## **CURRICULUM VITAE**

# LIN CHANG, M.D.

Professor of Medicine

Vatche and Tamar Manoukian Division of Digestive Diseases
David Geffen School of Medicine at UCLA

# **PERSONAL HISTORY:**

Office Address: G. Oppenheimer Center for Neurobiology of Stress and

Resilience

10833 Le Conte Avenue

CHS 42-210

Los Angeles, CA 90095-7378

(310) 206-0192; FAX (310) 825-1919

# **EDUCATION:**

1978 - 1982	University of California, Los Angeles, Degree: B.S. Biochemistry
1982 - 1986	UCLA School of Medicine, Los Angeles, Degree: M.D.
1986 - 1987	Internship: Harbor-UCLA Medical Center, Internal Medicine
1987 - 1989	Residency: Harbor-UCLA Medical Center, Internal Medicine
1989 - 1990	Research Fellowship: Harbor-UCLA Medical Center, Division of Gastroenterology
1990 - 1992	Clinical Fellowship: UCLA Integrated Program, Gastroenterology

**LICENSURE:** California - #G061634

**BOARD CERTIFICATION:** ABIM: Internal Medicine 1989

Gastroenterology recertification 2014

# **PROFESSIONAL EXPERIENCE:**

2006- present Professor of Medicine, Division of Digestive Diseases, David

Geffen School of Medicine at UCLA

2000 - 2006 Associate Professor of Medicine, Division of Digestive

Diseases, David Geffen School of Medicine at UCLA

1997 - 2000	Assistant Professor of Medicine, Division of Digestive Diseases, UCLA School of Medicine
1993 - 1997	Assistant Professor of Medicine-in-Residence, UCLA, Harbor-UCLA Medical Center
1992 - 1993	Associate Consultant, Mayo Clinic, Rochester, Minnesota, Department of Gastroenterology

# **PROFESSIONAL ACTIVITIES:**

2017 – present	Vice-Chief, Vatche and Tamar Manoukian Division of Digestive Diseases, David Geffen School of Medicine at UCLA
2002 - present	Co-Director, G Oppenheimer Center for Neurobiology of Stress and Resilience, Division of Digestive Diseases, David Geffen School of Medicine at UCLA
2022 – present	Clinical Studies and Database Core Lead and Board of Associate Directors, UCLA Goodman Luskin Microbiome Center
2013 – present	Program Director, UCLA GI Fellowship Training Program
2012 – 2016	Director, Digestive Health and Nutrition Clinic, UCLA
2016 – 2020	Scientific Review Committee, Clinical Translational Science Institute
2011 - 2016	Co-Leader, Clinical Translational Science Institute, Clinical and Community Research Resource Program
2005 – 2011	Associate Director, UCLA General Clinical Research Center
2004 - 2014	Co-Director, CURE: Digestive Diseases Research Center, Human Studies Core
2002 - 2004	Course Director of Pathophysiology of Disease: Gastrointestinal System, UCLA School of Medicine
1997 - 2002	Co-Director and Head of Clinical and Clinical Research Operations, Neuroenteric Disease Program, UCLA/CURE
1997 - 2007	Director, Motility Unit, UCLA Medical Center
1993 - 1997	Director, General Gastroenterology Clinic, Harbor-UCLA
1993 - 1997	Director, Motility Unit, Harbor-UCLA

# **Committee Service**

1994 - 1999	Harbor-UCLA Department of Medicine
1994 - 1997	Professional Group Management Committee
1996 - 1997	Medical Intern Interview Committee
1996 - 1999	Clinical Study Center Advisory Committee
1997 - present	UCLA
1997 - 1998	Clinical GI Meeting Committee
2000 - 2001	Enrichment Committee
1998 - 1999, 2002-3	All-Day Research Meeting Organizing Committee
	Served as Co-chair (2002)
2001 - 2003	Executive Committee
2005 - 2019	CURE Pilot and Feasibility Committee
2009 - 2015	UCLA MedCAP Committee, alternate member
2012- 2014	UCLA Search Committee for FTE in Division of Digestive
	Diseases
2010 – 2012	Gastroenterology Fellowship Application Committee
2013 – present	Gastroenterology Fellowship Application Committee (Chair)
2013 – present	Gastroenterology Fellowship Curriculum Action Committee
•	(Chair)
2014 – present	Gastroenterology Fellowship Clinical Competency
·	Committee
2015 – present	Gastroenterology Fellowship Program Evaluation
•	Committee (Chair)
2015 – present	Research Council, Division of Digestive Diseases
2011 – 2016	Operations Committee and Scientific Review Committee,
	UCLA Clinical Translational Research Center
2016 – 2021	Clinical and Translational Science Institute (CTSI) Scientific
	Review Committee (SRC)
2022 – present	UCLA Scientific Review Committee (SRC)
2018 – present	CTSI Data Safety Monitoring Board (DSMB)
2016 – 2018	UCLA Medical Education Pathway (MEP) mentor
2017 – present	NIH T32 GI training grant committee member
2016 – 2023	Department of Medicine Research Day, poster judge
2018 – 2022	Associate Director, CURE Digestive Disease Research
	Center
2018 – 2021	Council on Research, Academic Senate
2019 – present	UCLA Biodesign Fellowship, Affiliate Faculty
2019 – present	GI faculty scholarship champion
2020 – present	Advisory Committee for the UCLA Resident-Scientist
	Training Program (RSTP), an NIH-funded, R38 pilot
	program
2020 – present	Fellowship Counselor for Digestive Diseases, UCLA
	Department of Medicine residency program
2021 – 2023	IBD Director of Research faculty search committee, Chair
2022	Associate Dean for Clinical Research search committee
Sept 2022 – Aug 2025	Legislative Assembly
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Digestive Diseases Week

2017	2017 Regional Practice Skills Workshop- California, Faculty
2018	Course Director Director, AGA Postgraduate Course
2017 – 2018	Presidential Plenary Subcommittee, AGA Council
2018 – 2021	Clinical Research Councilor, AGA Institute Governing Board
2018 – 2021	Appointments Committee
2018 – 2021	AGA FORWARD Program (R25) selection committee and
2010 2021	External Advisory Board
2020 - 2023	AGA Clinical Practice Guidelines on Chronic Constipation,
	Technical Review Committee, Executive Committee
2020-2021	AGA DDW Task Force
2023-2024	Co-Course Director, AGA Western Regional Women in GI
	workshop
	AGA Neurogastroenterology and Motility Section
2003-2005	Abstract Selection Committee, Pharmacotherapy
	(served as Chair for 2004-5)
2003-2005	Abstract Selection Committee, Pharmacotherapy
	(served as Chair for 2004-5)
2004-2006	Abstract Selection Committee, Small Bowel Motility and
	Disorders (Chair for 2005-6)
2007-2012	Clinical Councilor
2008-2009	Abstract Section Committee Chair, Constipation, IBS
	and other Functional GI Disorders: Pathophysiology and
0000 0010	Genetics
2009-2010	Abstract Selection Committee, Constipation, IBS and
	Other Colonic Motility and Functional Disorders:
2010-2012	Pathophysiology Genetics and Molecular Epidemiology
2010-2012	Abstract Selection Committee Chair, Viscerosensory Mechanisms and Visceral Nociception
2012-2013	Abstract Selection Committee (Chair), Constipation, IBS
2012-2013	and Other Colonic Motility and Functional Disorders:
	Pathophysiology Genetics and Molecular Epidemiology
2012- 2013	Abstract Selection Committee (Chair), Constipation, IBS
2012 2010	and Other Colonic Motility and Functional Disorders:
	Diagnosis, Evaluation and Treatment
2013-2014	Abstract Selection Committee (Chair), Irritable Bowel
	Syndrome
2015-2016	Abstract Selection Committee (Vice Chair), Irritable
	Bowel Syndrome: Clinical
2016-2017	Abstract Selection Committee (Chair), Irritable Bowel
	Syndrome: Clinical
2017-2019	Vice-Chair, Neurogastroenterology and Motility Section
	AGA Hormone and Receptors Section
2005-2008	Councilor
2005-2008	Hormone and Receptors Section Abstract Selection
	Committees (Chair 2006-2008):
	Hormones/Transmitters/Receptors and the Enteric
	Nervous System, Gl Motility, Brain-Gut and Gut-Brain
	Axis, Appetite and Satiety

2010-2011	Nominating Committee
	AGA Institute Clinical Practice Section
2014-2015	Councillor
2023-2024	Councillor
2023-2024	Abstract Review Committee, COVID and Clinical
2023-2024	·
	Practice
2003 – 2010	Functional Brain Gut Research Group (FBG)
2003-2006	Annual FBG Young Investigators' Forum, Faculty, Co-Chair
	(2005), Chair (2006)
2004-2006	Council member
2006-2008	Secretary/treasurer
2008-2010	President Elect
2000-2010	NGM 2009 abstract selection committee
2009	NGW 2009 abstract selection committee
2008-present	American Neurogastroenterology and Motility Society
	(ANMS)
2008-2010	Councilor
2008-2010	Research Committee
2010	NGM 2010 abstract selection committee
2010	Chair, Tissue and Serum Biomarker group, FDA
	Biomarker Workshop
2010-2012	Chair, Clinical Practice Committee
2010-2012	President Elect
2012-2014	President
2014-2016	Past-President
2015-2016	Neurogastroenterology and Motility Journal Management
	Committee
2016, 2019	Young Investigator Forum faculty member
2015-2016	Junior Faculty Task Force
2017	Federation of Neurogastroenterology and Motility 2018
	meeting planning committee
2017-2022	ANMS Institute's Advisory Board
2019-2023	Women in NGM organizing committee
2022	ANMS Planning Committee for the 2022 Virtual Scientific
	Webinars
2003 procest	Rome Foundation
2003-present 2005-present	Rome Foundation Board of Directors
2007-present	Industry Advisory Council, Chair
2007-present	Education Committee, Chair
2003-2006	Rome III Committee, Co-chair of subcommittee on <i>Gender</i> ,
	Age and Cultural Influences on Functional Bowel Disorders
2005-2006	Rome Committee, Co-chair of working group on Severity of
2003-2000	Functional Gastrointestinal Disorders
2005-2006	Rome III working committee to develop a CD slide set for
2000-2000	Management and Diagnosis of Treatment Trials
2008-2009	Chair, Endpoints and Outcomes in FGID Conference
2012-2016	Rome IV Editorial Board and committee liaison
2012-2010	Nome IV Editorial Doard and Committee Haison

