SAVE THE DATE

American Neurogastroenterology and Motility Society
2019 ANMS Annual Meeting

Clinical Course
Providing the best clinical care for our patients
August 16, 2019

Scientific Program
Advancing patient care through cutting-edge research
August 16 (4 pm) – August 18, 2019

Young Investigator Forum
Developing our future researchers in neurogastroenterology and motility
August 15 – 16, 2019

Swissôtel, Chicago, Illinois
### Thursday, August 15, 2019

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>3:00 pm–6:00 pm</td>
<td><strong>Registration</strong> • Vevey Foyer, 2nd Floor</td>
</tr>
<tr>
<td>3:00 pm–6:00 pm</td>
<td><strong>Exhibitor Set Up</strong> • Vevey Foyer, 2nd Floor</td>
</tr>
</tbody>
</table>

### Friday, August 16, 2019

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>7:00 am–5:30 pm</td>
<td><strong>Registration</strong> • Vevey Foyer, 2nd Floor</td>
</tr>
<tr>
<td>7:00 am–7:45 am</td>
<td>Breakfast • <strong>Visit Exhibits</strong> • Vevey Foyer, 2nd Floor</td>
</tr>
<tr>
<td>7:45–8:00 am</td>
<td><strong>Welcome</strong> • John Pandolfino • Vevey</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Time</th>
<th>Concurrent Sessions</th>
<th>Esophagus • Vevey</th>
<th>Allied Health Professionals Session • Montreux</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:00–10:00 am</td>
<td><strong>Esophagus</strong> • Vevey</td>
<td><strong>Welcome</strong></td>
<td><strong>Moderators: Dustin Carlson, Rena Yadlapati</strong></td>
</tr>
<tr>
<td>8:00–8:25 am</td>
<td>Non-obstructive dysphagia: Phenotyping the patient</td>
<td><strong>Dustin Carlson</strong></td>
<td></td>
</tr>
<tr>
<td>8:25–8:50 am</td>
<td>Laryngopharyngeal reflux: Utility or futility of diagnostic tools</td>
<td><strong>Rena Yadlapati</strong></td>
<td></td>
</tr>
<tr>
<td>8:50–9:15 am</td>
<td>Mucosal integrity testing</td>
<td><strong>Michael Vaezi</strong></td>
<td></td>
</tr>
<tr>
<td>9:15–9:40 am</td>
<td>Office-based esophageal tissue sampling in eosinophilic esophagitis</td>
<td><strong>Ikuo Hirano</strong></td>
<td></td>
</tr>
<tr>
<td>9:40–10:00 am</td>
<td>Panel Discussion</td>
<td><strong>Break</strong></td>
<td><strong>Visit Exhibits</strong> • Vevey Foyer, 2nd Floor</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Time</th>
<th>Allied Health Professionals Session • co-sponsored by Diversatek Healthcare and Laborie • Montreux</th>
<th><strong>Moderator: Jason Baker</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>8:00–8:30 am</td>
<td>Anorectal manometry: What, why, how</td>
<td><strong>Jason Baker, Dawn Vickers</strong></td>
</tr>
<tr>
<td>8:30–9:00 am</td>
<td>Physical therapy management of constipation and fecal incontinence</td>
<td><strong>Vonna Karoghlanian</strong></td>
</tr>
<tr>
<td>9:00–9:30 am</td>
<td>Esophageal testing beyond endoscopy: FLIP–impedance planimetry</td>
<td><strong>John Pandolfino</strong></td>
</tr>
<tr>
<td>9:30–10:00 am</td>
<td>Panel Discussion</td>
<td><strong>Break</strong></td>
</tr>
</tbody>
</table>

*program continued*
### 10:30 am–12:30 pm: Stomach/Small Bowel • Vevey

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Moderator</th>
</tr>
</thead>
</table>
| 10:30–10:55 am| **Gastroparesis:** Update on mechanisms from the Gastroparesis Consortium  
|               | **Henry Parkman**                                                       |                        |
| 10:55–11:20 am| **New frontiers in studying motility of the stomach and small intestine**  
|               | **Braden Kuo**                                                         |                        |
| 11:20–11:45 am| **Emerging capsule technologies for functional gastrointestinal (FGI) and motility disorders:** The future is now!  
|               | **William Chey**                                                      |                        |
| 11:45 am–12:10 pm| **Motility modifying agents – Are we getting anywhere?**  
|               | **Mark Pimentel**                                                      |                        |
| 12:10–12:30 pm| **Panel Discussion**                                                   |                        |

### Parallel Lunches • Choose One • Visit Exhibits

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>12:30–1:15 pm</td>
<td><strong>Lunch</strong> • no speaker • Zurich • Visit Exhibits</td>
</tr>
</tbody>
</table>
| 12:30–1:15 pm| **Lunch Symposium** • sponsored by Alnylam (non-CME) • Please sign in at this luncheon • Montreux  
|               | **Medical Mystery: A case of unexplained, severe, diffuse, abdominal pain**  
|               | **Gregory Sayuk, Manisha Balwani**                                     |

### 1:15–2:45 pm: Anorectal Disorders • Vevey

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
</tr>
</thead>
</table>
| 1:15–1:40 pm | **New treatments for anorectal disorders**  
|               | **Satish Rao**                                                         |
| 1:40–2:05 pm | **Colon motility in constipation:** When & how to assess  
|               | **Richard Saad**                                                       |
| 2:05–2:30 pm | **Review:** Techniques utilized to assess colon motility in individuals with constipation  
|               | **Darren Brenner**                                                     |
| 2:30–2:45 pm | **Panel Discussion**                                                   |
| 2:45–3:00 pm | **Break** • Visit Exhibits • Vevey Foyer, 2nd Floor                    |

*program continued*
### Mind–Medicine Interplay in Gastroenterology • Vevey

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Speaker</th>
</tr>
</thead>
<tbody>
<tr>
<td>3:00–4:30 pm</td>
<td>Mind–Medicine Interplay in Gastroenterology • Vevey</td>
<td>Moderators: Laurie Keefer, Tiffany Taft</td>
</tr>
<tr>
<td>3:00–3:25 pm</td>
<td>New concepts in the mechanisms of brain–gut interactions</td>
<td>Kirsten Tillisch</td>
</tr>
<tr>
<td>3:25–3:50 pm</td>
<td>A positive psychology/resilience model in psychogastroenterology</td>
<td>Laurie Keefer</td>
</tr>
<tr>
<td>3:50–4:15 pm</td>
<td>When the diagnosis is functional: Supporting the psychological needs of pediatric/young adult patients and their parents from evaluation through treatment</td>
<td>Julie Snyder</td>
</tr>
<tr>
<td>4:15–4:30 pm</td>
<td>Panel Discussion</td>
<td></td>
</tr>
</tbody>
</table>

