



NGM 2010

**2010 Joint International
Neurogastroenterology and Motility
Meeting**

August 26 – August 29, 2010

Registration & Welcome Reception Aug 26 • Program Aug 27–29

**Westin Copley Place
Boston, Massachusetts**

Thursday, August 26, 2010

3:00–6:00 pm	Registration
6:00–7:00 pm	Welcome Reception
7:00–7:30 pm	History of Neurogastroenterology <i>David Thompson</i>
7:45–9:00 pm	Theme-based Symposium
7:45–9:00 pm	Theme-based Symposium

Friday, August 27, 2010

7:00–7:45 am	Registration & Continental Breakfast
7:45 am	Welcome
8:00 am–12:00 pm	Opening Plenary Session
8:00–8:30 am	Regenerative Medicine <i>Jay Pasricha</i>
8:30–9:00 am	Clinical Review <i>Jan Tack</i>
9:00–9:30 am	Basic Science Review <i>Keith Sharkey</i>
9:30–10:00 am	Break
10:00 am–12:00 pm	6 Abstracts (3 clinical, 3 basic science)
12:00–1:30 pm	European Steering Committee Meeting
12:00–2:30 pm	Lunch and Poster Session All posters up for 2 days of viewing
2:45–6:15 pm	Concurrent Parallel Sessions
2:45–4:30 pm	Session 1
	Peripheral Biomolecular Factors in Functional Gastrointestinal Diseases Reflect Organic Change Chairs: <i>Robin Spiller and Lionel Bueno</i>
2:45	Chemical and bacteriological luminal factors <i>Yehuda Ringel</i>
3:10	Cytokines and local effector mechanisms <i>Lin Chang</i>
3:35	Immunology and neurobiology <i>Nathalie Vergnolle</i>
4:00	Barrier function <i>Johan Söderholm</i>

2:45–4:30 pm Session 2

How Does Aging Affect the Gastrointestinal Tract?

Chairs: *Satish Rao and Beverley Greenwood van Meerveld*

2:45	Neurodegeneration <i>Robert Phillips</i>
3:10	Regulation of ICC numbers in aging <i>Simon Gibbons</i>
3:35	Sensory and motor degeneration with aging <i>Rick Saad</i>
4:00	Constipation and incontinence with aging <i>Charlene Prather</i>

2:45–4:30 pm Session 3

Novel Imaging for Pathophysiology of Gastrointestinal Sensorimotor Dysfunction

Chairs: *Reza Shaker and Fernando Azpiroz*

2:45	Imaging human enteric nerves <i>Michael Schemann</i>
3:10	Upper GI tract <i>Luca Marciani</i>
3:35	Lower GI tract <i>Adil Bharucha</i>
4:00	Brain <i>Emeran Mayer</i>
4:30–4:45 pm	Break
4:45–6:15 pm	Topic-Specific Oral Abstract Presentations
4:45–6:15 pm	Topic-Specific Oral Abstract Presentations
4:45–6:15 pm	Topic-Specific Oral Abstract Presentations
6:15–6:45 pm	American Neurogastroenterology and Motility Society – Business Meeting
5:30–6:30 pm	European Society of Neurogastroenterology and Motility – General Assembly
7:00 pm	<i>Dinner on your own</i>
7:00–8:30 pm	Theme-based Symposium
7:00–8:30 pm	Theme-based Symposium

Saturday, August 28, 2010

7:00 am – 8:00 am	Registration & Continental Breakfast
7:00 am – 8:00 am	All Society Committee Meeting
8:00 am–12:00 pm	Concurrent Parallel Sessions
8:00–9:45 am	Session 1
	Diagnosis and Management of Esophageal Motor Disorders Chairs: <i>Raj Goyal and Daniel Sifrim</i>

8:00 Pathogenesis and symptom genesis of functional and motor disorders
André Smout

8:25 High resolution esophageal pressure topography: how does it contribute in clinical practice?
Mark Fox

8:50 The pediatric patient: Just a mini version of the adult in terms of esophageal motor disorders?
Nathalie Rommel

9:15 New therapy: what, when, and how?
Peter Kahrilas

8:00–9:45 am Session 2

Overlap IBS–IBD

Chairs: *William Chey and Doug Drossman*

8:00 Animal models of inflammation and relation to IBS
Terez Shea Donohue

8:25 IBD in remission: hypersensitivity or hyposensitivity
Satish Rao

8:50 Clinical overlap IBS–IBD and treatment with antiinflammatories
Magnus Simrén