2013-2016 Rome IV Functional Bowel Disorders committee 2012-2013 Rome-China Liaison Committee, Chair 2020-2022 Rome communications working team Rome IBS plausibility working team 2020-present Rome V Editorial Board and committee liaison 2020-present 2004 - present **National Institutes of Health (NIH)** November 2004 NIH Clinical and Integrative Gastrointestinal Pathobiology (CIGP) study section ad hoc reviewer Digestive Sciences Small Business and Bioengineering November 2007, July 2008 scientific review panel NIDDK Data and Safety Monitoring Board- EPISOD 2007 - 2012October 2008 Center for Scientific Review- CFS study section May 2009 NIDDK reviewer for challenge grants February 2010 Somatosensory and Chemosensory Systems (SCS) study section- ad hoc reviewer June 2012 NIDDK study section for pilot R21 applications September 2015-June 2016 NIDDK Workshop on Functional Gastrointestinal Disorders: Research Directions, Planning Committee July 2016 – June 2020 Clinical, Integrative and Molecular Gastroenterology Study Section Diabetic Complications Consortium (DiaComp): 2019 Pilot & August 2019 Feasibility reviewer June 2021 NIDDK Diseases Special Emphasis Panel 2003-present **Other Committee Service** 2003-2013 International Foundation for Functional Gastrointestinal Disorders (IFFGD) Symposium Planning Committee IFFGD's 30th Anniversary Nancy and Bill Norton Education 2020-2021 Series Program Committee, Co-Chair 2005-2010, July 2015-2019 Gastrointestinal Drugs Advisory Committee of the FDA 9/16/2021 to 6/30/2025 (Chair, 2009-2010) 2009-2013 FDA Special Government Employee Institute of Medicine Committee on Gulf War and Health: April 2012 – February 2014 Long-term Effects of Blast Exposure 2009-2014 PRO Consortium IBS working group (qualitative research phase) 2014-2018 PRO Consortium IBS working group expert panel (quantitative research phase) American Board of Internal Medicine (ABIM) January 2018- 2022 Gastroenterology Committee

# Membership in Professional Associations and Scholarly Societies:

January 2022 - June 2024

1994 - present	American College of Gastroenterology (Fellow in 05/12)
1994 - present	American Gastroenterological Association (Fellow in 02/08)
2000 - 2010	Functional Brain Gut Research Group
2001 – 2022	Society for Neuroscience

**Approval Committee** 

Gastroenterology Certification and Traditional MOC

2004 - 2010 Gastroenterology Research Group

2004 - present American Neurogastroenterology and Motility Society
2008 - present Organization of the Study of Sex Differences (OSSD)

## **Advisory Boards/Consultant:**

2003, 2006-9 Foundation for Better Health Care
2008-2014 Foundation, IBS Initiative (Chair)
2014- present GI Health Foundation, Board member

2001-2007, 2009 GlaxoSmithKline

2001-2005 Solvay 2001-2005 Novartis

2005-2007 Vela/Pharmos Pharmaceuticals

2001-2003, 2007-14 Forest, Actavis

2003 Merck

2005 sanofi-Aventis

2006-2016, 2018-2021 Microbia/Ironwood (Steering Committee 2018- present)

Johnson & Johnson

 2006-2013
 Prometheus

 2006, 2015, 2020
 Allergan

 2006-2009, 2011-12, 2015
 Takeda

 2007, 2011
 Lexicon

 2008-2018
 Salix

 2008-2009
 McNeil

 2008, 2012-3
 Tioga

 2008, 2010-12
 Albireo

 2008, 2010, 2015-2018
 Synergy

 2008-2011
 Rose Pharma

 2008, 2010
 Movetis/Shire

 2009
 Ocera Therapeutics

 2011
 Orexigen

 2012
 ONO

 2011
 Marathon

 2012-2013
 Ferring

2011

2013 Purdue Pharma L.P. 2013 Entera Health

2014 Furiex

2014-2015 QOL Medical 2014-2018 Biomerica

2014 Drais Pharmaceuticals 2014-2019 ForConti Medical

2015-2018, 2022 Ardelyx

2015 Commonwealth Laboratories

2015 Valeant
2015 Astra-Zeneca
2016-2020 IM Health Sciences
2016 Synthetics Biologics

2016-2017 Eli Lilly 2016-2017, 2019 Orpho-Med

2017 Napo Pharmaceuticals2017 Cairn Diagnostics

2018-2019 Modify Health Clinical Advisory Committee Arena Pharmaceuticals 2018-2019 2018 Ritter 2018 Alnylam Pharmaceuticals 2018-2019 Meta Me 2018, 2022 Protagonist 2019-2020 Takeda-Shire 2020 Gelesis 2020 Pendulum 2020 Cosmo Pharma 2021 **Immunic** 2021 Mauna Kea Technologies 2022 AbbVie 2022-present Atmo 2021-present Trellus Health 2022 Mahana Therapeutics 2023 Food Marble 2023 Vibrant **Braintree** 2023 2023-2025 Viscera LLC **Reviewer Services:** Associate Editor October 2009-2015 American Journal of Gastroenterology Clinical Gastroenterology and Hepatology June 2017-2022 June 2022-2027 Gastroenterology **Editorial Board** 2004-2007 American Journal of Gastroenterology 2005-Gastroenterology and Hepatology Therapeutic Advances in Gastroenterology 2008-Neurogastroenterology and Motility 2008-2014 Gastroenterology (also Selected Summaries contributor) 2010-2013 Frontiers in Gastrointestinal Pharmacology 2010 2012-2015 Clinical Gastroenterology and Hepatology 2016-2019 Journal of Clinical Gastroenterology Reviewer 1996, 2003 Alimentary Pharmacology & Therapeutics 1996 Digestion 1996 - 1997 Current Gastroenterology 1998, 2001-2010, 2016-21 Gastroenterology 1998, 2003-2004, 2015, 2018Gut 2000-2002, 2004-2016 American Journal of Gastroenterology 2000 Sleep Reviews in Medicine 2004 Mayo Clinic Proceedings

Neurolmage

American Journal of Physiology

Lancet

Pain

2001 2001-2002

2001

2001, 2008

2002	Biological Research in Nursing
2003, 2006-2017	Neurogastroenterology and Motility
2003	Annals of Rheumatic Diseases
2003-2020	Clinical Gastroenterology and Hepatology

2005 Gender Medicine 2005, 2008-9 Journal of Pain

2007 Annals of Internal Medicine

2007 Journal of Psychosomatic Research

2008 Therapeutics in Gastroenterology and Hepatology

2016 Plos One

2020 Digestive Diseases and Sciences

# **HONORS AND SPECIAL AWARDS:**

1990	Young Investigator Award, American Motility Society
1995	Auxiliary Award, American College of Gastroenterology
2002	Janssen Award in Gastroenterology, Basic or Clinical Research
2002	Women in Gastroenterology and Wyeth Award for Gender Based Research, American College of Gastroenterology
2009	AGA Distinguished Clinician Award
2012	Most cited original paper 2009—2011 in Neurogastroenterology & Motility
2016 – 2017	UCLA/CSMC Mid-Career Women's Leadership Program
2018	2018 Innovation Fund MedTech competition recipient
2018	2018 David Y. Graham & Jim T. Schwartz Distinguished Lectureship Award
2018	Healio Gastroenterology and Liver Disease Gold Award for best special report or section in the American Society of Healthcare Publication Editors (ASHPE) Awards Competition for "Healio Hot Topic: IBS". One of the section experts
2019	ANMS Distinguished Investigator Award for Women in Neurogastroenterology, American Neurogastroenterology and Motility Society (ANMS)
2019	Certificate of Training, Facilitation Training in Communication Skills

2010 – 2011	Voted one of "75 Best Gastroenterologists in America" by Becker's ASC Review
2013-2016, 2019-2020	Best Doctors in America honor
2017-2019	Super Doctors in US honor
2019-2024	Southern California Super Doctors
2022-2024	Legacy Hall of Fame – Selected 15 years or more, Southern California Super Doctors
2017 - 2024	Castle Connolly Top Doctor
2019	Albert Nelson Marquis Who's Who in America, Lifetime Achievement Award
2019, 2023	AGA-Rome Lectureship presenter at Digestive Diseases Week meeting
2020	Who's Who Top Doctors Honors Edition
2021	AGA Distinguished Educator Award
2021	W. Jerry Dodds, MD and Sushil K. Sarna, PhD Endowed Lectureship, American Neurogastroenterology and Motility Society (ANMS)
2022	Top Doctors, Los Angeles Business Journal
2022	Becker's GI & Endoscopy 10 gastroenterologists to know
2023	Top Doctors in the US, The American Registry
2023	Charles Gerson Memorial Lectureship, Mount Sinai Division of Gastroenterology and Hepatology
2023	University of Maryland School of Medicine Jack S. Lissauer Lecturer
2023	AGA Morton I. Grossman Distinguished Lecture Award for outstanding research related to the discipline of gastroenterology
2023	The Rome Foundation Douglas Drossman Award for Communication and Patient-Centered Care in DGBI
2023	The Southern California Society of Gastroenterology (SCSG) Lifetime Achievement Award

# **RESEARCH GRANTS:**

Dates

#### 1. NIH

Active

U54 DK123755-01 (MPI: Mayer and Chang)

NIH/NIDDK/ORWH 05/01/20-04/30/25

SCORE title: Sex related differences in Brain Gut Microbiome Interactions in Irritable Bowel

Syndrome

Project 1 title: The role of brain-gut microbiome interactions in mediating IBS and constipation

symptoms during menses and menopause

Role: MPI, SCORE; Co-Lead, Project 1, Leadership Administrative Core, and Career

**Enhancement Core** 

SPARC OT2OD024899 (PI: Taché)

09/01/20 - 08/31/23 (NCTE)

NIH/NDS HEAL/SPARC

Comprehensive Structural and Functional Mapping of Mammalian Colonic Nervous System Milestone 5 title: 3D imaging and computational quantitation of extrinsic and intrinsic innervation and nerve-mast/glial cell spatial relationship in the human colonic mucosa for neuromodulation in patients with irritable bowel syndrome (IBS)