### Concurrent Sessions • Marijuana and Opioids • 4:30–5:30 pm • Women in Neurogastroenterology • 4:00–6:00 pm

#### Marijuana and Opioids • Vevey

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Speaker</th>
</tr>
</thead>
<tbody>
<tr>
<td>4:30–5:30 pm</td>
<td>Marijuana and Opioids • Vevey</td>
<td>Moderator: John Pandolfino</td>
</tr>
<tr>
<td>4:30–4:55 pm</td>
<td>The endocannabinoid system, cannabis, opioids, &amp; chronic pain</td>
<td>Ryan Zaklin</td>
</tr>
<tr>
<td>4:55–5:20 pm</td>
<td>Opioid constipation: New nomenclature, therapeutics, and guideline recommendations</td>
<td>Darren Brenner</td>
</tr>
<tr>
<td>5:20–5:30 pm</td>
<td>Panel Discussion</td>
<td></td>
</tr>
<tr>
<td>5:30 pm</td>
<td>Adjourn</td>
<td></td>
</tr>
</tbody>
</table>

#### Women in Neurogastroenterology • co-sponsored by Ironwood Pharmaceuticals, Inc. • Montreux

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Speaker</th>
</tr>
</thead>
<tbody>
<tr>
<td>4:00–4:30 pm</td>
<td>Welcome Reception</td>
<td></td>
</tr>
<tr>
<td>4:30–4:35 pm</td>
<td>Introduction and objectives of developing a Women in Neurogastroenterology Program</td>
<td>Beverley Greenwood-Van Meerveld</td>
</tr>
<tr>
<td>4:35–5:00 pm</td>
<td>Work–life integration</td>
<td>Linda Nguyen</td>
</tr>
<tr>
<td>5:00–5:15 pm</td>
<td>Women in Neurogastroenterology Survey results</td>
<td>Lin Chang</td>
</tr>
<tr>
<td>5:15–5:50 pm</td>
<td>Panel discussion with representatives from academia and private practice, followed by a group Q &amp; A</td>
<td>Lin Chang, Beverley Greenwood-Van Meerveld, Albena Halpert, Linda Nguyen</td>
</tr>
<tr>
<td>5:50–6:00 pm</td>
<td>Group discussion on creating an enduring Women in Neurogastroenterology Program, and planning future events</td>
<td></td>
</tr>
<tr>
<td>6:00 pm</td>
<td>Adjourn</td>
<td></td>
</tr>
</tbody>
</table>
## Friday, August 16, 2019

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>7:00 am–5:00 pm</td>
<td>Registration • Vevey Foyer, 2nd floor</td>
</tr>
<tr>
<td>6:00–8:00 pm</td>
<td>Poster Session • Welcome Reception • Zurich</td>
</tr>
</tbody>
</table>

### Saturday, August 17, 2019

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>7:00 am–5:00 pm</td>
<td>Registration • Vevey Foyer, 2nd floor</td>
</tr>
<tr>
<td>7:00–7:45 am</td>
<td>Breakfast • Visit Exhibits • Vevey Foyer, 2nd floor</td>
</tr>
<tr>
<td>7:45–8:00 am</td>
<td>Welcome • John Pandolfino • Montreux</td>
</tr>
<tr>
<td>8:00–9:30 am</td>
<td>Concurrent Session 1 • Montreux</td>
</tr>
<tr>
<td></td>
<td>Neurodevelopmental programming of the GI tract</td>
</tr>
<tr>
<td></td>
<td>Moderators: Kara Margolis, Shanthi Srinivasan</td>
</tr>
<tr>
<td>8:00–8:20 am</td>
<td>The effects of early-life stress on the development of FGIDs</td>
</tr>
<tr>
<td></td>
<td>Lin Chang</td>
</tr>
<tr>
<td>8:20–8:40 am</td>
<td>Intestinal microbiota influence the early postnatal development of the ENS</td>
</tr>
<tr>
<td></td>
<td>Elyanne Ratcliffe</td>
</tr>
<tr>
<td>8:40–9:00 am</td>
<td>Mapping out ENS development at the single cell level</td>
</tr>
<tr>
<td></td>
<td>Meenakshi Rao</td>
</tr>
<tr>
<td>9:00–9:15 am</td>
<td>Bacterial products affect enteric neural crest derived cell maturation</td>
</tr>
<tr>
<td></td>
<td>J Popov, J Bandura, J Huang, F Markovic, R Boroevic, N Pai, EM Ratcliffe</td>
</tr>
<tr>
<td></td>
<td>Hamilton, ON, Canada, Toronto, ON, Canada</td>
</tr>
<tr>
<td></td>
<td>McMaster University</td>
</tr>
<tr>
<td></td>
<td>Abstract 1</td>
</tr>
<tr>
<td>9:15–9:30 am</td>
<td>Sacral nerve stimulation inhibits the MAPK/NF-KB signaling pathway and promotes TREG-TH1/TH17 cell balance and self-renewal of enteric nervous system in TNBS-induced inflammation in rats</td>
</tr>
<tr>
<td></td>
<td>Y Meng, J Chen</td>
</tr>
<tr>
<td></td>
<td>Baltimore, MD</td>
</tr>
<tr>
<td></td>
<td>Johns Hopkins University</td>
</tr>
<tr>
<td></td>
<td>YIF Participant</td>
</tr>
<tr>
<td></td>
<td>Abstract 2</td>
</tr>
<tr>
<td>9:30–10:00 am</td>
<td>Break • Visit Exhibits • Vevey Foyer, 2nd floor</td>
</tr>
</tbody>
</table>

*program continued*
## Saturday, August 17, 2019

### Concurrent Sessions

<table>
<thead>
<tr>
<th>Time</th>
<th>Concurrent Session 1</th>
<th>Concurrent Session 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>10:00–11:45 am</td>
<td>Montreux</td>
<td>Vevey</td>
</tr>
<tr>
<td>Concurrent</td>
<td>New advances in behavioral treatments for GI diseases</td>
<td>Gut neurogenesis: What’s the latest</td>
</tr>
<tr>
<td></td>
<td>Moderators: Laurie Keefer, Jeffrey Lackner</td>
<td>Moderators: Simon Gibbons, Jackie Wood</td>
</tr>
</tbody>
</table>

### Session 1

- **10:00–10:20 am**
  - **Brain–gut psychotherapies for non-psychologists**
    - **Laurie Keefer**
  - **The role of stem cells in peripheral nervous system development?**
    - **Jaime Belkind-Gerson**

- **10:20–10:40 am**
  - **Patient experiences with behavioral medicine**
    - **Sarah Quinton**
  - **Neurogenesis in the adult enteric nervous system**
    - **Subhash Kulkarni**

- **10:40–11:00 am**
  - **Predictors of the placebo response in irritable bowel syndrome**
    - **Sarah Ballou**
  - **Gene environment interactions and neural plasticity**
    - **Robert Heuckeroth**

- **11:00–11:15 am**
  - **Using EndoFlip to compare static and dynamic pyloric motor function before and after G-POEM for treatment of refractory gastroparesis**
    - **L Watts, J Baker, A Lee, N Bowers, R Law, W Hasler**
    - **Ann Arbor, MI**
    - **University of Michigan**
  - **Transcriptional and epigenetic mechanisms underlying Wnt-Trp53–mediated loss of interstitial cell of Cajal stem cells (ICC-SC) in aging**
    - **Y Hayashi, J Lee, DR Linden, SJ Gibbons, T Ordog**
    - **Rochester, MN**
    - **Mayo Clinic College of Medicine and Science**

### Session 2

- **10:00–11:45 am**
  - **Assessment of the impact of introducing fecal bile acid diagnostic test for bile acid diarrhea in 1,077 patients in clinical practice and on prediction of response to bile acid sequestrants**
    - **P Vijayvargiya, G Calderon, D Gonzalez, Tawfic, S Batbold, H Saifuddin, P Duggan, V Melo, Thomas, M Heeney, A Beyder, J Miller, Jr, K Valles, K Oyemade, J Fenner, V Chedid, M Camilleri**
    - **Rochester, MN**
    - **Mayo Clinic College of Medicine and Science**
  - **Role of muscularis macrophages in the enteric nervous system plasticity**
    - **G Cipriani, S Ji, M Mischopoulou, A Wright, MJ Silva, L Sha, DR Linden, T Ordog, SJ Gibbons, G Farrugia**
    - **Rochester, MN**

### Poster Session

- **11:45 am–2:00 pm**
  - **Poster Session • Lunch • Zurich**

---

**Abstract 5**

- **L Watts, J Baker, A Lee, N Bowers, R Law, W Hasler**
- **Ann Arbor, MI**
- **University of Michigan**

**Abstract 6**

- **C Alcaino, K Knutson, V Nayak, P Strege, H Kacmaz, A Treichel, J Li, A Leiter, G Farrugia, A Beyder**
- **Rochester, MN, Worcester, MA**
- **Mayo Clinic**

**Abstract 7**

- **Y Hayashi, J Lee, DR Linden, SJ Gibbons, T Ordog**
- **Rochester, MN**
- **Mayo Clinic College of Medicine and Science**

**Abstract 8**

- **G Dukes, C Scimia, B Kuo, W Zhang, S Gupta, C Chen, E Chuang, M Camilleri**
- **Raleigh, NC, Boston, MA, Cambridge, MA, Park City, UT, Rochester, MN**
- **Takeda Pharmaceuticals**

**Abstract 9**

- **G Vijayvargiya, G Calderon, D Gonzalez, S Tawfic, S Batbold, H Saifuddin, P Duggan, V Melo, Thomas, M Heeney, A Beyder, J Miller, Jr, K Valles, K Oyemade, J Fenner, V Chedid, M Camilleri**
- **Rochester, MN**
- **Mayo Clinic College of Medicine and Science**

**Abstract 10**

- **G Cipriani, S Ji, M Mischopoulou, A Wright, MJ Silva, L Sha, DR Linden, T Ordog, SJ Gibbons, G Farrugia**
- **Rochester, MN**

---

*program continued*
Saturday, August 17, 2019  
continued

| 2:00–3:30 pm | Concurrent Sessions | Concurrent Session 1 • Montreux  
Sex differences: Are they important in the control of the GI tract  
Moderators: Lin Chang, Linda Nguyen | Concurrent Session 2 • Vevey  
Food intolerances: Laboratory to table  
Moderators: Bethany Doerfler, Helen Raybould |
|---|---|---|
| 2:00–2:20 pm | The role of sex and puberty in functional gastrointestinal disorders  
Bruno Chumpitazi | Bitter taste receptors in the gut: Luminal sensing and signaling  
Catia Sternini |
| 2:20–2:40 pm | Estrogen–gut microbiome axis and women’s health  
Melissa Herbst-Kralovetz | Interactions between diet and the microbiota in the modulation of visceral sensation  
Alan Lomax |
| 2:40–3:00 pm | Sex and stress: Effects on the brain–gut axis  
Yanyan Jiang | Diet therapies for IBS: Where are we going?  
William Chey |
| 3:00–3:15 pm | Sexual dimorphic epigenetic regulation of chronic visceral pain following unpredictable early life stress  
T Louwies, B Greenwood-Van Meerveld  
Oklahoma City, OK.  
Oklahoma University Health Sciences Center  
YIF Participant  
Abstract 11 | Mechanisms responsible for regulation of caloric intake following acute high fat diet are developmentally regulated  
C Clyburn, RA Travagl, KN Browning  
Hummelstown, PA, Hershey, PA  
Penn State University College of Medicine  
YIF Participant  
Abstract 13 |
| 3:15–3:30 pm | Gonadal androgens act via the enteric nervous system to regulate colonic motility in mice  
D Rastelli, L Matthews, W Dan, P Yim, M Rao  
Boston, MA, New York, NY  
Harvard Medical School  
Abstract 12 | Eating and psychiatric disorders are independent risk factors for rumination syndrome  
JX Cai, D Wong, D Lee, WW Chan  
Boston, MA  
Harvard Medical School  
Abstract 14 |
| 3:30–4:00 pm | Break • Visit Exhibits • Vevey Foyer, 2nd floor | Break • Visit Exhibits • Vevey Foyer, 2nd floor |
| 4:00–5:45 pm | Concurrent Sessions | Concurrent Session 1 • Montreux  
Next generation therapeutics: Targeting microbiology, life style, and host factors  
Moderators: Eammon Quigley, Tamas Ordog | Concurrent Session 2 • Vevey  
Neuroinflammation and bowel dysfunction  
Moderators: Fievos Christofi, Meenakshi Rao |
| 4:00–4:25 pm | Gut microbiome: Nurture, design and replace  
Purna Kashyap | Enteric neuroplasticity in inflammatory disorders  
Gary Mawe |
| 4:25–4:50 pm | Cannabis and cannabinoids: Use and abuse  
Keith Sharkey | Interaction between enteric neurons, glia, and nociceptors in neuroinflammation, motility, and pain  
Brian Gulbransen |
| 4:50–5:15 pm | Epigenetics: Erasing painful transcriptional memories  
John Wiley | The guts of the opioid crisis: Microbiome and opioid tolerance  
Hamid Akbarali |
| 5:15–5:30 pm | Olorinab (APD371), a peripherally acting, highly selective, full agonist of the cannabinoid type 2 receptor (CB2), reduces visceral hypersensitivity in animal models  
B Lindstrom, J Castro, J Maddern, S Garcia-Carabalbo,  
A Lumsden, J Adams, SM Brierley  
Adelaide, S Australia, San Diego, CA  
Arena Pharmaceuticals  
Abstract 15 | Enteric glial A2Br signaling regulates gut barrier function, immune responses, and behavior after acute colitis  
V Grubišić, V Bali, DE Fried, HK Eltzschig, MS Mazei-Robison, BD Gulbransen  
East Lansing, MI, Houston, TX  
Michigan State University  
YIF Participant  
Abstract 17 |
<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Presenters</th>
<th>Sponsor</th>
<th>Type</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>5:30–5:45 pm</td>
<td>Comparing symptom outcomes after recommending prokinetic agents for diabetic vs. non-diabetic patients with suspected gastroparesisWL Hasler, B Kuo, A Lee, L Nguyen, B Moshiree, H Parkman, J Wo, M Schulman, I Sarosiek, R McCallum, S Rao&lt;br&gt;Ann Arbor, MI, Boston, MA, Palo Alto, CA, Charlotte, NC, Philadelphia, PA, Indianapolis, IN, Largo, FL, El Paso, TX, Augusta, GA&lt;br&gt;University of Michigan</td>
<td>Enteric glia contribute to visceral hypersensitivity through interactions with nociceptor signalingW Morales-Soto, BD Gulbransen&lt;br&gt;East Lansing, MI&lt;br&gt;Michigan State University</td>
<td>Abstract 16</td>
<td>YIF Participant</td>
<td>Abstract 18</td>
</tr>
<tr>
<td>6:00–7:00 pm Concurrent Theme Symposium • Visceral Pain • sponsored by Arena Pharmaceuticals • non CME • Montreux&lt;br&gt;The endocannabinoid system and visceral pain: Its relevance to irritable bowel syndrome&lt;br&gt;Moderator: Kirsteen Browning</td>
<td>6:00–6:25 pm An overview of the endocannabinoid system in the brain–gut axis&lt;br&gt;Keith Sharkey</td>
<td>6:25–6:50 pm Role of the cannabinoid system in pain control: Therapeutic implications&lt;br&gt;John Wiley</td>
<td>6:50–7:00 pm Q &amp; A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6:00 pm–7:30 pm Concurrent Theme Symposium • Gastroparesis • sponsored by Allergan • non-CME • Vevey&lt;br&gt;Challenges and controversies in gastroparesis: Motor, sensory or brain-gut dysfunction?&lt;br&gt;Moderator: Brian Lacy</td>
<td>6:00–6:10 pm Introduction: Review epidemiology, quality of life, economic impact, and current FDA treatment options&lt;br&gt;Brian Lacy</td>
<td>6:10–6:25 pm Gastroparesis: It’s a motor disorder&lt;br&gt;Henry Parkman</td>
<td>6:25–6:40 pm Gastroparesis: It’s a sensory disorder&lt;br&gt;Linda Nguyen</td>
<td>6:40–6:55 pm Gastroparesis: It’s all in the pylorus&lt;br&gt;Michael Camilleri</td>
<td>6:55–7:10 pm Gastroparesis: It’s a disorder of the brain-gut axis&lt;br&gt;Brian Lacy</td>
</tr>
</tbody>
</table>
**Sunday, August 18, 2019**