9:15 Psychosocial basis
Bruno Bonaz

8:00–9:45 am Session 3

The Vagus Nerve and Taste Receptors in the Gut

Chairs: *Yvette Taché and R. Alberto Travagli*

8:00 Sensory mechanisms
Helen Raybould

8:25 Central synaptic connections of vagal afferents and glucose
Kirsteen Browning

8:50 Vagus in sensation: mediation and modulation
David Grundy

9:15 Macronutrient detection
Christine Feinle-Bisset

9:45–10:15 am *Break*

10:15 am–12:00 pm Concurrent Parallel Sessions

10:15 am–12:00 pm Topic-Specific Oral Abstract Presentations

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12:00–2:30 pm Lunch and Poster Session

All posters up for 2 days of viewing

1:00 pm – 2:00 pm FBG Board Meeting

2:45–5:30 pm Concurrent Sessions

2:45–4:30 pm Session 1

Advances in Clinical Trials

Chairs: *Shin Fukudo and Max Schmulson*

2:45 Advances in trial endpoints in IBS: binary endpoints, PRO guidance, and validity of interim endpoints
Brennan Spiegel

3:10 Placebo response
Sigrid Elsenbruch

3:35 New approaches to psychological interventions
Jeffrey Lackner

4:00 New drugs
Michael Camilleri

2:45–4:30 pm Session 2

Esophageal Sensation

Chairs: *Hiroto Miwa and Miguel Valdovinos*

2:45 Afferent innervation of the esophagus
Marian Kollarik

3:10 CNS evaluation of esophageal pain
Qasim Aziz

3:35 Sensory testing
Ronnie Fass

4:00 Potential targets
Frank Zerbib

2:45–4:30 pm Session 3

Sensory Transmission and Transduction in the Gut

Chairs: *Sumei Liu and Kenton Sanders*

2:45 Synaptic mechanisms
Jim Galligan

3:10 Enteric glia in control of neuronal and intestinal barrier homeostasis
Michel Neunlist

3:35 Muscle and ICC
Sean Ward

4:00 Visceral afferents
Simon Brookes

4:30–4:45 pm *Break*

4:45–6:15 pm Topic-Specific Oral Abstract Presentations

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4:45–6:15 pm Topic-Specific Oral Abstract Presentations

Poster boards down by 5:00 pm

6:30–10:00 pm Banquet

Sunday, August 29, 2010

7:00–8:00 am Registration & Continental Breakfast

8:00 am–12:00 pm **Concurrent Parallel Sessions**

8:00–9:45 am Session 1

The Pediatric Enteric Nervous System: From Animal Models to the Pediatric Patient

Chairs: *Mark Benninga and Hayat Mousa*

8:00 Long-term effects of maternal separation and neonatal injury on ENS and gut function
Rene van den Wijngaard

- 8:25 Functional maturation
Xiaochun Bian
- 8:50 What is the role of food allergy in childhood constipation?
AnnaMaria Staiano
- 9:15 Abdominal motility disorders in children (including intestinal transplantation)
Carlo Di Lorenzo

8:00–9:45 am Session 2

Neuropathic Pain: Sodium Channels and Other Mechanisms

Chairs: *Ashley Blackshaw and David Grundy*

- 8:00 Na channel genetics, biology, and Rx
Mohammed Nassar
- 8:25 Na channel visceral sensitivity: animal hypersensitivity
Mike Beyak
- 8:50 Pharmacology
Michael Jarvis
- 9:15 Clinical implications of Na channel blockers
Gianrico Farrugia

9:45–10:15 am *Break*

10:15 am–12:00 pm Concurrent Parallel Sessions

10:15 am–12:00 pm Session 1

Development of Gut Innervation

Chairs: *Michael Gershon and Maria-Adelaide Micci*

- 10:15 Vagus
Edward Fox
- 10:40 Guidance cues: Netrin/DCC
Elyanne Ratcliffe

- 11:05 Molecular and cellular mechanisms
Heather Young
- 11:30 Potential therapeutics
Alan Burns

10:15 am–12:00 pm Session 2

Ileus, Sepsis, Critical Care, and Dysmotility and Peripheral Opioid Antagonists

Chairs: *Aiping Zhao and Jay Pasricha*

- 10:15 Inflammation, macrophages and POI in animal models
Anthony Bauer
- 10:40 Mast cells and vagus: animals and humans
Guy Boeckstaens
- 11:05 Mu opiate antagonists and other Rx in POI
Anthony J. Senagore
- 11:30 Delayed gastric emptying in the ICU
Robert Fraser

10:15 am–12:00 pm Session 3

Functional Food for Functional Disorders?