Role: Co-I

# **Pending**

Completed

NIH CAP Award 08/01/96-07/31/99

Sensory Input in IBS and Fibromyalgia

M01 RR00425-27S2

Role: PI

NIH R01 grant (PI: Naliboff) 07/01/98-06/30/01

Gender related differences in visceral sensitivity in IBS

R01 NR04881 Role: Co-I

NIH R01 grant (PI: Mayer) 07/01/01-05/31/06

Perception and modulation of visceral sensations

R01 DK 48351 Role: Co-I

NIH M01 grant (PI: Levey) 12/01/01 – 11/30/11

NIH/NCRR

General Clinical Research Center

M01-RR00865 Role: Co-I

NIH R01 grant (PI: Chang) 07/01/99-1/31/12

Neuroendocrine alterations in Fibromyalgia and IBS

R01 AR46122-01

Role: PI

1P50 DK64539 (PI: Mayer)

10/01/02-08/31/12

Center for Neurovisceral Sciences and Women's Health

Project 2: Sex differences in mucosal neuron-endocrine-immune interactions in IBS patients and

relationship to symptoms (PI: Chang)

P50 DK64539 Role: PI, Project 2

1U01AR057936 (PI: Khanna/Spiegel)

09/30/09 - 07/31/13

NIH/NIAMS

**GI Stress Domain for PROMIS** 

Role: Co-I

P30 DK 41301 (PI: Rozengurt)

12/01/09 - 11/30/14

NIH/NIDDK

CURE: Digestive Diseases Research Core Center - Human Studies Core

Co-Director, Human Studies Core

Role: Co-I

UL1TR000124 (PI: Dubinett)

06/01/11-05/31/16

NIH/ National Center for Advancing Translational Sciences UCLA Clinical and Translational Science Institute (CTSI)

Role: Co-Leader, Clinical & Community Research Resource (CCRR) Program

1R21 DK104078-01 (PI: Chang)

08/01/15-07/31/18

NIH/NIDDK

DNA Methylation Based Biomarkers and Epigenetic Regulation in IBS

Role: PI

1P50 DK64539 (PI: Mayer)

09/01/12 - 08/31/19 (NCTE)

NIH P50 Center Grant

Center for Neurovisceral Sciences and Women's Health

Project 1: HPA Axis Dysregulation in IBS and Related Animal Models, with Emphasis on Sex

Differences (PI: Chang)

Role: Co-Lead (Administrative Core), PI (Proj. 1)

R01 DK048351 (PI: Mayer)

09/30/96 - 07/31/20 (NCTE)

NIH/NIDDK

Perception and Modulation of Visceral Sensations

Role: Co-Investigator

R44DK116362 Phase II SBIR (PI: Larauche)

05/01/19 - 04/30/21

NIH/NIDDK

Targeting Irritable Bowel Syndrome (IBS) with astressins

Role: Co-Investigator

UL1TR0001881-01S2 (PI: Dubinett)

07/01/16-5/31/22 (NCTE)

NIH/ National Center for Advancing Translational Sciences

UCLA Clinical and Translational Science Institute (CTSI): Enhancing Innovation and Implementation in Safety Net Systems: A CTSA and Public Health Data Collaboration Role: Scientific Review Committee, Data Safety Monitoring Board

## 2. Mentored NIH Awards

NIH Training grant (PI: Jensen)

07/01/14-06/30/17

Gastroenterology

Project: Markers of Stress Hyperresponsiveness in Irritable Bowel Syndrome

NIH T32 DK07180-40

Role: Mentor

NIH Loan Repayment Program (Videlock)

07/01/15- 2021

Stress-related biomarkers in IBS

L30 DK106759-01 Role: Mentor

NIH Training grant (PI: Jensen)

07/01/07- 06/30/09

Gastroenterology

Project: Neuroendocrine responses and startle response in IBS

NIH T32 DK07180-40

Role: Mentor

NIDDK Diversity grant supplement (PI: Mayer/Chang)

08/01/07- 07/31/10

Women's health and functional visceral disorders center

Project 2: Sex differences in neuroendocrine and immunologic responses in IBS

3P50DK064539-06

Role: PI, Project 2, Mentor

CURE (P30 DK 41301)/CTSI (UL1TR000124)

Pilot and Feasibility Grant (PI: Joshi)

03/08/16- 07/31/17

Colonic miRNA and gene expression pathways and gut-microbiome interaction in IBS

Role: Mentor

## 3. University

# **Active**

UCLA Innovation Fund

12/11/18- present

**IBS Diagnostic Test** 

UCLA Innovation Fund, New Ventures Division, UCLA Technology Development Group

Role: Co-PI

UCLA Gastroenterology Fellowship Research Seed Grant

01/23/23 - present

Use of a commercially available wearable device to assess the relationship between sleep and

daily step count on irritable bowel syndrome symptoms

Role: Mentor, Pl

# Completed

Harbor-UCLA

10/01/94-09/30/95

Initial support of new faculty grant

Identification of the pathophysiologic mechanisms present in idiopathic constipation

REI 104258-00-12;008039

Role: PI

Harbor-UCLA Research seed grant

03/01/95-02/28/97

Identification of the pathophysiologic mechanisms present in idiopathic constipation

REI 508063-00-00

Role: PI

Norman Cousins Program in

04/01/98-04/01/99

Psychoneuroimmunology at UCLA

Autonomic, Neuroendocrine, Immunologic, and Brain Responses to Acute Stimulation in

Ulcerative Colitis

Role: PI

Children's Discovery & Innovation Institute Harry Winston

07/01/18-06/30/20

Fellowship, UCLA Department of Pediatrics

VSI-IBD: A Measure of GI Symptom Specific Anxiety in IBD

Role: Mentor

Barbara and Joel Marcus GI Fellowship Seed Grant

03/01/16-12/30/22

Fructose Reintroduction Protocol in Irritable Bowel Syndrome Patients Successfully Treated with a low FODMAP diet (manuscript published)

Role: PI/Mentor

Investigator-initiated study

05/01/18 - 01/31/20

Vatche and Tamar Manoukian Division of Digestive Diseases

Use of the Stress Management and Resilience Training (SMART) program in the management of irritable bowel syndrome: A pilot study (study completed; paper being submitted)

Role: PI

## 4. Private Industry

# Active or pending

AnX Robotica 1/26/21 - present

Investigator-initiated study: Navicam Magnetically Controlled Capsule Endoscopy Feasibility

Study in Gastric Motility

Role: PI

UCLA GI Fellowship Seed Grant/NeurAxis

04/23/20 - present

Neuromodulation with Percutaneous Electrical Nerve Field Stimulation for Adults with Irritable

Bowel Syndrome: A Randomized, Double-Blind, Sham-Controlled Pilot Study

Role: PI

**Ironwood Pharmaceuticals** 

9/2/2021 - 9/1/2025

Investigator-initiated study: 3D imaging of sensory fibers and cholinergic innervation in colonic

mucosa of IBS with constipation patients and healthy controls

Role: PI

# Completed

AstraZeneca (Mayer)

01/01/97 - 6/30/03

Basic and Clinical studies in functional GI disorders.

Role: Co-I

GlaxoWellcome - Investigator-initiated

09/00 - 12/01

A Pilot Study to Assess Nocturnal Autonomic Arousal in Female Subjects with Diarrhea-

Predominant Irritable Bowel Syndrome as Compared with Healthy Controls

Role: PI

Novartis - Investigator-initiated

07/01/03 - 06/30/05

Characterization of irritable bowel syndrome with alternating bowel habits

Role: PI

GlaxoSmithKline – Investigator-initiated

1/05/05-12/31/07

Colonic mucosal immune markers in IBS

Study # RA03-18

Role: PI

Prometheus – Multicenter clinical trial

1/01/08 - 6/13/08

Procurement of blood samples for use in the development of a gastrointestinal disease test panel.

Role: PI

Gastrotech/Rose-Multicenter clinical survey study

8/01/08 - 12/30/08

Survey for evaluation of pain attacks in irritable bowel syndrome. A natural history survey.

Roel: Site PI

Prometheus - Investigator-initiated

02/15/09 - 10/14/10

Measurements of biomarkers in biopsies from IBS patients

Role: PI

Takeda – Investigator-initiated

09/15/09 - 12/15/10

The IBS Patient Reported Observed Outcomes and Function Database

Role: Co-PI

Rose Pharma – Investigator-initiated

1/1/2010 - 6/30/2011

Characterizing abdominal pain in IBS: The impact on illness experience and treatment

expectations Role: Co-Pl

Shire-Movetis NV – Investigator-initiated

05/15/11-12/31/11

Developing a PRO for the Treatment of Patients with Gastroesophageal Reflux Disease (GERD) who have Partial but Inadequate Symptom Relief from Proton Pump Inhibitor (PPI) Therapy

Role: Co-I

Tioga- Multicenter Clinical Trial

04/01/12 - 03/30/13

A 12-Week, Randomized, Double-Blind, Placebo-Controlled Study of Asimadoline in Subjects with Diarrhea-Predominant Irritable Bowel Syndrome

Role: Site PI

Ironwood - Investigator-initiated

03/01/12 - 07/31/14

A Pilot Study Evaluating Guanylate Cyclase C Receptor and Ligand Expression in Colonic

Mucosa in Irritable Bowel Syndrome with Constipation and Chronic Constipation Role: PI

Salix – Multicenter Clinical Trial

09/03/13 - 07/24/14

A Study to Assess Repeat Treatment Efficacy and Safety of Rifaximin 550 mg TID in Subjects with Irritable Bowel Syndrome with Diarrhea (IBS-D)

Role: Site PI

Ironwood – Investigator-initiated

10/1/11-10/31/14

Development and Validation of The Automated Evaluation of GastroIntestinal Symptoms (AEGIS) Platform

Role: Co-I

Ardelyx, Inc. – Investigator-initiated

03/23/17 - 03/15/18

Influence of Tenapanor on alterations of colonic epithelial permeability induced by IBS-C and IBS-D fecal supernatants.