<table>
<thead>
<tr>
<th>Time</th>
<th>Event Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>7:00–10:00 am</td>
<td>Registration • Vevey Foyer, 2nd floor</td>
</tr>
<tr>
<td>7:00–8:00 am</td>
<td>Breakfast • Visit Exhibits • Vevey Foyer, 2nd floor</td>
</tr>
<tr>
<td>8:00–9:00 am</td>
<td><strong>W. Jerry Dodds, MD and Sushil K. Sarna, PhD Lectureship • Vevey</strong></td>
</tr>
<tr>
<td></td>
<td>Introduction: Beverley Greenwood-Van Meerveld</td>
</tr>
<tr>
<td></td>
<td><strong>Handshake research, mechanistic thinking, and management of patients:</strong></td>
</tr>
<tr>
<td></td>
<td>Combine basic science and clinical medicine: Half human, half fish</td>
</tr>
<tr>
<td></td>
<td><em>Michael Camilleri</em></td>
</tr>
<tr>
<td>9:00–10:00 am</td>
<td><strong>Young Investigator Presentations • Vevey</strong></td>
</tr>
<tr>
<td></td>
<td>Moderators: Brian Gulbransen, Maria Vazquez Roque, Co-Chairs, Young Investigator Forum</td>
</tr>
</tbody>
</table>
|               | Exploring the roles of voltage-gated calcium channels in mouse enteroendocrine cell mechanotransduction  
|               | C Alcaino, K Knutson, V Nayak, P Strege, H Kacmaz, A Treichel, J Li, A Leiter, G Farrugia, A Beyder  
|               | Rochester, MN, Worcester, MA, Mayo Clinic                                         |
|               | Proton pump inhibitor therapy reduces risk of repeat ablation for atrial fibrillation in patients with gastroesophageal reflux disease JX Cai, S Kapur, and WW Chan, Boston, MA, Harvard Medical School  
|               | Mechanisms responsible for regulation of caloric intake following acute high fat diet are developmentally regulated C Clyburn, RA Travagl, KN Browning  
|               | Hummelstown, PA, Hershey, PA, Penn State University College of Medicine  
|               | Abstract 18A                                                                      |
|               | Enteric glial A2BR signaling regulates gut barrier function, immune responses, and behavior after acute colitis V Grubišić, V Bali, DE Fried, HK Eltzschig, MS Mazei-Robison, BD Gulbransen  
|               | East Lansing, MI, Houston, TX, Michigan State University  
|               | Abstract 18B                                                                      |
|               | Acute colitis following chronic traumatic brain injury in mice induces persistent neurobehavioral deficits ME Hanscom, DJ Loane, T Shea-Donoue, AI Faden  
|               | Baltimore, MD, Dublin, Ireland, Bethesda, MD, University of Maryland  
|               | Abstract 18E                                                                      |
|               | Effects of comprehensive self-management intervention on extraintestinal pain, fatigue, and sleep in adults with IBS KK Kamp, KR Weaver, LB Sherwin, SK Hwang, P Yang, BR Burr, K Cain, MM Heitkemper  
|               | Seattle, WA, Baltimore, MD, Columbia, MO, Yangsan, South Korea, University of Washington  
|               | Abstract 18F                                                                      |
|               | The molecular origin of differences in chronic visceral pain following unpredictable early life stress TLouwies, B Greenwood-Van Meerveld  
|               | Oklahoma City, OK, Oklahoma University Health Sciences Center  
|               | Abstract 18G                                                                      |
|               | Mechanotransduction in enteric glia may cause direct presynaptic facilitation of non-cholinergic neuromuscular contractions EMazzotta, EVillalobos-Hernandez, I Grants, S Bergese, B Gulbransen, JM McClain, A Harzeman, BA Blakeney, J Grider, FL Christof  
|               | Columbus, OH, East Lansing, MI, Richmond, VA, The Ohio State University  
|               | Abstract 18H                                                                      |
|               | Sacral nerve stimulation inhibits the MAPK/NF-KB signaling pathway and promotes TREG-TH1/TH17 cell balance and self-renewal of enteric nervous system in TNBS-induced inflammation in rats YMeng, J Chen  
|               | Baltimore, MD, Johns Hopkins University  
|               | Abstract 18I                                                                      |

*program continued*
<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>9:00–10:00 am</td>
<td>Young Investigator Presentations • Vevey continued</td>
</tr>
</tbody>
</table>
|                  | Enteric glia contribute to visceral hypersensitivity through interactions with nociceptors  
|                  | W Morales-Soto, BD Gulbransen                                          
|                  | East Lansing, MI, Michigan State University                             |
|                  | Pre-exposure to an enriched environment is protective against stress-induced viscero-somatic hypersensitivity  
|                  | A Orock, J Love, C Ligon, AC Johnson, B Greenwood-Van Meerveld         
|                  | Oklahoma City, OK, University of Oklahoma Health Sciences Center       |
|                  | Symptom severity predicts short-term response to gastric electrical stimulation in children with refractory nausea and vomiting  
|                  | DK Orsagh-Yentis, K Ryan, N Bal, K Vaz, D Yacob, C Di Lorenzo, PL Lu  
|                  | Columbus, OH, Nationwide Children's Hospital                            |
|                  | 4D MRI allows for dynamic estimation of gastric motility in humans      
|                  | R Sclocco, C Nguyen, R Staley, H Fisher, A Mendez, V Napadow, B Kuo    
|                  | Charlestown, MA, Boston, MA, Massachusetts General Hospital, Harvard Medical School |
|                  | Impact of fecal bile acid diagnostic testing in 966 patients with chronic functional diarrhea: reduction in health care utilization, positive diagnosis and prediction of response to bile acid sequestrants  
|                  | P Vijayvargiya, G Calderon, D Gonzalez, S Tawfic, S Batbold, H Saifuddin, P Duggan, V Melo, T Thomas, M Heeney, A Beyder, J Miller, Jr., K Valles, K Oyemade, J Fenner, V Chedid, M Camilleri  
|                  | Rochester, MN, Mayo Clinic College of Medicine and Science             |
|                  | "First in man" routine patch clamp recordings in neurons and glia in isolated networks of human myenteric ganglia - A model of the human little brain  
|                  | Columbus, OH, The Ohio State University                                 |
| 10:00–10:30 am   | Break • Visit Exhibits • Vevey Foyer, 2nd floor                       |
| 10:30 am–12:00 pm| ANMS Distinguished Lectures • Vevey                                   |
|                  | Moderators: Jim Galligan, Satish Rao                                   |
| 10:30–11:00 am   | UES journey from the laboratory to clinic                             
|                  | Reza Shaker                                                            |
| 11:00–11:30 am   | Bugs, guts and brains: Interactions of the gut microbiota with gut epithelium and nerves  
|                  | Helen Raybould                                                         |
| 11:30 am–12:00 pm| A renaissance for ‘myogenic’ regulation of GI motility                
<p>|                  | Kenton Sanders                                                         |
| 12:00 pm         | Adjourn                                                                |</p>
<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:00–8:30 am</td>
<td>Registration and Breakfast</td>
</tr>
<tr>
<td>8:30–8:40 am</td>
<td>Welcome • Linda Nguyen</td>
</tr>
<tr>
<td>8:40–9:10 am</td>
<td>Gastroparesis &amp; functional dyspepsia • Linda Nguyen</td>
</tr>
<tr>
<td>9:10–9:40 am</td>
<td>Irritable bowel syndrome (IBS) &amp; small intestinal bacterial overgrowth (SIBO) • William Chey</td>
</tr>
<tr>
<td>9:40–10:10 am</td>
<td>Break • Q &amp; A with speakers</td>
</tr>
<tr>
<td>10:10–10:40 am</td>
<td>How to navigate eating • Bethany Doerfler</td>
</tr>
<tr>
<td>10:40–11:10 am</td>
<td>Exploring brain–gut therapies • Tiffany Taft</td>
</tr>
<tr>
<td>11:10–11:40 am</td>
<td>Stories that matter: The patient’s voice • Gastroparesis: Melissa Adams VanHouten • Irritable bowel syndrome: Ceciel Rooker</td>
</tr>
<tr>
<td>11:40 am–12:00 pm</td>
<td>Q &amp; A (all speakers)</td>
</tr>
<tr>
<td>Poster No.</td>
<td>Title</td>
</tr>
<tr>
<td>-----------</td>
<td>----------------------------------------------------------------------</td>
</tr>
<tr>
<td>1</td>
<td>Predictors of hospitalization for children with cyclic vomiting syndrome</td>
</tr>
<tr>
<td>2</td>
<td>Trends and costs of hospitalization for children and adolescents with cyclic vomiting syndrome: 2015-2018</td>
</tr>
<tr>
<td>3</td>
<td>Altered lysophosphatidic acid receptor expression in chronic intestinal pseudo-obstruction</td>
</tr>
<tr>
<td>4</td>
<td>Efficacy and safety of DOR fundoplication in patients with severe gastroparesis and refractory gastroesophageal reflux disease</td>
</tr>
<tr>
<td>5</td>
<td>Cesarean delivery and functional gastrointestinal disorders (FGID): Could an altered gut microbiome at birth increase the risk for FGID?</td>
</tr>
<tr>
<td>6</td>
<td>Abnormal bolus reflux on impedance-pH monitoring independently predicts 3-year mortality in patients with idiopathic pulmonary fibrosis</td>
</tr>
<tr>
<td>7</td>
<td>Characterization of anorectal manometry of children with attention deficit hyperactivity disorder (ADHD)</td>
</tr>
<tr>
<td>8</td>
<td>Clinical characteristics, trends and outcomes in inpatient pediatric cyclic vomiting syndrome in the United States</td>
</tr>
<tr>
<td>9</td>
<td>Demographics and associated diagnoses of readmission of pediatric cyclic vomiting syndrome hospitalizations in the United States</td>
</tr>
<tr>
<td>10</td>
<td>Does anorectal manometric parameters predict which patients expel a water-filled balloon using a commercial stool device following a failed balloon expulsion test?</td>
</tr>
<tr>
<td>11</td>
<td>Physiological responses to sacral nerve stimulation in rodent colon</td>
</tr>
<tr>
<td>12</td>
<td>A novel in vivo model of colonic aganglionosis using diphtheria toxin-mediated ablation of the enteric nervous system</td>
</tr>
<tr>
<td>13</td>
<td>Abnormal enteric innervation and altered gut motility may contribute to post pull-through morbidity in Hirschsprung disease</td>
</tr>
<tr>
<td>14</td>
<td>Multichannel electrogastrography distinguishes gastric slow wave spatiotemporal parameter differences in pediatric chronic nausea</td>
</tr>
</tbody>
</table>
16 Abnormal reflux on combined hypopharyngeal-esophageal impedance–pH testing predicts poorer health-related quality of life in laryngopharyngeal reflux patients
J X Cai, S Salgado, D Sikavi, R Din, K Hathorn, W Lo, T Carroll, W W Chan
Boston, MA
Harvard Medical School

17 Proton pump inhibitor therapy reduces risk of repeat ablation for atrial fibrillation in patients with gastroesophageal reflux disease
J X Cai, S Kapur, W W Chan
Boston, MA
Harvard Medical School

18 Postreflux swallow-induced peristaltic wave index (PSPW) independently correlates with symptoms in laryngopharyngeal reflux patients
J X Cai, S Salgado, R Din, D Sikavi, D Lee, T L Carroll, W W Chan
Boston, MA
Harvard Medical School

19 Tradipitant, a novel NK-1 receptor antagonist, significantly improved nausea and other symptoms of gastroparesis in a phase II trial
J L Carlin, V R Lieberman, A Dahal, M S Keefe, C Xiao, G B Birzniesks, M H Polymeropoulos
Washington, DC
Vanda Pharmaceuticals, Inc.

20 Tradipitant, a novel NK-1 receptor antagonist, significantly improved nausea in both diabetic and idiopathic gastroparesis
J L Carlin, M S Keefe, V R Lieberman, A Dahal, C Xiao, G B Birzniesks, M H Polymeropoulos
Washington, DC
Vanda Pharmaceuticals, Inc.

21 Clinical efficacy of per-oral endoscopic myotomy (POEM) for spastic esophageal disorders – a systematic review and meta-analysis
S Chandan, B P Mohan, O Chandan, L K Jha, H S Mashiana, A T Hewlett, M A Khashab
Omaha, NE, Tucson, AZ, Baltimore, MD
University of Nebraska Medical Center

22 Real-world evaluation of economic burden for diabetic gastroparesis in the US
Y J Chen, Z Huang, M Luo, H Pang, C Almansa, G Dukes, H P Parkman
Cambridge, MA, Raleigh, NC, Philadelphia, PA
Takeda Pharmaceuticals

23 Enteric glial MHC II contributes to T-lymphocyte activation in LPS stimulation
A K Chow, B D Gulbransen
East Lansing, MI
Michigan State University

24 Immunoreactivity for the Na+/HCO3– cotransporter (NBCe1, SLC4A4) in pacemaker interstitial cells of Cajal is selectively reduced by knocking down SLC4A4 gene expression using an Etv1-Cre driver in mouse
M G Colmenares Aquilar, A Mazzone, W Zhao, P R Streges, S T Eisenman, J M Silva, L Sha, G E Shull, M F Romero, G Farrugia, S J Gibbons
Rochester, MN, Shenyang, LN, China, Cincinnati, OH
Mayo Clinic

25 Upper gastrointestinal symptoms are related to the kind of alcoholic beverage
N F Cordova Valenzuela, J A Magana Leon, A Delgado Moreno, F A Felix Tellez, A M Mateos Viramontes, A A Leó Martinez, J M Avendaño Reyes, A R Flores Rendón
Mexicali, BC, Mexico
Facultad de Medicina Universidad Autónoma de Baja California

26 Characterization of esophageal motility in children with operated esophageal atresia using high-resolution impedance manometry and pressure flow analysis
O Courbette, T Omari, A Aspirot, C Faure
Montreal, QC, Canada, Adelaide, SA, Australia
University of Montreal

27 Role of the endocannabinoid system in the regulation of intestinal barrier function: Effects of diet
H Cuddihye, J Cavin, W K MacNaughton, K Sharkey
Calgary, AB, Canada
University of Calgary

28 The efficacy of celiac plexus block as a non-invasive procedure in treating median arcuate ligament syndrome (MALS) patients
A Dada, S Alam, R Naga, S Usmani, M Nasri, H Mistry, A Suleman
Plano, TX, McKinney, TX
Emory University

29 Pharyngeal and upper esophageal sphincter motor dynamics during normal swallow
A Damrongmanee, K El-Chammas, L Fei, H Zang, N Santucci, A Kaul
Cincinnati, OH
Cincinnati Children’s Hospital Medical Center
30 Efficacy of probiotic I3.1 symptomatic improvement in patients with lactose intolerance
AD Cano Contreras, N Pérez y López, JI Minero Alfaro, VM Medina López, JU Reyes-Huerta
Mexico City, Mexico
Universidad Autonoma de Mexico  Abstract 48

31 Retrograde gastroesophageal intussusception despite fundoplication
JK Deutsch, A Davis, MJ Sanchez
New Haven, CT
Yale University  Abstract 49

32 Enteric glia express the cytosolic DNA sensor sting
CDharshika, CM Waters, BD Gulbransen
East Lansing, MI
Michigan State University  Abstract 50

33 Ameliorating effects of sacral nerve stimulation for visceral hypersensitivity and mechanisms involving nerve growth factor and TRPV1 in rats with irritable bowel syndrome
Y Dong, J Yin, J Chen
Baltimore, MD
Johns Hopkins University  Abstract 51

34 Sub-serosal interstitial cells of cajal contribute to nitrergic innervation and influence the excitability of longitudinal smooth muscle in the mouse proximal colon
BDrumm, BE Rembetski, SA Baker, KM Sanders.
Reno, NV
University of Nevada, Reno School of Medicine  Abstract 52

35 Frequency of manometery and esophagram abnormalities in jackhammer esophagus
B Elger, AS Abdussalam, RS Gorantla, KS Nandipati, JS Stavas, SS Chandra
Omaha, NE
Creighton University School of Medicine  Abstract 53

36 Efficacy of nutrition intervention on key nutrients and fiber intake in patients with constipation and dyssynergic defecation
CM Flatley, SS Satish Rao, R Parr, S Fiedler, J Anglin
Augusta, GA
Augusta University  Abstract 54

37 Epigenetic factors in enteric nervous system development and disease
J Ganz, E Melancon, C Wilson, A Amores, P Batzel, M Strader, I Braasch, P Diba, J Kuhlman, J Postlethwait, J Eisen
East Lansing, MI, Eugene, OR, Ames, IA
Michigan State University  Abstract 55

38 Transcutaneous vagal nerve stimulation improves symptoms, pain, and gastric emptying in patients with idiopathic gastroparesis
AC Gottfried, E Poon Adler, N Fernandez-Becker, JO Clarke, A Habtezion, LA Nguyen
Stanford, CA
Stanford University  Abstract 56

39 Exploring the relationship between prematurity and functional gastrointestinal disorders in children
SGutierrez, C Axelrod, C Velasco, M Saps
Miami, FL, Cali, Italy
Jackson Memorial Hospital, University of Miami  Abstract 57

40 Acute colitis following chronic traumatic brain injury in mice induces persistent neurobehavioral deficits
MEHanscom, DJ Loane, T Shea-Donohue, AI Faden
Baltimore, MD, Dublin, Ireland, Bethesda, MD, University of Maryland
YIF Participant  Abstract 58

41 Measurement of trans-esophagogastroduodenal pressure gradients during straight leg raise (SLR) maneuver can augment evaluation of the EGJ barrier during esophageal HRM
SLHasak, VH Hansalia, BRogers, CGyawali
Saint Louis, MO
Washington University in St. Louis  Abstract 59

42 Characterization of abdominal pain response to Rifaximin in patients with irritable bowel syndrome with diarrhea (IBS-D), by baseline (BL) pain severity
ZHeimanson, ALembo, BCash
Bridgewater, NJ, Boston, MA, Houston, TX
Salix Pharmaceuticals  Abstract 60

43 Rifaximin for improving abdominal pain and bloating symptoms in patients with irritable bowel syndrome with diarrhea (IBS-D) using modified definitions of pain response
ZHeimanson, BLacy, MPimentel
Bridgewater, NJ, Jacksonville, FL, Los Angeles, CA
Salix Pharmaceuticals  Abstract 61

44 Decreased ileocecal junction pressure does not correlate with the presence of small intestinal bacterial overgrowth: A retrospective evaluation
AA Herekar, YS Yan, JS Bhagatwala, SS Rao, AS Sharma
Augusta, GA
Augusta University  Abstract 62
45 Nestin-expressing cells isolated from ganglionic region of mice with Hirschsprung disease can give rise to functioning neurons
R Hotta, SM Bhave, M Ahmed, C Baker, EJ Arciero, N Ho, A Nair, AM Goldstein
Boston, MA
Harvard Medical School

46 Does etiology, prior therapy and operative time affect outcome of G-POEM in refractory gastroparesis? – A systematic review and meta-analysis
LK Jha, S Chandan, BP Mohan, OC Chandan, AT Hewlett, I Bhat
Omaha, NE, Tucson, AZ
University of Nebraska Medical Center

47 High stress level is associated with low motivation, confidence and rating of social support for weight management in participants in a clinical trial on pharmacologic management of obesity
HC Kadouh, MM Clark, S Kalsy, K Grothe, K Graszer, H Halawi, V Chedid, M Camilleri
Rochester, MN
Mayo Clinic College of Medicine and Science

48 Association of obesity class with gastric motor functions, appetite measures, gut hormones and body composition in individuals with obesity
HC Kadouh, H Halawi, V Chedid, D Burton, M Camilleri
Rochester, MN
Mayo Clinic College of Medicine and Science

49 Gastric dysmotility and its relationship to upper gastrointestinal symptoms in patients with long-standing diabetes mellitus
T Kamiya, H Fukuta, S Osaga, H Hagiwara, M Shikano, E Kubota, H Kataoka
Nagoya, Japan
Nagoya City University Graduate School of Medical Sciences

50 Effects of comprehensive self-management intervention on extraintestinal pain, fatigue, and sleep in adults with IBS
KK Kamp, KR Weaver, LB Sherwin, SK Hwang, PL Yang, BL Burr, K Cain, MM Heitkemper
Seattle, WA, Baltimore, MD, Baltimore, MD, Yangsan, South Korea
University of Washington
YIF Participant

51 Real-world analysis of symptoms, diagnostic patterns, and provider perspective on acute hepatic porphyria
JKo, S Murray, M Merkel, C Karki, K Krautwurst, R Mustafina, S Agarwal
Cambridge, MA, Mahwah, NJ
Alnylam Pharmaceuticals

52 The patient odyssey to confirmed acute hepatic porphyria diagnosis: Clinical characteristics and healthcare utilization of patients preceding diagnosis of acute hepatic porphyria
JKo, S Rudnick, H Pedro, M Merkel, A Simon, B Jonson, V Noxon, A Cole, S Agarwal
Cambridge, MA, Winston, Salem, NC, Hackensack, NJ
Alnylam Pharmaceuticals

53 'Non-pathological' reflux contributes to chronic cough
MLalehzari, S Chaudhuri, M Nguyen, M Gaeta, R Ryabtsev, A Masoud, M Sanchez
New Haven, CT
Yale University

54 The association between BMI and cough severity in patients referred for esophageal manometry testing
MLalehzari, S Chaudhuri, M Nguyen, M Gaeta, R Ryabtsev, A Masoud, M Sanchez
New Haven, CT
Yale University

55 The association between esophageal dysmotility and cough
MLalehzari, S Chaudhuri, M Nguyen, M Gaeta, R Ryabtsev, A Masoud, M Sanchez
New Haven, CT
Yale University

56 Lower basal esophagogastric junction pressures associated with regurgitation severity
MLalehzari, S Chaudhuri, M Gaeta, M Nguyen, R Ryabtsev, A Masoud, M Sanchez
New Haven, CT
Yale University

57 GC-C agonism with linaclotide attenuates chronic stress-induced colonic hypersensitivity independently of elevated CRF expression in the central amygdala
CO Ligon, G Hannig, P Ge, C Higgins, B Greenwood-Van Meerveld
Oklahoma City, OK, Cambridge, MA
University of Oklahoma Health Sciences Center

58 Inter-observer reliability for stool consistency between the bristol stool scale and the brussels infant and toddler stool scale (BITSS) when using Rome IV criteria in younger children
ALlanos-Chea, CAVelasco-Benitez, M Saps
Miami, FL, Cali, Italy
University of Miami

Poster Sessions, continued
Poster No. 59 Baseline impedance on high-resolution esophageal impedance-manometry correlates with impedance parameters of reflux in lung transplantation
W Lo, V Rangan, HJ Goldberg, WW Chan
Boston, MA
Brigham and Women’s Hospital, Harvard Medical School
Abstract 77

Poster No. 60 Gastroesophageal reflux is associated with chronic rejection after lung transplantation independent of underlying pulmonary physiology
W Lo, HJ Goldberg, WW Chan
Boston, MA
Brigham and Women’s Hospital, Harvard Medical School
Abstract 78

Poster No. 61 Obesity is independently associated with increased risk of fecal incontinence and rectal hyposensitivity
N Lodhia, L Horton, A Goldin, W Chan
Boston, MA
Harvard School of Medicine
Abstract 79

Poster No. 62 Clinical phenotypes of GERD patients non-responder to double doses of PPIs: A prevalence study based on esophageal pH monitoring results
LF Pineda, AJ Acuña, AJ Luquez, LM Moya, AM Guio
Bogotá, Colombia
Instituto Gutmedica Bogota
Abstract 80

Poster No. 63 Influence of high fat diet on the enteric nervous system during pregnancy
F Markovic, K Kennedy, D Sloboda, E Ratcliffe
Burlington, ON, Canada, Hamilton, ON, Canada
McMaster University
Abstract 81

Poster No. 64 Distribution of transient receptor potential vanilloid type 2 channel in rat gastrointestinal tract: alteration in TNBS-induced colitis
K Matsumoto, S Kato
Kyoto, Japan
Kyoto Pharmaceutical University
Abstract 82

Poster No. 65 Mechanotransduction in enteric glia may cause direct presynaptic facilitation of non-cholinergic neuromuscular contractions
Columbus, OH
The Ohio State University
YIF Participant
Abstract 83

Poster No. 66 Neuroanatomical and connectivity abnormalities identified by brain MRI analysis in CVS patients with and without marijuana use
RW McCallum, M Ramirez, I Sarosiek, H Sandoval, C Mullins, J Gavito, V Calhoun, T Davis
El Paso, TX, Albuquerque, NM, Lubbock, TX
Texas Tech University Health Science Center
Abstract 84

Poster No. 67 Evidence for the abnormal anchoring between the lower esophageal sphincter and crural diaphragm in patients with achalasia esophagus
RK Mittal, M Caplin, A Zifan
La Jolla, CA, San Diego, CA
University of California San Diego
Abstract 85

Poster No. 68 Electrophysiological and mechanical characteristics of rectal compliance and role of enteric nervous system and interstitial cells in gastrointestinal smooth muscle
SB Ryoo, TS Sung, RD Corrigan, J Lee, HM Kim, D Koh
Seoul, Korea, Reno, NV, Wonju, Korea
Seoul National University College of Medicine
Abstract 86

Poster No. 69 Importance of CGRP-mediated mechanisms in visceral organ cross sensitization
EN Mohammadi, CO Ligon, K Mackenzie, J Stratton, B Greenwood-VanMeerveld
Oklahoma City, OK, Redwood City, CA
University of Oklahoma
Abstract 87

Poster No. 70 Long-term symptom improvements after recommending gastroparesis diets in patients with suspected gastroparesis in relation to gastric emptying on wireless motility capsule testing
B Moshiree, B Kuo, A Lee, H Parkman, L Nguyen, I Sarosiek, S Rao, J Wo, R McCallum, M Schulman, W Hasler
Charlotte, NC, Boston, MA, Ann Arbor, MI, Philadelphia, PA, Palo Alto, CA, El Paso, TX, Augusta, GA, Indianapolis, IN, Largo, FL
University of North Carolina, Atrium Health
Abstract 88

Poster No. 71 Initial experience with abdominal massage during pediatric colonic manometry
S Mostamand, L Busing, A Sicolo, J Punati, TF Danialifa
Los Angeles, CA
Children’s Hospital Los Angeles
Abstract 89

Poster No. 72 Clinical phenotypic presentation of rectal prolapse varies with age
Stanford, CA
Stanford School of Medicine
Abstract 90
73 Symptom severity predicts short-term response to gastric electrical stimulation in children with refractory nausea and vomiting
DK Orsagh-Yentis, K Ryan, N Bali, K Vaz, D Yacob, C Di Lorenzo PL Lu
Columbus, OH
Nationwide Children’s Hospital
YIF Participant
Abstract 91

74 Resilience in irritable bowel syndrome is lower compared to the general population and other chronic gastrointestinal conditions
CH Parker, BD Naliboff, W Shih, AP Presson, L Kilpatrick, C Liu, L Chang
Toronto, ON, Canada, Los Angeles, CA, Loma Linda, CA, Salt Lake City, UT
University of Toronto
Abstract 92

75 Post-fundoplication gastroparesis: Similarities and differences to idiopathic and diabetic gastroparesis
Philadelphia, PA, Baltimore, MD, El Paso, TX, Wake Forest, NC, Ann Arbor, MI, Stanford, CA, Boston, MA, St. Louis, LA, Rochester, MN, Bethesda, MD
Temple University
Abstract 93

76 Economic burden of idiopathic gastroparesis in the United States
HP Parkman, YJ Chen, Z Huang, C Almansa, H Pang, M Luo, G Dukes
Philadelphia, PA, Cambridge, MA, Raleigh, NC
Temple University
Abstract 94

77 Psychometric evaluation of the ANMS GCSI-DD in patients with idiopathic or diabetic gastroparesis
HP Parkman, S Lavoie, DA Revicki, RM Speck, J Chen, B Kuo, M Camilleri
Bethesda, MD, Cambridge, MA, Boston, MA, Rochester, MN
Temple University
Abstract 95

78 Early postnatal malnutrition causes gastrointestinal dysmotility that is sexually dimorphic
GA Preidis, KG Soni, PT Edwards, T Halder, ME Conner
Houston, TX
Baylor College of Medicine & Texas Children’s Hospital
Abstract 96

79 Clinical utility of advanced impedance metrics of reflux in the pre-lung transplant population
V Rangan, W Lo, HJ Goldberg, WW Chan
Boston, MA
Brigham and Women’s Hospital, Harvard Medical School of Medicine
Abstract 97

80 A new treatment regimen achieves effective outcomes in rumination syndrome: A single-center experience
A Robles, H Quezada, YA Romero, E Tatro, R McCallum
El Paso, TX
Texas Tech University Health Science Center
Abstract 98

81 4D MRI allows for dynamic estimation of gastric motility in humans
R Sclocco, C Nguyen, R Staley, H Fisher, A Mendez, Napadow, B Kuo
Charlestown, MA, Boston, MA
Massachusetts General Hospital, Harvard Medical School
YIF Participant
Abstract 99

82 Patient perspectives on short-course pharmacotherapy: barriers and facilitators to rifaximin adherence
LB Sherwin, CB Deroche, M Matteson-Kome, M Bechtold, BJ Wakefield, T Ruppar
Columbia, MO, Chicago, IL
University of Missouri
Abstract 100

83 Cancelled

84 Opioids interfere with deglutitive inhibition assessed by response to multiple rapid swallows during high-resolution esophageal manometry
DL Snyder, LR Valdovinos, J Horsley-Silva, MF Vela, MD Crowell
Scottsdale, AZ
Mayo Clinic
Abstract 102

85 Effects of esophageal provocation on aerodigestive reflexes in infants following gastrostomy tube placement
NA Swiader, N Nazaryan, S Nawaz, C Collins, K Hasenstab, S Jadhkerla
Reynoldsburg OH, Columbus, OH
Nationwide Children’s Hospital
Abstract 103

86 Patients with irritable bowel syndrome (IBS) consume a considerably healthier diet than the general US population
TH Taft, L Guadagnoli, B Doerfler, EA Mutlu
Chicago, IL
Northwestern University Feinberg School of Medicine
Abstract 104

87 Feasibility and acceptability of health coaching for patients with irritable bowel syndrome
KN Tomasino, S Peterson, AU Pandit, SK Quinton, SW Kinsinger
Chicago, IL, Maywood, IL
Northwestern University Feinberg School of Medicine
Abstract 105
88 Environmental parkinsonism induces stressless response in neurons of the dorsal motor nucleus of the vagus
AR Travagli, C Bove
Elizabethtown, PA, Hershey, PA
Penn State College of Medicine
Abstract 106

89 Wireless motility capsule demonstrates changes in colon contractility during fiber administration compared to placebo
CD Velez, A Bailey, B Kuo, K Staller
Boston, MA
Harvard University
Abstract 107

90 ‘First in man’ routine patch clamp recordings in neurons and glia in isolated networks of human myenteric ganglia – A model of the human little brain
Columbus, OH
The Ohio State University
YIF Participant
Abstract 108

91 Aquaporin channel expression in normal human colon and terminal ileum mucosa and preliminary measurements in patients with IBS
XJ Wang, V Chedid, P Carlson, ATaylor, S McKinzie, I Busciglio, M Camilleri
Rochester, MN
Mayo Clinic College of Medicine and Science
Abstract 109

92 Descending perineum syndrome causes ~10% of constipation in 297 adults in referral center
XJ Wang, V Chedid, P Vijayvargiya, M Camilleri
Rochester, MN
Mayo Clinic College of Medicine and Science
Abstract 110

93 Enriched housing alleviates pain and visceral hypersensitivity in male and female rats
JH Winston
Galveston, TX
University of Texas Medical Branch
Abstract 111

94 The relationship between esophageal acid exposure and ineffective esophageal motility
T Yamasaki, T Kondo, T Kono, K Tozawa, T Tomita, T Oshima, HFukui, H Miwa
Nishinomiya, Japan
Hyogo College of Medicine
Abstract 112

95 Digital rectal examination in the evaluation of neuropathy in patients with anorectal disorders
Y Yan, Q Gu, A Herekar, T Patcharattrakul, A Sharma, Q Wan, S Rao
Augusta, GA
Augusta University
Abstract 113

96 Enteric neuronal aggregation of α-synuclein causes colonic dysmotility
NK Yelleswarapu, F Manfredsson, JJ Galligan
Okemos, MI, Grand Rapids, MI, East Lansing, MI
Michigan State University
Abstract 114

97 Comparison between direct vagal nerve stimulation and noninvasive auricular vagal nerve stimulation for opioid-induced constipation
Y Zhang, X Lin, J Chen
Baltimore, MD
Johns Hopkins University
Abstract 115

98 The role of Na+/HCO3-co-transporter activity in electrical slow waves of the mouse intestine
W Zhao, L Zhang, L Ermilov, A Mazzone, ST Eisenman, MG Colmenares Aguilar, JM Silva, GE Shull, MF Romero, L Sha, G Farrugia, SJ Gibbons
Rochester, MN, Cincinnati, OH, Shenyang, LN, China
Mayo Clinic
Abstract 116

99 Type II achalasia is increasing in incidence
MJ Zhou, DE Freedberg, D Markowitz, D Jodorkovsky
New York, NY
Columbia University Medical Center
Abstract 117

100 On the use of pressure-CSA loop analysis in the assessment of anal sphincter muscle dysfunction in patients with fecal incontinence
AZifan, RK Mittal, JSwartz, DC Kunkel, LJ Tuttle
La Jolla, CA, San Diego, CA
University of California San Diego
Abstract 118

101 Swallow-induced esophageal distension patterns during peristalsis in patients with functional dysphagia: An unsupervised analysis
AZifan, P Castillo, Y Youn, RK Mittal
La Jolla, CA, San Diego, CA, Seoul, Korea
University of California San Diego
Abstract 119