Chairs: *Peter Whorwell and Stephen M. Collins*

- 10:15 Pre- and probiotics
Eammon Quigley
- 10:40 Tryptophan and melatonin
Kok-Ann Gwee
- 11:05 Fiber
Larry Schiller
- 11:30 Trial designs for food testing
Paul Enck

12:00 Adjourn

Program Overview

The purpose of this meeting is to provide a forum for the presentation, discussion, and debate of translational and clinical research in the area of neurogastroenterology and motility so that physicians and health care professionals diagnosing and managing patients in this area will be able to draw on the latest evidence-based methods for promoting effective patient outcomes. These conditions are multifactorial in origin; alterations in brain–gut interactions, as well as in the absorptive, sensory, secretory, and motor functions of different regions of the gastrointestinal tract are considered key underlying pathophysiological mechanisms that constitute more or less accessible targets for therapy. It is important that research scientists and clinicians work together in an interactive and supportive collaboration as new data become available. The activity addresses the needs expressed by the memberships of the American Neurogastroenterology and Motility Society and the joint societies of neurogastroenterology and motility.

Statement of Need

Functional gastrointestinal and motility disorders are prevalent conditions diagnosed in both children and adults. Although these are common disorders, the underlying pathophysiology and mechanisms that result in these conditions are not well understood indicating that more research and dialogue into the diagnosis and management of these diseases is needed.

Meeting Goals

The overall goal of this activity is to improve patient care by increasing learner competence and performance in diagnosing functional gastrointestinal and motility disorders and providing appropriate strategies for effective and efficient management of disease based on the research and clinical data. Participants will interact with current concepts to develop increased knowledge of the mechanisms and a framework for improving their competence in optimizing diagnosis and treatment. These scientific approaches will be aligned to the art of medical management to enhance holistic treatment for patients, including education in the skills to identify those with increased vulnerability to develop functional gastrointestinal and motility disorders. In addition, the adoption by learners of the consensus guidelines on diagnosis will increase their competence and performance and improve patient care.

Intended Audience

Primarily, gastroenterologists but also psychiatrists and other clinicians; physicians in training such as gastroenterology fellows, biochemists, molecular and cell biologists, physiologists, neurophysiologists, immunologists, pharmacologists, and behavioral psychologists, doctoral level researchers, and nurses.

Meeting Objectives

At the conclusion of this educational activity, the participant should be better able to

1. discuss the most up-to-date and relevant basic science, translational and clinical research findings in the field of neurogastroenterology and motility
2. describe the role of brain–gut communication and signaling in functional gastrointestinal and motility disorders, such as functional dyspepsia, irritable bowel syndrome, and obesity in the elderly, adults, and children
3. discuss current concepts of peripheral mechanisms within the gastrointestinal tract including the enteric nervous system, ingestive, sensory, motor, secretory and absorptive mechanisms that are relevant to upper and lower gastrointestinal disorders
4. summarize the diagnostic criteria, diagnostic tools and outcome measures used in clinical treatment trials
5. compare and contrast the non-pharmacologic and pharmacologic treatment approaches in functional gastrointestinal and motility disorders, incontinence and obesity
6. evaluate the role of the microbiome, pre- and probiotics and the effect of antibiotics in diseases such as diarrhea, irritable bowel syndrome, abdominal bloating, and obesity
7. address advances in the understanding of the risk–benefit ratio of approved medications and devices, as well as state-of-the-art information about novel approved or as yet non-approved medications and devices.

Accreditation Statement

This activity has been planned and implemented in accordance with the Essentials and Standards of the Accreditation Council for Continuing Medical Education (ACCME) through the joint sponsorship of Tulane University Health Sciences Center and the American Neurogastroenterology and Motility Society. Tulane University Health Sciences Center is accredited by the ACCME to provide continuing medical education for physicians.

Designation

Tulane University Health Sciences Center designates this educational activity for a maximum of 17.25 *AMA PRA Category 1 Credits™*. Each physician should claim only those hours of credit that he/she actually spent in the educational activity.

Tulane University Health Sciences Center presents this activity for educational purposes only and does not endorse any product, content of presentation or exhibit. Participants are expected to use their own expertise and judgment while engaged in the practice of medicine. The content of the presentations is provided solely by presenters, who have been selected because of their recognized expertise.

Procedure for CME Credit

To receive the appropriate number of CME credits, it is important to do the following:

1. On your arrival, pick up your verification form at the Registration Desk.
2. On your departure, turn in your completed verification form at the Registration Desk.

A listing of the number of credits available each day will be included with the verification form. Program hours that run simultaneously or overlap are not included in the total credits available each day.

Disclosure

It is the policy of the Center for Continuing Education at Tulane University Health Sciences Center to plan and implement all of its educational activities in accordance with the ACCME's Essential Areas and Policies to ensure balance, independence, objectivity and scientific rigor. In accordance with the ACCME's Standards for Commercial Support, everyone who is in a position to control the content of an educational activity certified for *AMA PRA Category 1 Credit™* is required to disclose all relevant financial relationships with any commercial interests within the past 12 months that create a real or apparent conflict of interest. Individuals who do not disclose are disqualified from participating in a CME activity. Individuals with potential for influence or control of CME content include planners and planning committee members, authors, teachers, educational activity directors, educational partners, and others who participate, e.g. facilitators and moderators. This disclosure pertains to relationships with pharmaceutical companies, biomedical device manufacturers or other corporations whose products or services are related to the subject matter of the presentation topic. Any real or apparent conflicts of interest related to the content of the presentations must be resolved prior to the educational activity. Disclosure of off-label, experimental or investigational use of drugs or devices must also be made known to the audience.

The ACCME does not allow CME credit to be awarded for presentations given by employees of commercial interests (as defined by the ACCME); i.e., pharmaceutical, medical device, or biotech companies, etc. If the focus of your presentation is a commercially funded study, please list the funding company or source and your affiliation with the funding company or source on the CME Disclosure Form when submitting an abstract.

Exhibitor Information

Exhibiting is an integral part of the Joint International Neurogastroenterology and Motility meetings. This meeting is jointly sponsored by four societies – American Neurogastroenterology and Motility Society (ANMS), Functional Brain–Gut Research Group, European Society of Neurogastroenterology and Motility, and International Neurogastroenterology and Motility Group. Please see exhibitor information and complete the Exhibitor Form online at [www • motilitysociety • org](http://www.motilitysociety.org).

Please note: The exhibition schedule includes the American Neurogastroenterology and Motility Society 5th Biennial Course on Gastrointestinal Motility and Neurogastroenterology in Clinical Practice, August 26, which immediately precedes NGM 2010. The exhibition venue is the same for both meetings.

Steering Committee

Michael Camilleri, *Chair*
Fernando Azpiroz
Ashley Blackshaw
Lin Chang
Roberto Dantas
Gianrico Farrugia
Emeran Mayer
Henry Parkman
Michael Schemann
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Meeting Coordinator

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Peter Kahrilas
Magnus Simrén
André Smout
Yvette Taché

Tulane Joint Sponsor Liaison

Robert Bulat, MD

Invited Speakers

Qasim Aziz, FRCP, PhD

Barts and The London, London, United Kingdom

Mike Beyak, MD, FRCPC

Queen's University, Canada

Adil E. Bharucha, MD

Mayo Clinic College of Medicine

Anthony J. M. Bauer, PhD

University of Pittsburgh

Xiaochun Bian, PhD, MD

Michigan State University

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Katholieke Universiteit Leuven, Belgium

Bruno Bonaz, MD, PhD

Grenoble Faculty of Medicine and Hospital, France

Simon J. H. Brookes, PhD

Flinders University, South Australia

Kirsteen Browning, PhD

Pennington Biomedical Research Center, Louisiana State University

Alan Burns, PhD

Institute of Child Health, University College, London, United Kingdom

Michael Camilleri, MD

Mayo Clinic College of Medicine

Lin Chang, MD

David Geffen School of Medicine at UCLA

Carlo Di Lorenzo, MD

Nationwide Children's Hospital

Sigrid Elsenbruch, PhD

University of Duisburg-Essen, Germany

Paul Enck, PhD

University of Tuebingen, Germany

Gianrico Farrugia, MD

Mayo Clinic College of Medicine

Ronnie Fass, MD

Southern Arizona VA Health Care System

Christine Feinle-Bisset, PhD

University of Adelaide and Royal Adelaide Hospital, Australia

Edward A. Fox, PhD

Purdue University

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University Hospital Zürich, Switzerland

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Jim Galligan, PhD

Michigan State University

Simon J. Gibbons, PhD

Mayo Clinic College of Medicine

David Grundy, PhD

The University of Sheffield, United Kingdom

Kok Ann Gwee, FRCP, PhD

Gleneagles Hospital and National University of Singapore

Michael Jarvis, PhD

Abbott Laboratories

Peter Kahrilas, MD

Feinberg School of Medicine, Northwestern University

Marian Kollarik, MD, PhD

The Johns Hopkins School of Medicine

Jeffrey Lackner, PsyD

University at Buffalo School of Medicine

Luca Marciari, PhD

The University of Nottingham, United Kingdom

Emeran A. Mayer, MD

David Geffen School of Medicine at UCLA

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Baylor University Medical Center

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