Role: Co-PI

Vanda – Multicenter Clinical Trial

01/18/18 - 04/30/19

A Multicenter, Randomized, Double-Blind, Placebo-Controlled Study to Assess the Efficacy of Tradipitant in Relieving Symptoms of Gastroparesis

Arena Pharmaceuticals- Multicenter Clinical Trial

04/09/20 - 12/31/21

A Phase 2, Multi-Center, Randomized, Double-Blind, Placebo-Controlled Parallel-Group Study to Evaluate the Safety, Tolerability, and Efficacy of Olorinab in Subjects with Irritable Bowel Syndrome Experiencing Abdominal Pain

Role: Lead PI, Site PI

## 5. Other

#### Active

Crohn's and Colitis Foundation IBD Plexus Project 12/10/20 - present Using Epigenetic Markers to Facilitate Early Diagnosis of Inflammatory Bowel Disease Role: Co-Pl

ACG 2022 Clinical Research Pilot Award (Freedberg)

03/01/2022- 02/28/2023

Long-term Gastrointestinal Symptoms After COVID-19

Role- Co-I

## Completed

The Rome Foundation

03/01/15 - 02/29/16

Multi-center Validation Study of the Rome IV Diagnostic Criteria for Functional Gastrointestinal Disorders

Role: Site PI

#### **PATENTS**

- 1. DNA methylation based biomarkers for irritable bowel syndrome, Ref.: 2018-578-2, UCLA reference: UCLA.260WOU1, filed 5/31/2019.
- 2. DNA methylation-based algorithm to diagnose irritable bowel syndrome and other GI conditions. U.S. Provisional Patent Application Serial No.: 63/499,017, filed on 4/28/2023.

# **TEACHING**

Lectures:	
1993 - 1996	GI motility disorders. Advanced Clinical Gastroenterology Lecture Series, Harbor-UCLA GI Inpatient Consultation Service
1993 – 1997	Inpatient Internal Medicine Ward Attending, Harbor-UCLA Medical Center (2 months per year)
1993 – 1997	Inpatient Gastroenterology Consultation Service Attending, Harbor-UCLA Medical Center (3-4 months per year)
1994 - 1997	"Pathophysiology of Gastrointestinal Motility Disorders" UCR/UCLA Biomedical Science Program, Disease Process 260 A, B, C
1994 - 1997	"Cirrhosis: Clinical Case Presentation" UCR/UCLA Biomedical Science Clinical Pathology Conference
January 1995	Colonic Motility Disorders, UCLA GI Fellows' Friday Morning Conference Lecture Series
February 1995	"Management of diabetic gastroparesis", Harbor-UCLA Clinical Endocrinology Conference
April 1995	"Evaluation of Pathophysiologic Mechanisms of Idiopathic Constipation" UCLA Neuroenteric Biology Group Clinical Research Seminar
April 1995	"Management of Chronic Constipation" Harbor UCLA Department of Medicine Grand Rounds
June1995	"Management of ascites", Harbor-UCLA Department of Surgery Grand Rounds
June 1995	"Evaluation and management of dyspepsia", Harbor-UCLA Family Medicine Grand Rounds
June 1996	"Evolving therapy in irritable bowel syndrome", Harbor-UCLA Medical Grand Rounds
January 1997	Anorectal Motility Disorders. UCLA Affiliated Training Program in GI Lecture Series.
February 1997	Alterations in the Brain-Gut Axis in Irritable Bowel Syndrome. Dallas VA Medical Center GI Conference
March 1997	Advanced Clinical Gastroenterology
1997 – present	Motility/IBD Weekly Noon Conference, UCLA Division of Digestive Diseases

October 1997	Functional Bowel Diseases. Primary Care Lecture Series, Harbor-UCLA Medical Center
July 1998, 1999, 2000, 2001	Gastrointestinal Infection, Inflammatory Bowel Disease, and Irritable Bowel Syndrome, California Internal Medicine Board Review Course Cosponsored by the American College of Physicians and the UCLA Department of Medicine
September 1998	Fibromyalgia and Irritable Bowel Syndrome: Overlap of Symptoms and Pathophysiologic Mechanisms. Harbor-UCLA Medical Center Medical Grand Rounds
January 1999	Esophageal Motility Disorders, Friday Morning Lecture Series, UCLA Affiliated Training Program in Gastroenterology
January 1999	Non-ulcer Dyspepsia and Helicobacter pylori, Gl Journal Club, UCLA Division of Digestive Diseases
Feb. – March 1999 October 2001-2002 Jan 2004, Jan 2005, Jan 2006, 2007, 2008 2009, March 2010, 2011, May 2012, May	
April 1999	Evaluation of Anorectal Motility Disorders, GI Journal Club, UCLA Division of Digestive Diseases
May 1999	Irritable Bowel Syndrome: Update on Pathophysiologic Mechanisms and Treatment, GI Conference, Cedar-Sinai Medical Center
May 2000-2001	Gender Bias in GI Disease, Pathophysiology of Disease: Liver and Gastrointestinal Systems, UCLA School of Medicine
May 2000-2001  December 2000	Gender Bias in GI Disease, Pathophysiology of Disease: Liver and
·	Gender Bias in GI Disease, Pathophysiology of Disease: Liver and Gastrointestinal Systems, UCLA School of Medicine  Post-Infectious Irritable Bowel Syndrome, GI Conference of the Week,
December 2000	Gender Bias in GI Disease, Pathophysiology of Disease: Liver and Gastrointestinal Systems, UCLA School of Medicine  Post-Infectious Irritable Bowel Syndrome, GI Conference of the Week, UCLA Division of Digestive Diseases, UCLA School of Medicine  Differences in responses to somatic and visceral stimuli in IBS. GI Fellows
December 2000 January 2001	Gender Bias in GI Disease, Pathophysiology of Disease: Liver and Gastrointestinal Systems, UCLA School of Medicine  Post-Infectious Irritable Bowel Syndrome, GI Conference of the Week, UCLA Division of Digestive Diseases, UCLA School of Medicine  Differences in responses to somatic and visceral stimuli in IBS. GI Fellows Conference, University of North Carolina  Update in Management of IBS, GI Fellows Conference, UCLA Division of

October 2001	Perspectives on Managing IBS Patients, Friday AM GI Fellowship Conference, UCLA School of Medicine
January 2002	Pathophysiologic Mechanisms of Irritable Bowel Syndrome, UCLA Department of Medicine Grand Rounds
March 2002-2004	Lower Gastrointestinal Disorders, Pathophysiology of Disease: Liver and Gastrointestinal Systems, UCLA School of Medicine
July 2002	Serotonin Agents for the Treatment of IBS, Preceptor for UCLA Division of Digestive Diseases Journal Club, UCLA School of Medicine
October 2002	Pathophysiologic Mechanisms of Irritable Bowel Syndrome, Medical Grand Rounds, Visiting Professor Program, University of Manitoba, Winnipeg, Canada
December 2002	Concepts of Visceral Hypersensitivity in Irritable Bowel Syndrome, GI Grand Rounds, Cedars Sinai Medical Center, Beverly Hills, California
February 2003	Utility of Visceral Sensitivity Measures and Brain Imaging in Irritable Bowel Syndrome, USC GI Conference, Visiting Professor Program
February 2003	Evidence of Altered Brain-Gut Interactions in Irritable Bowel Syndrome, USC Medical Conference, Visiting Professor Program
March 2003	Anorectal Manometry, UCLA Division of Digestive Diseases Noon Conference.
August 2003	Women's Health Issues in GI Disorders: What Does Sex Have to do with it? UCLA GI Fellows Conference
September 2003	Overlap syndromes, GI Conference, University of Arizona VA, Visiting Professor Program
September 2003	Mechanisms of Visceral Hypersensitivity, Gulf Coast Research Conference, Baylor University and University of Texas, Visiting Professor Program
September 2003	Functional Gastrointestinal Disorders: Emerging Concepts and Promising Therapies, Cornell GI Grand Rounds
January 2004	Diagnosis and Management of Irritable Bowel Syndrome, Functional Bowel Disorders in Women: IBS, Dyspepsia, and More, UCLA Center for Neurovisceral Sciences and Women's Health Clinical Symposium (Program Chair)
January 2004	Interactive Case Presentations, Functional Bowel Disorders in Women: IBS, Dyspepsia, and More, UCLA Center for Neurovisceral Sciences and Women's Health Clinical Symposium (Program Chair)

January 2004 Pathophysiologic Mechanisms and Treatment of Irritable Bowel Syndrome. Staten Island University Hospital Grand Rounds, New York January 2004 Emerging Concepts and Novel Treatments for Irritable Bowel Syndrome. University of Medicine and Dentistry of New Jersey Grand Rounds, New Jersey February 2004 Use of Psychotropic Agents in Functional Gastrointestinal Disorders, UCLA Division of Digestive Diseases Noon Conference February 2004 Functional Dyspepsia: What's the Cause and Can We Treat It? Difficult Problems - New Solutions: An update in Gastroenterology and Hepatology for 2004, UCLA Division of Digestive Diseases 50th Anniversary, Century City, Los Angeles July 2004 Pathophysiologic Mechanisms of Irritable Bowel Syndrome and Fibromyalgia, Center for Neurovisceral Sciences and Women's Health Translational Seminar, UCLA, Los Angeles August 2004 Differential diagnosis of IBS: symptom presentation and diagnosis; UCLA Division of Digestive Diseases Noon Conference September 2004 Overlap of Irritable Bowel Syndrome and Fibromyalgia, GI Grand Rounds, University of Michigan, visiting professor November 2004 Irritable Bowel Syndrome, Gastrointestinal, Endocrine and Reproductive Medicine II, Human Biology and Disease Curriculum, David Geffen School of Medicine November 2004 Gender Specificity in GI Disease, Gastrointestinal, Endocrine and Reproductive Medicine II, Human Biology and Disease Curriculum, David Geffen School of Medicine January 2005 Overlap of Chronic Functional Pain Syndromes. Functional Gastrointestinal Disorders and Co-Morbid Conditions, UCLA Center for Neurovisceral Sciences and Women's Health Clinical Symposium (Program Chair) February 2005 Irritable Bowel Syndrome: New Approach to Diagnosis and Treatment, Update 2005: Gastroenterology and Hepatology for the Primary Care Physician, Division of Digestive Diseases, David Geffen School of Medicine March 2005 Functional Dyspepsia; UCLA Division of Digestive Diseases Noon Conference April 2005 Sex Determinants of Visceral Pain Including Irritable Bowel Syndrome (IBS), CURE Astra-Zeneca Lecture Series August 2005 Abuse and GI Pain Conditions; UCLA Division of Digestive Diseases Noon Conference

September 2005 IBS Medical Therapies: Current Treatment and What's in the Pipeline? UCLA Division of Digestive Diseases GI Fellows Morning Conference April 2006 New Data and Drugs for the treatment of Functional GI Disorders, UCLA Division of Digestive Diseases Noon Conference July 2006 **UCLA Summer Course** October 2006 Sex Differences in Irritable Bowel Syndrome, UCLA Division of Digestive Diseases Noon Conference November 2006 Irritable bowel syndrome, Gastrointestinal, Endocrine and Reproductive Medicine II, Human Biology and Disease Curriculum, David Geffen School of Medicine December 2006 How does one best manage patients with functional bowel disorders? Interactive case presentations. UCLA Division of Digestive Diseases Noon Conference February 2007 Addressing the Use of Psychotropic Agents for Functional GI Disorders: Why, Which One, and How. UCLA Division of Digestive Diseases Noon Conference March 2007 New insights in the molecular mechanisms of sex differences and stress in functional gastrointestinal disorders, UCLA Department of Grand Rounds Pathophysiology and Treatment of Irritable Bowel Syndrome, USC GI April 2007 **Grand Rounds** July 2007 Post-DDW 2008 abstract review: Functional GI Disorders. UCLA Division of Digestive Diseases Noon Conference October 2007 Irritable bowel syndrome, Intestinal Inflammation lecture series, 2<sup>nd</sup> year medical school curriculum, David Geffen School of Medicine December 2007 Irritable bowel syndrome and other gastrointestinal pain disorders. 2007-2008 Pain Lecture Series, VAGLAHS Pain Management Program December 2007 Functional GI and Motility case conference, UCLA Division of Digestive Diseases Noon Conference March 2008 Functional GI and Motility case conference, UCLA Division of Digestive Diseases Noon Conference IBS Overview, GI Fellows conference, UCLA-VA-Cedars GI Fellowship August 2008 Program September 2008 Understanding sex and gender related differences in irritable bowel syndrome, GI Grand Rounds, Cedars-Sinai Medical Center October 2008 The Smart Pill, UCLA Division of Digestive Diseases Noon Conference

October 2008 American College of Gastroenterology Women's Leadership Skills Program, Orlando, Florida November 2008-2010 Irritable bowel syndrome, 2<sup>nd</sup> year medical school curriculum, David Geffen School of Medicine at UCLA January 2009 Patient case of painful constipation. Functional GI and Motility case conference, UCLA Division of Digestive Diseases Noon Conference March 2009 Irritable Bowel Syndrome: Differences in Symptoms, Pathophysiology and Treatment in Men and Women. Columbia GI Grand Rounds March 2009 Irritable bowel syndrome with constipation. St. Luke's and Roosevelt's GI Conference May 2009 ACG Guidelines for Treatment of Irritable Bowel Syndrome 2009, UCLA Division of Digestives Diseases Noon Conference October 2009 IBS with diarrhea case presentation. Functional GI and Motility case conference, UCLA Division of Digestive Diseases Noon Conference November 2009, 2010 Irritable bowel syndrome. 2<sup>nd</sup> year medical school curriculum, David Geffen School of Medicine at UCLA March 2010 Nausea and vomiting case presentation. Functional GI and Motility case conference, UCLA Division of Digestive Diseases Noon Conference July 2010 Bile acid malabsorption and rectal prolapse. Functional GI and Motility case conference, UCLA Division of Digestive Diseases Noon Conference August 2010 Early life trauma and stress response. CNS Translational Seminar, UCLA November 2010 Pancreatic polypeptide tumor and refractory constipation. Functional GI and Motility case conference, UCLA Division of Digestive Diseases Noon Conference February 2011 Irritable Bowel Syndrome: What you Need to Know for Clinical Practice March 2011 IBS Case Conference, UCLA Division of Digestive Diseases Noon Conference July 2011 How to Write a Scientific Paper, UCLA CTSI Educational Program Functional Dyspepsia case conference, UCLA Division of Digestive July 2011 Diseases Noon Conference November 2011 Bloating and gas case conference, UCLA Division of Digestive Diseases Noon Conference

Grant writing course, UCLA-CTRW 2014 Clinical & Translational Research Workshop: Grant & Clinical Protocol Development

# Mentoring/Training:

Max Schmulson, M.D. Oh Young Lee, M.D. Miyoshi Hirano Kerstin Huebel Birgit Adam Tobias Liebregts	visiting scientist visiting scientist pre-medical student medical student medical student medical student	1997-1999 1997-1999 1999-2007 1999 1999
Britta Dickhaus, M.D.	visiting scientist	2000-2002
Joel Sach, M.D.	GI fellow	2001-2004
Kirsten Tillisch, M.D.	GI research fellow/clinical instructor	2002-2005
Steven Tan, M.D.	Post-doc fellow	2002-2004
Heng Wong, M.D.	visiting scientist	2003-2004
Mark Michalski	pre-medical student	2002-2003
Paul Dunckley, M.D., Ph.D.	GI research fellow	2002-2005
Caroline Hwang	medical student	2004
Violette Gray, M.D.	Kennamer general medicine fellow	2004-2005
Elizabeth Videlock, M.D.*	med student, GI fellow, Asst Prof	2006-2009, 2013-2019
Amy Strickland, M.D.	medical resident	2006-2007
Mopelola Adeyemo, MS	graduate student, medical student	2006-2009, 2014
Trinh Truong, M.D.	GI research fellow	2007-2009
Eddie Garcia	pre-medical student	2009
Neel Mann, M.D.	GI fellow	2008-2009
Sarah Khan, M.D.	medical resident	2009-2010
Lynn Connelly, M.D.,MSCR	GI research fellow	2010-2012
Kara Bradford, M.D.	medical resident	2010-2011
Sharon Kim, M.D.	medical resident	2010-2012
Miriam Goebel, M.D.	medical resident	2010-2012
Paul Cheng	medical student	2011-2012
Laleh Boroujerdi, M.D.	medical resident	2011-2012
Andrew Su	medical student	2012
Malin Gadd, M.D.	visiting scientist	2012-2013
Alexa Orand**	medical student	2013-2016
Wendy Shih, MS	graduate student	2011-2016
Aaron Lee, M.D.	medical resident	2013-2016
Swapna Joshi, PhD	Post-doc fellow/Project Scientist	2013-present
Sarah Park, M.D.	medical student/resident/fellow	2014-present
Guy Weiss, M.D.	GI fellow	2014-2016
Vien Nguyen	medical student	2015-2016
Rusha Modi, M.D. MPH	GI fellow	2016-2017
Shahzad Ahmed, M.D.	Nutrition fellow	2016- 2017
Raymond Addante, M.D.	medical resident	2016- 2017
Rachel Wong	undergraduate student	2016-2017
Emily Huang	undergraduate student	2016-2018
Marissa Holden	medical student	2017-2020
Tiffany Ju, B.A.	Post-graduate	2017-2019

Colleen Parker, M.D. Lisa Lin Janice Bitong, M.D.*# Kim Trieschmann, M.D.#	Post-doc visiting scientist GI fellow, GI faculty Pediatric GI fellow Pediatric GI fellow	2017-2021 2017-present 2016-2019# 2017-2021
Karen O'Laco**	medical student	2018-2019
Charlene Choo	medical student	2018-2022
Adrienne Lenhart, M.D. Saumya Pathak, M.D.#	GI fellow, GI faculty pediatric GI fellow	2018-present 2018-2021
Ariela Khandadash	Pre-medical student/medical student	
Ben Nulsen, M.D.	GI fellow	2018-2021
Frank Chen, M.D.	GI fellow	2019-2021
Wendi LeBrett, M.D.	medical resident/GI fellow	2018-present
Eric Shah, MD MBA	junior faculty	2019-present
Rachel Sarnoff, MD##	medical resident, Clinical Instructor	2020-present
Troy Sanders	medical student	2019-2020
Jessica Sohn	undergraduate student	2019-present
Preetha Ivengar	medical resident	2020-present
Anna Lee	medical resident/GI fellow	2020-present
Dean Ehrlich	GI fellow	2020-2022
Rahul Kamath	GI fellow	2021-2023
Callie Cuff	medical student	2021-present
Ellie Chen	GI fellow	2021-present
Wael El-Nachef	Assistant Professor of Medicine	2021-2022
Arpana Gupta	Associate Professor of Medicine	2021-present
Jennifer Labus	Professor of Medicine	2021-present
Samantha Palmer	medical resident	2022-present
Lynn Nguyen	medical student	2023-present
Elizza Villarruel	medical Student)	2023-present

<sup>\*</sup> T32 training grant award

## Thesis Committee member, UCLA:

- 1. Elizabeth Videlock, M.D., Ph.D.; May 2019, Molecular Mechanisms in Irritable Bowel Syndrome, Molecular, Cellular, and Integrative Physiology, UCLA
- 2. Artin Soroosh, Ph.D., Molecular, Cellular, and Integrative Physiology; May 2021.
- 3. Lynn Connolly, M.D. MSCR; May 2012; Differences in brain responses between lean and obese women to a sweetened drink.
- 4. Trinh Troung, M.D. MSCR; May 2013, Discrimination of contextual threat cues associated with visceral threat in patients with IBS.

# Scientific Oversight Committee member, Pediatric Gastroenterology, UCLA:

- 1. Janice Bitong, M.D., July 2018-2020, Microbiome and metabolome of patients with chronic intestinal pseudo-obstruction (CIPO)
- 2. Kim Trieschmann, M.D., July 2018-2020, Visceral Sensitivity Index for Inflammatory Bowel Disease
- 3. Saumya Pathak, M.D., July 2019-2021, DNA methylation profile of peripheral blood mononuclear cells in pediatric patients with irritable bowel syndrome

<sup>\*\*</sup>Internal Medicine Chief's Summer Fellowship Award

<sup>\*</sup>Scientific Oversight Committee

<sup>##</sup>Master of Science in Clinical Research (MSCR) program

# **KL2 Mentorship committee**

1. Elizabeth Videlock, M.D., Ph.D., UCLA CTSI Institutional KL2 Translational Science Award 2023 - "Parkinson's Disease (PD) May Begin in the Gastrointestinal Tract

## **LECTURES AND PRESENTATIONS:**

#### 1990-1995

- 1. The effect of activated inflammatory cells on colonic smooth muscle contraction.

  Workshop on the Immunomodulation of Motility, Montecito, California, March, 1990.
- 2. Effect of bethanechol and vasoactive intestinal peptide on the early production of inositol 1,4,5-trisphosphate in intact smooth muscle. American Motility Society Symposium, Newport, Rhode Island, October, 1990.
- 3. Comparison of endobiliary biopsy, brush and aspiration cytology performed during ERCP in the diagnosis of biliary obstruction. American College of Gastroenterology, Miami Beach, Florida, October, 1992.
- 4. Acid peptic disorders. Department of Medicine Conference, Downey Community Hospital, Downey, California, November, 1994.
- 5. Management of diabetic gastroparesis. City of Hope Endocrinology Conference, Downey, California, May, 1995.
- 6. A prospective randomized trial assessing the timing and cost of ERCP in gallstone pancreatitis. American College of Gastroenterology, New York, New York, October, 1995.

# 1996

- 7. H. Pylori: To treat or not to treat. Visiting Professor Lecture, St. Francis Medical Center, Lynwood, California, February, 1996.
- 8. A prospective randomized trial of mild-moderate gallstone pancreatitis: Clinical outcome and cost of selective preoperative vs. postoperative ERCP. ASGE meeting, San Francisco, California, May, 1996.
- 9. Inflammatory and functional intestinal disorders differ in their response to acute visceral pain. CURE Clinical GI Research Meeting, West Los Angeles, California, October, 1996.

- 10. Anorectal motility disorders. UCLA Affiliated Training Program in GI Lecture Series, Westwood, California, January, 1997.
- 11. The role of ERCP in gallstone pancreatitis. 4<sup>th</sup> International Symposium on Pancreatic and Biliary Endoscopy, Anaheim, California, January, 1997.
- 12. Inflammatory and functional intestinal disorders differ in their response to acute visceral pain. Western Society for Clinical Investigation, Carmel, California, February, 1997.

- 13. Alterations in the brain-gut axis in irritable bowel syndrome. Dallas VA Medical Center GI Conference, Dallas, Texas, February, 1997.
- 14. Functional gastrointestinal disease and fibromyalgia. Functional Gastrointestinal Disorders: Defining Cost and Outcomes, Kona, Hawaii, October, 1997.

- 15. Pain perception. 9<sup>th</sup> Annual GIRG Research Retreat, University of Calgary, Banff, Canada, January, 1998.
- 16. The association of irritable bowel syndrome and fibromyalgia. American Fibromyalgia Foundation Annual Conference 1998, Newport Beach, California, February, 1998.
- 17. Differences in left prefrontal activation to visceral and somatic stimuli assessed by O<sup>15</sup>-water PET in female patients with irritable bowel syndrome (IBS) and fibromyalgia. American Gastroenterological Association Meeting, New Orleans, Louisiana, May, 1998.
- 18. Gastrointestinal infection, inflammatory bowel disease, and irritable bowel syndrome. California Internal Medicine Board Review Course Cosponsored by the American College of Physicians and the UCLA Department of Medicine, Universal City, California, July, 1998.
- 19. CNS responses to visceral pain in patients with inflammatory bowel disease. 4<sup>th</sup> International Symposium on Brain-Gut Interactions, San Diego, California, July, 1998.
- 20. Controversies in functional bowel disease and motility disorders. Southern California Society of Gastroenterology 21<sup>st</sup> Post-AGA-DDW Weekend Review, Palm Springs, California, July, 1998.

- 21. The emotional brain-implications for diagnosis and therapy. 3<sup>rd</sup> International Symposium on Functional Gastrointestinal Disorders, Milwaukee, WI, April, 1999.
- 22. Irritable bowel syndrome: visceral hyperalgesia. DDW Symposium: Women's health in gastroenterology. American Gastroenterological Association, Digestive Diseases Week, Orlando, FL, May, 1999.
- 23. Neuroendocrine Parameters in functional GI Disorders. Functional Dyspepsia Mechanisms and Experimental Models, Astra Hässle, Mölndal, Sweden, June, 1999.
- 24. Controversies in irritable/functional bowel disease. Southern California Society of Gastroenterology 22<sup>nd</sup> Post-AGA-DDW Weekend Review, Carlsbad, CA, July, 1999.
- 25. Irritable bowel syndrome. American Fibromyalgia Foundation, Inc.'s support group meeting, Hoag Memorial Hospital, Newport Beach, CA, July, 1999.
- 26. The Cause of IBS. Breakthrough in Patient Care for Irritable Bowel Syndrome, American Academy of Family Physicians Scientific Assembly, Orlando, FL, September, 1999.

- 27. Extraintestinal symptoms. Workshop on the Pathophysiology and Treatment of Functional Gastrointestinal Disorders, Key Biscayne, FL, October, 1999.
- 28. Altered neuroendocrine response. Workshop on the Pathophysiology and Treatment of Functional Gastrointestinal Disorders, Key Biscayne, FL, October, 1999.
- 29. Perceptual and CNS responses to visceral pain in patients with inflammatory bowel disease. Society of Neuroscience 29<sup>th</sup> Annual Meeting, Miami, FL, October, 1999.
- 30. Motility disorders of the lower gastrointestinal tract: from basic science to therapy. European Postgraduate Gastro-surgical School, Amsterdam, December, 1999.

- 31. Irritable Bowel Syndrome. California Academy of Family Physicians, 52<sup>nd</sup> Annual Scientific Assembly, San Francisco, CA, February, 2000.
- 32. Pathophysiology of IBS. IBS: Advances in the New Millenium, Inova Fairfax Hospital, Physicians Conference Center, Falls Church, VA, April, 2000.
- 33. Clinical Perspectives and the role of gender. DDW Symposium: Visceral Sensitivity: Basic Advances and Novel Therapies, San Diego, May, 2000.
- 34. Progress in the treatment of IBS role of 5-HT<sub>3</sub> antagonists. DDW Satellite Symposium: Visceral Hypersensitivity and Irritable Bowel Syndrome, San Diego, May, 2000.
- 35. Differences in cortical activation to visceral and somatic stimuli assessed by H<sub>2</sub> <sup>15</sup>O PET in female patients with irritable bowel syndrome (IBS) and fibromyalgia. Brain-Gut 2000, Toulouse, France, July 2000.
- 36. IBS clinical overview. Western Region Managed Care Advisory Board, Santa Barbara, California, September 2000.
- 37. Management of Irritable Bowel Syndrome (IBS). 2000 Post Graduate Assembly, Santa Monica, California, September 2000.
- 38. Serotonergically Active Agents: New Drugs for an Old Disorder. Symposium Treatment of Irritable Bowel Syndrome, American College of Gastroenterology meeting, New York, October 2000.
- 39. Visceral Hyperalgesia: Implications on the Management of IBS. Postgraduate Course, National Weekend of Gastroenterology, Mazatlán, Mexico, December 2000.

- 40. Gender Differences in the Physiologic Responses in Irritable Bowel Syndrome. University of North Carolina Functional Bowel Disease Center Meeting, Chapel Hill, North Carolina, January 2001.
- 41. The Emotional Brain. Canadian Digestive Diseases Week, Banff, Canada, February 2001.

- 42. Irritable Bowel Syndrome. Iris Cantor Center Medical Conference, UCLA, February 2001.
- 43. Brain-Gut Axis. 4<sup>th</sup> International Symposium on Functional Gastrointestinal Disorders, Milwaukee, WI, March-April 2001.
- 44. Gender Differences in IBS. 4<sup>th</sup> International Symposium on Functional Gastrointestinal Disorders, Milwaukee, WI, March-April 2001.
- 45. A Comprehensive Disease Model of IBS. Gastroenterology Conference, Visiting Professor's Program, Mayo Clinic, Rochester, MN, April 2001.
- 46. Pharmacotherapy of IBS. Postgraduate Course, American Gastroenterological Association, Atlanta, GA, May 2001.
- 47. Irritable Bowel Syndrome. Family Practice Department Educational Conference, Kaiser Permanente, Baldwin Park, CA, June 2001.
- 48. Irritable Bowel Syndrome. UCLA Women's Health Initiative Lecture Series. UCLA, July 2001.
- 49. The Brain-Gut Axis New Pathways to Understanding Functional Disorders, Update in Gastroenterology, Hepatology & Nutrition, Columbia and Cornell Gl Course, New York, November 2001.

- 50. Gender Differences in Visceral Perception. The Haynang University-UCLA Joint Symposium on Gut-Brain Interactions, Seoul, Korea, March 2002.
- 51. The Neurobiology of Stress and Gastrointestinal Disorders. The Haynang University-UCLA Joint Symposium on Gut-Brain Interactions, Seoul, Korea, March 2002.
- 52. Extraintestinal Manifestations of IBS. American Gastroenterological Association meeting, San Francisco, California, May 2002.
- 53. Gender Differences in GI Disorders. Meet the Professor luncheon, American Gastroenterological Association meeting, San Francisco, California, May 2002.
- 54. Measurement and Assessment: Imaging. NIAMS Fibromyalgia Program Assessment, Airlie Conference Center, Warrenton, Virginia, September 2002.
- 55. Extraintestinal and psychiatric manifestations of IBS: What is the link? Falk symposium No.130, Freiburg, Germany, October 2002.
- 56. New Treatment Frontiers for Irritable Bowel Syndrome. American college of Osteopathic Family Physicians California, Anaheim, California, October 2002.

#### 2003

57. Advances the diagnosis and treatment of IBS. Women's Healthcare Forum, Anaheim, California, March 2003.

- 58. Gender and sociocultural differences in functional GI disorders. International Functional Gastrointestinal Disorders meeting, Milwaukee, Wisconsin, April 2003.
- 59. Brain-Gut Axis workshop. International Functional Gastrointestinal Disorders meeting, Milwaukee, Wisconsin, April 2003.
- 60. University-based practice. First Annual Functional Brain Gut Research Group's GI Motility Disorders Young Investigators' Forum, Phoenix, Arizona, May 2003.
- 61. Focused clinical updates in functional lower GI disorders. Digestive Diseases Week, Orlando, Florida, May 2003.
- 62. Safety and appropriate use of alosetron in clinical practice. Translating Science into Clinical Outcomes: New Paradigms in the Management of the IBS Patient. Digestive Diseases Week, Orlando, Florida, May 2003.
- 63. Diagnosis of IBS. State of the Art Lecture, Digestive Diseases Week, Orlando, Florida, May 2003.
- 64. Mechanisms of visceral hypersensitivity. CME educational symposium, Digestive Diseases Week, Orlando, Florida, May 2003.
- 65. Controversies in Functional Bowel Disorders. Post-DDW Meeting, Southern California Gastroenterology Society, La Costa, California, July 2003.
- 66. Conquering the Challenges of Treating the Diarrhea Predominant IBS Patient, teleconference series, April-September 2003 (served as Chair)
- 67. The pathophysiology of IBS as a basis of understanding symptom presentation, Pri-Med CME Symposium, Philadelphia, Pennsylvania, September 2003.
- 68. Irritable bowel syndrome- top three DDW heavyweights. Gastro-Hep Impact 2003 "Improving Medical Practice through Advanced Clinical Therapeutics," Chicago, Illinois, September 2003.
- 69. How I manage the IBS patient with constipation. Gastro-Hep Impact 2003 "Improving Medical Practice through Advanced Clinical Therapeutics," Chicago, Illinois, September 2003.
- 70. The pathophysiology of IBS, and common co-morbidities, as a basis of understanding symptoms, Functional Disorders in the Lower GI Tract: Mechanisms, Meaning and Clinical Management. Program for American Academy of Family Physicians, New Orleans, Louisiana, October 2003.
- 71. New development in the safety and clinical use of alosetron. Coping with the Complexities of IBS: Practical Aspects of Patient Management, CME educational symposium, American College of Gastroenterology meeting, Baltimore, Maryland, October 2003 (served as Chair).
- 72. The role of serotonin as a central mediator in IBS symptom complexes. The Challenges of Irritable Bowel Syndrome in Clinical Practice: From Science to Solutions, CME educational

- symposium, American College of Gastroenterology meeting, Baltimore, Maryland, October 2003.
- 73. New pathophysiological concepts and treatment options in IBS. Current Diagnosis and Management of Gastrointestinal Motility Disorders, Boston, MA, November 2003.

- 74. Emerging concepts and novel treatments for irritable bowel syndrome, New York Gastroenterological Association, New York, January 2004.
- 75. IBS with constipation: diagnosing and managing the multiple symptom complex. Constipation: chronic disorder or irritable bowel? Symptom-defined strategies for continuing challenges, Pri-Med Update Meeting, La Jolla, California, March 2004.
- 76. Emerging concepts and novel treatments for irritable bowel syndrome, Women's Healthcare Forum, Anaheim, March 2004.
- 77. Differences in brain responses to rectal distension between patients with inflammatory and functional GI disorders. CURE Annual Research Meeting, Los Angeles, March 2004.
- 78. Epidemiology and quality of life functional gastrointestinal disorders. Novartis GI: Advancing the Science Global Summit, Hollywood, Florida, April 2004.
- 79. Stirring up the sluggish colon. My approach to the constipated IBS patient. Gastro-Hep Impact 2004: "Improving Medical Practice by Advancing Clinical Therapeutics." New York, April 2004.
- 80. University-based practice. Second Annual Functional Brain Gut Research Group's GI Motility Disorders Young Investigators' Forum, Scottsdale, Arizona, April 2004.
- 81. Differences in brain responses to rectal distension between patients with inflammatory and functional GI disorders, American Gastroenterological Association meeting, New Orleans, Louisiana, May 2004.
- 82. Evidence for an antihyperalgesic effect of exogenous corticotropin releasing factor (CRF) in irritable bowel syndrome (IBS). American Gastroenterological Association meeting, New Orleans, Louisiana, May 2004.
- 83. Novel therapeutics for functional dyspepsia and irritable bowel syndrome. 2004 American Gastroenterological Association Spring Postgraduate Course, New Orleans, Louisiana, May 2004.
- 84. Differential diagnosis of IBS: symptom presentation and diagnostic; improving treatment success: individualizing gastrointestinal disease management. Digestive Diseases Week satellite symposium, American Gastroenterological Association meeting, New Orleans, Louisiana, May 2004.
- 85. New treatment options in irritable bowel syndrome in men and women. The future of irritable bowel syndrome management in men and women. Digestive Diseases Week satellite

- symposium, American Gastroenterological Association meeting, New Orleans, Louisiana, May 2004.
- 86. Diagnostics and treatment of irritable bowel syndrome. A State of the Art Update in Clinical GI Problems, University of Manitoba, Winnipeg, Canada, June 2004.
- 87. Bowel disorders: differential diagnosis and new therapeutic strategies. The 12<sup>th</sup> Annual Congress on Women's Health, Hilton Head, South Carolina, June 2004.
- 88. IBS and gender. Symposium for Patients and Non-Health Care Professionals. "Understanding IBS and Other Functional Gastrointestinal Disorders." Raleigh-Durham, North Carolina, June 2004.
- 89. New Advances in the Treatment of IBS. 48<sup>th</sup> Annual Postgraduate Symposium, Family Medicine Update 2004. San Diego, California, June 2004.
- 90. Clinical Minicourse Interactive Session (IBS, colon, pediatrics). American Motility Society meeting, Rochester, Minnesota, September 2004.
- 91. Optimizing the management of IBS/Chronic Constipation. Gastro-Hep Impact 2004: "Improving Medical Practice by Advancing Clinical Therapeutics." Chicago, October 2004.
- 92. Medical Crossfire Live ACG Program: Irritable Bowel Syndrome: Evolving Perspectives and Treatment Strategies. American College of Gastroenterology meeting, Orlando, Florida, October-November 2004.
- 93. Cases challenges in functional bowel disease: what to do when the usual stuff fails. Irritable bowel syndrome should we target the brain, gut or both? American College of Gastroenterology meeting, Orlando, Florida, October-November 2004.

- 94. What's new in the pathophysiology of IBS? First Annual IBS Symposium, University of Washington, Seattle, Washington, January 2005.
- 95. Hot New Medical Therapies. First Annual IBS Symposium, University of Washington, Seattle, Washington, January 2005.
- 96. Update on IBS and Constipation. Women's Health Group, Santa Monica, California, February 2005.
- 97. Functional Dyspepsia. Visiting Professor program, FDA GI Medical Team, Rockville, Maryland, February 2005.
- 98. Pathophysiology of IBS. Mayo Clinic Scottsdale Winter Gastroenterology Meeting Linked to Endoscopy and Hepatology, March 2005.
- 99. How to Make the Most of Your Mentoring Partnership. Third Annual Functional Brain Gut Research Group's GI Motility Disorders Young Investigators' Forum, Del Mar, California, March 2005.

- 100. Other Causes for Pelvic Pain in Women: From Irritable Bowel Syndrome (IBS) to Fibromyalgia, and Interstitial Cystitis. Women's Sexual Health State-of-the-Art Series, Beverly Hills, California, April 2005.
- 101. Sex Determinants of Visceral Pain with a Focus on Irritable Bowel Syndrome. BIRCWH Scholars Conference on Sex Determinants of Pain, London, April 2005.
- 102. How I manage the IBS patient with constipation. Gastro-Hep Impact 2005 "Improving Medical Practice through Advanced Clinical Therapeutics," Chicago, Illinois, April 2005.
- 103. Communication Skills Mini-Symposium: Methodological Approach to Studying the Gastroenterological-Patient Relationship, International Foundation of Functional Gastrointestinal Disorders meeting, Milwaukee, Wisconsin, April 2005.
- 104. Update on Diagnosis and Treatment of IBS, Gut Club, Mobile, Alabama, April 2005
- 105. Irritable bowel syndrome, fibromyalgia and other overlapping conditions, GI Grand Rounds, Visiting professor program, University of South Alabama, Mobile, Alabama, April 2005.
- 106. Diagnosing and Managing Women with Irritable Bowel Syndrome. 5<sup>th</sup> Annual North American Women's Healthcare Forum, Anaheim, May 2005.
- 107. Emerging Therapies: What does the future hold? Controversies in the Management of IBS Clinical Practice symposium, American Gastroenterological Association meeting, Chicago, May 2005.
- 108. Diagnosis and Treatment of IBS. Managing IBS: Optimizing Patient Selection and Clinical Outcomes, Digestive Diseases Week satellite symposium (Chair), American Gastroenterological Association meeting, Chicago, May 2005.
- 109. Pathophysiology of IBS. Meet the Professor luncheon, American Gastroenterological Association meeting, Chicago, May 2005.
- 110. IBS with constipation: diagnosing and managing the multiple symptom complex. Constipation: chronic disorder or irritable bowel? Symptom-defined strategies for continuing challenges, Pri-Med CME Symposium, Sacramento, California, May 2005.
- 111. Cross-system interactions from the GI perspective (Irritable Bowel Syndrome), Pelvic Pain Syndrome(s) in Women: New Insights into Pathophysiology, Center for Neurovisceral Sciences and Women's Health at UCLA, Los Angeles, California, June 2005.
- 112. How I manage the IBS patient with constipation. Gastro-Hep Impact 2005 "Improving Medical Practice through Advanced Clinical Therapeutics," Los Angeles, California, June 2005
- 113. IBS with constipation: diagnosing and managing the multiple symptom complex. Constipation: chronic disorder or irritable bowel? Symptom-defined strategies for continuing challenges, Pri-Med CME Symposium, San Jose, California, June 2005.
- 114. Brain processing of gastrointestinal sensorimotor function. 20<sup>th</sup> International Symposium on Neurogastroenterology and Motility, Toulouse, France, July 2005.

- 115. Controversies in Functional Bowel Disorders. Post-DDW Meeting, Southern California Gastroenterology Society, La Costa, California, July 2005.
- 116. Visceral pain and abuse. IASP Satellite Symposium on Visceral Pain, Adelaide, Australia, August 2005.
- 117. Pathophysiology of Chronic Constipation and Irritable Bowel Syndrome. Chronic Constipation and Irritable Bowel Syndrome: Helping Patients Move from Intestinal Distress to Intestinal Success! Roundtable Discussion, Montreal, Canada, September 2005.
- 118. Overview of IBS: New Concepts and Treatment Options. Frontiers in Gastroenterology and Hepatology, Case Western Gl Grand Rounds Program, Cleveland, Ohio, September 2005.
- 119. IBS with constipation: diagnosing and managing the multiple symptom complex. Constipation: chronic disorder or irritable bowel? Symptom-defined strategies for continuing challenges, Pri-Med CME Symposium, Pasadena, California, September 2005.
- 120. Gender Differences in Irritable bowel syndrome. A Day in the Gut symposium-North Shore University Hospital in Manhasset, Long Island, New York, October 2005.
- 121. Tegaserod the reality of clinical practice. Dysmotility and sensory symptoms understanding and treating IBS-C, United European Gastroenterology Week 2005 (UEGW), Copenhagen, Denmark, October 2005.
- 122. Brain-gut pathways in FGIDs. NASPGHAN Postgraduate Course, Salt Lake City, Utah, October 2005.
- 123. IBS with constipation: diagnosing and managing the multiple symptom complex.

  Constipation: chronic disorder or irritable bowel? Symptom-defined strategies for continuing challenges, Pri-Med CME Symposium, Los Angeles, California, November 2005.
- 124. Future of Functional GI Disorders. National Week of Gastroenterology Congress, Mexico City, November 2005.
- 125. Treatment of IBS. National Week of Gastroenterology Congress, Mexico City, November 2005.
- 126. Gender Differences in IBS. Keynote presentation, National Week of Gastroenterology Congress, Mexico City, November 2005.
- 127. Chronic constipation: primary care approaches to a common patient concern, Pri-Med CME symposium, Sacramento, California, December 2005.
- 128. Current and Future Treatment Options. Conquering Chronic Constipation: Exploring Pathophysiology and Treatment Options, AGA Clinical Congress satellite symposium, Hollywood, Florida, December 2005.
- 129. Emerging Medical Treatments for IBS, Bench to Bedside in IBS. AGA Winter Clinical Congress, Hollywood, Florida, December 2005.

- 130. HPA axis dysregulation in functional disorders. Center for Neurovisceral Sciences and Women's Health 3<sup>rd</sup> Annual Basic and Translational Science Symposium, Los Angeles, California, January 2006.
- 131. Traditional and Novel Treatment of FGID in Adults. Diagnosis and Management of Functional GI Disorders: From Child to Adult, Center for Neurovisceral Sciences and Women's Health 3<sup>rd</sup> Annual Clinical Symposium, Los Angeles, California, January 2006.
- 132. How I manage the IBS patient with constipation. Gastro-Hep Impact 2006 "Improving Medical Practice through Advanced Clinical Therapeutics," Phoenix, Arizona, January 2006.
- 133. Irritable bowel syndrome: pathophysiology and treatment. Functional Bowel Disorders session, American Motility Society course on Gastrointestinal Motility in Clinical Practice, San Diego, California, February 2006.
- 134. A status report: complementary and alternative medicine. GI Motility and Functional Bowel Disorders Focus Areas, American Motility Society course on Gastrointestinal Motility in Clinical Practice, San Diego, California, February 2006.
- 135. How I manage the IBS patient with constipation. Gastro-Hep Impact 2006 "Improving Medical Practice through Advanced Clinical Therapeutics," Beverly Hills, California, Febuary 2006.
- 136. Irritable bowel syndrome: neurobiologic alterations and their overlap with other chronic pain syndromes. Frontiers of GI Research Conference, visiting professor program, University of Illinois at Chicago, Illinois, February 2006.
- 137. Chronic Constipation: Piecing Together the Puzzle in Primary Care, Pri-Med meeting, Seattle, Washington, March 2006; Durham, North Carolina, March 2006; Anaheim, Calfornia, April 2006; Dallas, Texas, April 2006; San Jose, California, November 2006.
- 138. Focusing on the Patient: Clinical challenges in motility and sensory disorders, Primed meeting, Los Angeles, California, March 2006; Chicago, Illinois, May 2006; Seattle, Washington, September 2006.
- 139. Neurobiologic alterations of IBS and the overlap with other chronic pain syndromes. GI Research Conference, The Johns Hopkins Hospital, Baltimore, Maryland, March 2006.
- 140. Stress and the single woman. Clinical Conundrums in Gastroenterology, Foundation for Better Healthcare, Atlanta and Los Angeles, April 2006.
- 141. Chronic Constipation: An Age-old Problem with New Solutions, American Geriatric Society annual scientific meeting adjunct symposium, Chicago, Illinois, May 2006.
- 142. Is There a Relationship Between IBS and Colonic Ischemia? Controversies in IBS. Clinical Practice symposium, American Gastroenterological Association meeting, Los Angeles, California, May 2006.

- 143. Managing the Patient with Severe Functional Bowel Disease. Digestive Diseases Week Meet-the-Professor luncheon, American Gastroenterological Association meeting, Los Angeles, California, May 2006.
- 144. IBS-C: Where are we going? Fast Track Solutions to GI Motility and Sensory Disorders. Digestive Diseases Week satellite symposium, American Gastroenterological Association meeting, Los Angeles, California, May 2006.
- 145. Exploring the Mechanism of Action of Therapeutic Modalities for Chronic Constipation. Chronic Constipation: Translating Novel Mechanisms of Action into Innovative Therapeutic Interventions. Digestive Diseases Week satellite symposium, American Gastroenterological Association meeting, Los Angeles, California, May 2006.
- 146. Evidence-Based Presentation 2: Evaluating Current and Novel Treatment Modalities for Chronic Idiopathic Constipation. Raising the Bar in the Management of Chronic Idiopathic Constipation (serving as moderator), satellite symposium, American Association of Physician Assistants meeting, San Francisco, California, May 2006.
- 147. Novel Mechanisms Paving the Way to Relief in Chronic Constipation. CME dinner programs, Los Angeles, June 2006, San Francisco, June 2006 and Anaheim September 2006.
- 148. Does the HPA Axis have a Role in Modulating Visceral Hypersensitivity? AGA/BSG Joint Symposium, Cambridge, UK, September 2006.
- 149. The Mechanism Behind the Treatment. New Mechanisms and Novel Concepts in Chronic Constipation, American Motility Society Joint International meeting, Boston, MA, September 2006 (Chair).
- 150. Deal A Winning Hand: Expert Advice on Chronic Constipation. American College of Gastroenterology meeting symposium, Las Vegas, Nevada, October 2006.
- 151. IBS-C and CC: A therapeutic continuum? Overlapping GI motility and sensory disorders: An integrated approach, American College of Gastroenterology meeting symposium, Las Vegas, Nevada, October 2006.
- 152. Irritable bowel syndrome: Diagnosis is the Key, Perspectives in Women's Health, Women's Health Congress, San Francisco, November 2006.
- 153. Treatment of Irritable Bowel Syndrome, Gastroenterology Pan-American Congress, Cancun, Mexico, November 2006.
- 154. Evaluating Current and Novel Treatment Modalities for Chronic Idiopathic Constipation, Gastroenterology-Hepatology Impact meeting, San Francisco, November 2006.

155. Dysregulation of the hypothalamic-pituitary-adrenal (HPA) axis and its association with symptoms in irritable bowel syndrome and fibromyalgia. American Psychosomatic Society meeting, Budapest, Hungary, March 2007.

- 156. Diagnosis and treatment of patients with functional somatic syndromes. "Best practice" breakfast symposium, American Psychosomatic Society meeting, Budapest, Hungary, March 2007.
- 157. Peripheral measures of stress response in irritable bowel syndrome (IBS). Annual CURE Scientific meeting, Los Angeles, March 2007.
- 158. Brain-Gut Axis/Genetics. Plenary session, 7<sup>th</sup> Annual International Foundation of Functional Gastrointestinal Disorders (IFFGD) Symposium. Milwaukee, Wisconsin, April 2007.
- 159. Gender, Age, Society, Culture, and Patient's Perspective in Functional GI Disorders workshop. 7<sup>th</sup> Annual International Foundation of Functional Gastrointestinal Disorders (IFFGD) Symposium. Milwaukee, Wisconsin, April 2007.
- 160. Neurobiologic Alterations in IBS and Other Chronic Pain Syndromes. GI Visiting Professor Program, University of Chicago, Chicago, May 2007.
- 161. Focused Clinical Updates: Irritable bowel syndrome. Digestive Diseases Week, American Gastroenterological Association meeting, Washington, D.C., May 2007.
- 162. Neurobiologic alterations in irritable bowel syndrome and fibromyalgia, IBS and Co-morbid somatic conditions symposium. Digestive Diseases Week, American Gastroenterological Association meeting, Washington, D.C., May 2007.
- 163. No. It is in the brain! Functional brain imaging in functional GI disorders. Third International Symposium on Pediatric Gastroenterology, Hepatology, and Nutrition. Montreal, Canada, June 2007.
- 164. Controversies in Gastrointestinal & Liver Diseases: Functional GI Disorders. Southern California Society of Gastroenterology, San Diego, July 2007.
- 165. Gender differences in irritable bowel syndrome. Pregraduate Course, Congreso Argentino de Gastroenterología Y Endoscopia Digestiva, Mendoza, Argentina, August 2007.
- 166. Brain-gut dysregulation in irritable bowel syndrome, Congreso Argentino de Gastroenterología Y Endoscopia Digestiva, Mendoza, Argentina, August 2007.
- 167. Emerging treatments for functional gastrointestinal disorders, Congreso Argentino de Gastroenterología Y Endoscopia Digestiva, Mendoza, Argentina, August 2007.
- 168. Neuroendocrine Alterations of the Central Stress Response in Irritable Bowel Syndrome. GI Division Research Conference, Mayo Clinic visiting professor program, Rochester, MN, September 2007.

- 169. HPA Axis and Brain Imaging. IGA/AGA meeting, Tel Aviv, Israel, February 2008.
- 170. How to Prepare and Deliver a Presentation. IGA/AGA meeting, Tel Aviv, Israel, February 2008.

- 171. Newer Agents for the Gut. IGA/AGA meeting, Tel Aviv, Israel, February 2008.
- 172. Pathophysiology and Drug Targets for IBS. GI conference, Hassadah Hospital, Jerusalem, Israel, February 2008.
- 173. Irritable Bowel Syndrome. Gastroenterology and Hepatology Linked to Endoscopy: Mayo Clinic's 6<sup>th</sup> Annual Winter Course in Scottsdale, Scottsdale, AZ, February 2008.
- 174. Evidence Based Therapy for IBS. Canadian Digestive Diseases Week and the Fourth Annual CASL Winter Meeting, Montreal, Canada, February-March 2008.
- 175. