for information and education in gastrointestinal disease, treatment and care.

## The universal source of knowledge in gastroenterology

Here, on a single website, anyone in the world can access over 8,000 documents and more than 600 multimedia items. More content is being added all the time – including presentations, podcasts and videos, such as endoscopy and surgical cases. There is also a growing range of accredited e-courses in gastroenterology and hepatology.

The UEG e-learning library includes all abstracts and materials from UEG, our member societies, and UEG Week, the annual meeting that attracts over 14,000 people from across the world. The site is also a platform for fostering collaboration and interaction, and we encourage all our users to contribute.

Discover a world of knowledge and learning at your fingertips. Register free now at [www.e-learning.ueg.eu](http://www.e-learning.ueg.eu)

[www.twitter.com/my\\_ueg](http://www.twitter.com/my_ueg)  
[www.facebook.com/myueg](http://www.facebook.com/myueg)



## Congress Information

### Congress Venue

Nuovo Polo Congressuale  
Palazzo dei Congressi and Sala Maggiore  
Piazza della Costituzione N°4/a  
40128 Bologna, ITALY  
► [www.bolognacongressi.it](http://www.bolognacongressi.it)

### Congress and Exhibition Office



CPO HANSER SERVICE GmbH  
Office Berlin  
Paulsborner Str. 44  
14193 Berlin, GERMANY  
Phone: +49 – 30 – 300 669-0  
Fax: +49 – 30 – 305 73 91  
Email: [ngm2012@cpo-hanser.de](mailto:ngm2012@cpo-hanser.de)

### Congress Registration Counter

All congress materials and documentations are available at the congress registration counter. The congress counter will be located in the Sala Maggiore at the Nuovo Polo Congressuale.

#### Opening hours

Thursday, 6 September 2012	11:00 – 20:00
Friday, 7 September 2012	06:30 – 19:30
Saturday, 8 September 2012	06:30 – 19:30

During these opening hours the conference counter can be reached at:

Phone: +39–051–63 75 160

### Registration Fees

Category	EUR
Member of ESNM or ANMS	600
Non-Member of ESNM or ANMS	650
Resident, Post-Doctoral Fellow, Trainee*	300
Accompanying Person	100

\* Resident, Post-Doctoral Fellows and Trainees must present a formal declaration from the head of department or responsible for the training programme.

Registration Fee for NGM Delegates, Residents, Post-Doctoral Fellows and Trainees includes:

- Admission to all scientific sessions (Thursday – Saturday, 6 – 8 September 2012)
- Admission to poster exhibition and technical exhibition
- Congress materials (delegate bag, final programme, etc.)
- Coffee breaks (Thursday – Saturday, 6 – 8 September 2012) and lunches on Friday and Saturday
- Public transportation pass (Thursday – Saturday, 6 – 8 September 2012)
- Admission to the Welcome Reception (Thursday, 6 September 2012)

Registration Fee for Accompanying Persons includes:

- Admission to the Welcome Reception (Thursday, 6 September 2012)
- Half-day Bologna sightseeing tour
- Public transportation pass (Thursday – Saturday, 6 – 8 September 2012)

### On-site Registration

On-site registration will be processed on a first-come, first-served basis. Priority will be given to pre-registered delegates. Depending on the number of on-site registered delegates, availability of congress material may be limited.

### Name Badges

Participants are asked to wear their name badge at all times during the congress including the Welcome Reception.

The colours of the name badges have the following significance:

Faculty:	orange
Participants:	blue
Accompanying persons:	pink
Exhibitors:	green
Staff:	red

### Congress Information System

For the Joint International Neurogastroenterology and Motility Meeting, the web based Congress Information System CO CONGRESS ONLINE® has been installed:

► [www.ngm2012.org](http://www.ngm2012.org)

The delegates can set up and print out their personal congress programme schedule. CO CONGRESS ONLINE® provides:

- Programme by day
- Programme by format
- Programme search
- List of participants (who is who)
- List of exhibitors and sponsors
- General congress information
- Private mailbox



### Congress Language

The official language of the Joint International Neurogastroenterology and Motility Meeting is English.

### Certificate of Attendance

A certificate of attendance or CME certificate will be handed out upon request at the registration counter.

### Abstract Book

All abstracts are published in an abstract book which is a supplement to the Journal of Neurogastroenterology & Motility. Participants will receive a copy of the final programme and the abstract book or abstract CD ROM with the congress material.

### Abstract CD ROM

The abstract CD ROM is supported by



### Programme Changes

The organisers cannot assume liability for any changes in the conference programme due to external or unforeseen circumstances.

### Speakers Centre

The Speakers Centre is located in meeting room 3 on the corridor level 1, between Sala Maggiore and Palazzo dei Congressi. Speakers are asked to hand in their CD-ROM or USB stick containing the PowerPoint presentation (IBM format or compatible, no multisession) preferably one day before their presentation, but at the latest three hours prior to their presentation. Due to time and technical reasons, we kindly ask the speakers not to use their own notebook. In the Speakers Centre there are several PC working stations where speakers can also work on their presentation charts in a quiet area. Technical staff will be happy to assist you.

**ESTENSIS**  
The Conference Company.

### Opening hours

Thursday,	6 September 2012	11:00 – 19:00
Friday,	7 September 2012	06:30 – 18:00
Saturday,	8 September 2012	06:30 – 18:00

### Poster Exhibition

Poster sessions will be held on Friday, 7 September 2012 and Saturday, 8 September 2012 in the foyers of Sala Maggiore, level 2. These sessions offer an effective forum for the exchange of information and a means to communicate ideas, research and programmes.

Poster authors are required to be available for presentation at their poster board during their poster session between 12:30 – 14:30.

Posters will be changed daily and are on display for the entire day of the respective poster session. The poster exhibition is open to all registered delegates:

#### Poster exhibition times

Friday,	7 September 2012	09:00 – 18:00
Saturday,	8 September 2012	09:00 – 18:00

#### Poster presentation times

Friday,	7 September 2012	12:30 – 14:30
Saturday,	8 September 2012	12:30 – 14:30

Interested participants can meet the authors for discussions of their poster presentation during the time of the poster presentation.

#### Set-up and dismantling times for posters

Posters need to be set-up and dismantled on the day of the respective poster session within the following times:

#### Set-up:

Friday,	7 September 2012	07:30 – 09:00
Saturday,	8 September 2012	07:30 – 09:00

#### Dismantling:

18:00 – 19:00 on the day of the presentation.

Posters which have not been removed within the indicated dismantling time will be disposed of.

### Technical Exhibition

The Joint International Neurogastroenterology and Motility Meeting will be accompanied by a major technical exhibition taking place in the Sala Maggiore, level 1 of the Nuovo Polo Congressuale.

#### Exhibition hours

Friday,	7 September 2012	09:00 – 18:00
Saturday,	8 September 2012	09:00 – 18:00

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## Congress Information

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### Internet Centre/Wireless Lan

Internet terminals are available in the exhibition area in Sala Maggiore. Wireless Lan/WiFi is available throughout the congress centre.

### Coffee Breaks

Coffee and tea will be served free of charge to all registered delegates during the morning and afternoon coffee breaks on Friday, 7 September 2012 and Saturday, 8 September 2012. Coffee stations are located in the exhibition area.

### Lunch Breaks

Lunches are served for registered participants on Friday, 7 September 2012 and Saturday, 8 September 2012 from 12:30 – 14:30. The catering stations are located in the exhibition area.

### Mobile Phones

Participants are kindly requested to keep their mobile phones turned off while attending the scientific sessions in the meeting rooms.

### Cloakroom

A cloakroom can be used free of charge from Thursday, 6 September 2012 – Saturday, 8 September 2012. Participants can also store their luggage here. The cloakroom is located next to the registration counter in Sala Maggiore at the Nuovo Polo Congressuale.

### Hotel Reservations

Hotel accommodation can be reserved at the congress counter.

### Public Transportation

Upon registration at the registration counter, all participants will receive a voucher and in exchange a public transportation pass valid for all public transportation during the congress period, from Thursday, 6 September through Saturday, 8 September 2012. Most of the hotels available are located either close to the congress centre or in the city centre within 20 to 30 minutes transport time by bus. A time table of the public busses to the venue is provided in the congress bags.

Please take [bus line ► 28](#) to the venue. The bus stop located in Piazza Costituzione is named "Fiera – Palazzo Congressi".

### Shuttle Busses

In addition to public transportation morning and evening bus shuttles (limited number of seats) are available. A detailed overview and time table is in your congress bag.

### Parking

Please use the parking ground with access from Via Calzoni. The parking fee is EUR 16 per day. There is also a public parking located in Piazza Costituzione with the same daily parking fee.

### Taxis

Taxis are available at the entrance of the Nuovo Polo Congressuale.

### Bank/ATM machines

Bank and ATM machines can be found within walking distance of the congress centre.

### Currency

The official Italian currency is EUR. Credit cards are widely accepted.

### Climate

Bologna has a continental climate, without any influence from the seaside. The average temperature during the day in early September is 24° Celsius.

### First Aid

First Aid will be provided in the congress centre. In case of an emergency please contact the congress counter.

### Insurance/Liability

The organiser does not accept any liability for damages and/or loss of any kind which may be incurred by the congress participants or by any person accompanying them, during either the official activities or excursions. Delegates participate in all tours/events at their own risk. Participants are advised to take out insurance against loss, accidents or damage that could be incurred during the congress.



# Gut Microbiota & Health

A SECTION OF THE EUROPEAN SOCIETY OF NEUROGASTROENTEROLOGY AND MOTILITY

## OFFICERS

The board of directors is composed of:  
**Prof F. Azpiroz, Barcelona - Spain (chair)**  
Prof Q. Aziz, London - UK  
Prof J. Doré, Paris - France  
Prof P. Enck, Tübingen - Germany  
Prof F. Guarner, Barcelona - Spain  
Prof M. Simren, Gothenburg - Sweden

The purpose of the Gut Microbiota & Health Section of the European Society of Neurogastroenterology and Motility (ESNM) is to raise recognition and expand knowledge & interest in the field of Gut Microbiota & Health. To achieve this, the section will:

- Stimulate & encourage research in the, field of Gut Microbiota & Health.
- Provide a forum for dissemination of novel discoveries in Gut Microbiota & Health.
- Promote science & educational activities to widely disseminate the knowledge in this field.

To become a member, visit the ESNM website: <http://www.esnm.eu>

## THE GUT MICROBIOTA FOR HEALTH EXPERTS EXCHANGE

An open and participatory web platform to share news, innovations and informations between experts and health care professionals interested in Gut Microbiota.

Offers a selection of current topics of conversation organized around cross-cutting themes of: digestive health, immune function, metabolic conditions, gut brain axis, research tools, trends and discoveries, and nutrition.

→ TO FIND OUT MORE & REGISTER : [www.gutmicrobiotaforhealth.com](http://www.gutmicrobiotaforhealth.com)



Save the date  
The next GMFH Summit:  
Madrid,  
Feb 24<sup>th</sup> to 26<sup>th</sup> 2013

**GUT MICROBIOTA FOR HEALTH**  
1st World Summit

## THE GUT MICROBIOTA FOR HEALTH SUMMIT

Set up by the GM&H Section, the first summit (Evian, France, March 2012) has reached its objectives and has provided a forum for dissemination of novel discoveries in Gut Microbiota & Health among the medical community.

## Social Programme

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Palazzo dei Congressi



Palazzo Re Enzo

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### Welcome Reception

Date: Thursday, 6 September 2012 20:30  
Venue: Palazzo dei Congressi, Foyer Europa

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All participants and accompanying persons are invited to the Welcome Reception of NGM 2012 taking place in Foyer Europa at the congress venue Nuovo Polo Congressuale. The Welcome Reception offers the opportunity to meet colleagues from all over the world in a casual atmosphere. Typical Italian dishes and drinks will be provided.

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### Visit of Bologna University Museum

Date: Friday, 7 September 2012 20:15 –21:15  
Venue: Archiginnasio palace – public library

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Prior to the congress dinner, interested delegates are kindly invited to visit the Bologna University museum. English speaking guides will show you around. The visit is followed by a reception with local food and beverages. After the reception, hostesses will guide you to Palazzo Re Enzo, which is within 5 minutes walking distance from the museum.

The Archiginnasio palace is among Bologna's most significant monuments due to its architectural and artistic characteristics. It has always been a symbol of the city's culture, having been seat of the old university from 1563 to 1803, and from 1838 the Civic Library.

#### Address:

Archiginnasio public library  
Piazza Galvani 1  
40124 Bologna

**No pre-registration necessary**

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### Congress Dinner

Date: Friday, 7 September 2012 21:00  
Venue: Palazzo Re Enzo

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The Congress Dinner will take place at the Palazzo Re Enzo. Located in the heart of the medieval city centre of Bologna, the historical building of the 13<sup>th</sup> century is one of Bologna's most prestigious venues. Experience the unique atmosphere of a very popular Bologna venue. After a reception, a typical Italian 3-course menu accompanied by local Italian wines will be served in the beautiful Salone del Podestà. The dinner is partially supported by Italcimica SpA. Cost contribution per person: EUR 35

**A limited number of tickets is still available. Please contact the counter the day before, on 6 September 2012.**

### City of Bologna

Bologna lies between the Po River and the Apennine Mountains of Northern Italy. The city is situated 52 km/32 miles south of Ferrara, 151 km /94 miles south-west of Venice and 378 km/234 miles north of Rome. It is the seventh largest city in terms of population and it is the heart of a metropolitan area of about 1,000,000 inhabitants. It is home to prestigious cultural, economic and political institutions as well as one of the most impressive trade fair districts in Europe.

Bologna is well-known for its food and for its politics, and is now regarded to be one of the most attractive cities in Italy, being full of character. The beautiful city centre of Bologna is well preserved and maintained, and is a credit to the city's policy of preservation. The historic city of Bologna is divided up into districts and the city centre is separated from the rest of the city by large, ancient walls.

With unified architecture and marbled pavements, this charming Emilian city is well pedestrianised and easily explored by foot. From the city's two main squares Piazza Maggiore and Piazza del Nettuno located in the heart of Bologna, most of the city's main tourists attractions and historical monuments are within walking distance. Bologna is a thriving university city and the enormous University of Bologna is World's oldest, founded over 900 years ago.



Bologna



Piazza Maggiore



Piazza del Nettuno



S. Stefano

### Half-Day Tour: Bologna Historical Centre

Date: Thursday, 6 September 2012 15:00 – 18:00 h  
Friday, 7 September 2012 15:00 – 18:00 h

Meeting

point: Piazza del Nettuno  
(in front of Neptune statue)  
Incl. English speaking guide

Price: EUR 15 per person

Guided walking tour of Bologna historical centre. Starting from the heart of the town Piazza Maggiore, you will visit the major buildings such as Palazzo d' Accursio, Palazzo Re Enzo, Palazzo del Podestà, San Petronio, Fontana del Nettuno, Palazzo dei Notai and the magnificent Palazzo de' Banchi. Besides you will visit the Archiginnasio and the Teatro Anatomico, the two towers and Santo Stefano complex of 7 churches.



Bologna: Palazzo Comunale

For [registered accompanying persons](#) the Bologna Historical Centre Tour is complimentary but necessary to reserve in advance. Please contact the registration counter.

# Exhibitors Floor Plan

## Sala Maggiore, First Floor



## Exhibitors, Sponsors and Acknowledgements

### Exhibitors in alphabetical order

(as of August 2012)

Name	Booth No.
Alfa Wassermann S. p. A.	2
ANMA – Asian Neurogastroenterology and Motility Association	4
ANMS – American Neurogastroenterology and Motility Society	12
ESNM – European Society of Neurogastroenterology and Motility	11
GE Healthcare	9
Given Imaging GmbH	8
Italchimici SpA	15
MEDICA S. p. A.	16

Name	Booth No.
Medical Measurement Systems b. v.	10
Medtronic	14
NATHURA S. R. L.	17
Norgine Italia SRL	13
ROME Foundation	3
Sandhill Scientific, Inc	5
Shire	1
SOFAR S. p. A.	7
UNIBO Store – University of Bologna	18
Yakult Europe B. V.	6

### Acknowledgements

The organisers gratefully acknowledge the support of the following companies:

#### Principal Sponsor



#### Main Sponsors



GE Healthcare



#### General Sponsors

A. C. R. A. F. S. p. A.  
Alfa Wassermann S. p. A.  
Almirall  
Given Imaging GmbH  
Italchimici SpA  
MEDICA S. p. A.  
Medical Measurement Systems b. v.

Medtronic  
NATHURA S. R. L.  
Norgine Italia SRL  
Sandhill Scientific, Inc  
SOFAR S. p. A.  
Steigerwald Arzneimittelwerk GmbH  
SymbioPharm GmbH  
Yakult Europe B.V.

## List of Authors

<b>A</b>			Bühner, S.	OP-09	Dore, J.	SA-02
Abdel-Aziz, H.	PS-22		Burgell, R.	PS-33	Du, P.	PS-11, PS-28
Abu Baker, S.	PS-11		Burns, A.	WS-08	Duarte-Araújo, M.	PS-27
Accarino Garaventa, A.	PS-14				Durand, C.	PS-25
Ait-Belgnaoui, A.	PS-05		<b>C</b>			
Aizawa, S.	PS-04		Camilleri, M.	SA-01, WS-05, WS-12, OP-04, PS-13, PS-30, PS-32	<b>E</b>	
Akbarali, H.	PS-10		Candeloro, L.	PS-12, PS-29, PS-33	Elsenbruch, S.	OP-04, OP-13
Al-Beshir, M.	OP-07		Cantarini, R.	PS-15	Enck, P.	PS-03, PS-08, PS-35
Allam, S.	PS-22		Cao, X.	PS-15		
Almquist, E.	PS-15		Carabotti, M.	PS-30	<b>F</b>	
Altan, E.	PS-05		Carbone, S.	OP-01	Falalyeyeva, T.	PS-04
Altomare, A.	PS-35		Carrington, E.	OP-12	Fang, X.	PS-15
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Americo, M.	S-17, PS-04, PS-21		Çelebi, A.	PS-12	Farzi, A.	PS-09
Angel, F.	PS-20		Chaloner, A.	PS-07	Fass, R.	WS-12
Angeles, P.	PS-12		Chang, L.	PS-15	Faussone-Pellegrini, M.	PS-05
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Avula, L.	PS-23		Chen, C.	PS-12	Felice, V.	PS-25
Aziz, Q.	WS-05		Chen, J.	PS-18	Fichna, J.	PS-10
Azpiroz, F.	WS-11		Chen, J.	PS-30	Fikree, A.	OP-02, PS-17, PS-30
			Chey, W.	WS-12	Foong, J.	PS-19
<b>B</b>			Chiocchetti, R.	PS-01	Fox, M.	PS-12
Babu, D.	PS-10		Chirila, I.	PS-03, PS-21	Friebe, A.	OP-03
Bajor, A.	PS-33		Chiu Ugalde, J.	PS-12	Frøkjær, J.	PS-07, PS-19
Baldassano, S.	S-20, PS-03		Cho, S.	PS-29	Frugier, T.	PS-19
Balestra, B.	PS-35		Choi, W. S.	PS-12	Fukudo, S.	PS-22
Barbara, G.	SA-02		Choi, M.	PS-22	Furness, J.	WS-07
Basu, P.	PS-16		Choi, C.H.	PS-22, PS-32	Fynne, L.	PS-16
Bazzocchi, G.	PS-32		Cirillo, C.	OP-11		
Benninga, M.	WS-15		Clarke, G.	PS-26	<b>G</b>	
Bercik, P.	SA-02, OP-10		Cobine, C.	PS-19	Galeazzi, F.	PS-23
Bernardini, N.	PS-06		Collins, S.	WS-11	Gallego, D.	PS-10
Bertalot, T.	PS-18		Colucci, R.	PS-23	Gamage, P.	PS-18
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Bharucha, A.	WS-04		Coss-Adame, E.	OP-04, OP-06, OP-12, PS-16, PS-32, PS-33	Gershon, M.	WS-08
Bianco, F.	OP-11				Ghia, J.	PS-23
Bitar, K.	WS-04		Cossais, F.	PS-18	Gil, V.	PS-10
Blackshaw, A.	WS-05		Costa, M.	WS-01	Gil, K.	PS-25
Blandizzi, C.	PS-01, PS-06		Cremon, C.	OP-10, PS-23	Giron, M.	PS-06
Blat, S.	PS-20		Cryan, J.	WS-03	Goebel-Stengel, M.	PS-14, PS-27
Bochkareva, J.	PS-13, PS-29				Gonlachanvit, S.	PS-32
Boeckxstaens, G.	WS-07		<b>D</b>		Gourcerol, G.	OP-07, PS-29, PS-31, PS-33
Boeckxstaens, V.	PS-29		Dalziel, J.	PS-19	Grasa Lopez, L.	PS-19, PS-26
Boesmans, W.	OP-05, OP-11		Dantas, R.	PS-12	Grider, J.	PS-18
Boggio Marzet, C.	PS-12, PS-16, PS-32		De Almeida Araujo, E.	PS-01	Grinsvall, C.	PS-15
Bok, G.	PS-12		De Lartigue, G.	PS-20	Groneberg, D.	PS-10
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### Abbreviations

<b>L</b>	Lectures
<b>WS</b>	Workshops
<b>OP</b>	Oral Presentations
<b>PS</b>	Poster Sessions
<b>IG</b>	Interest Groups
<b>SA</b>	Satellite Symposia

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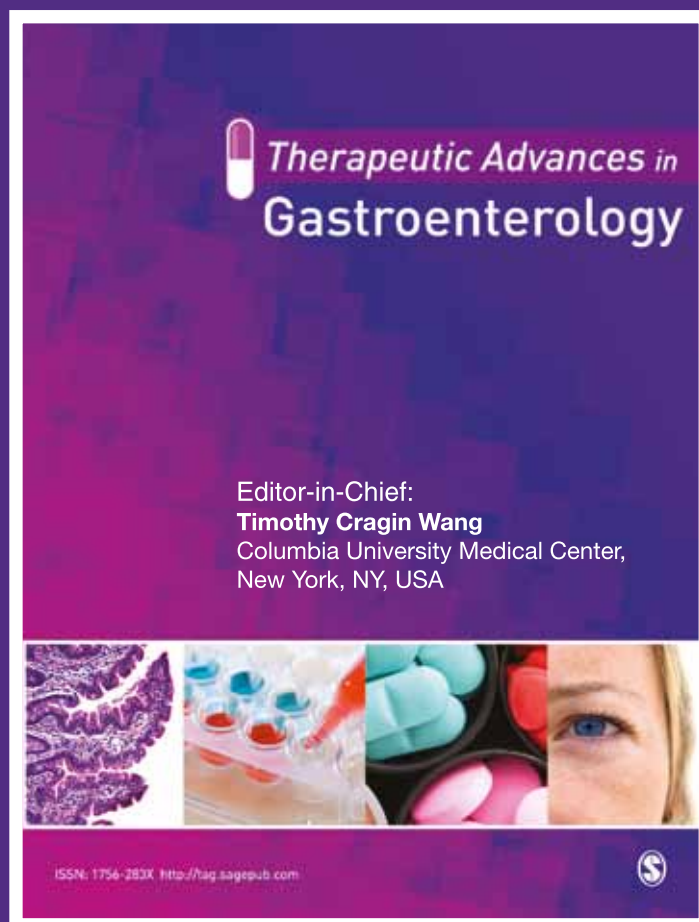
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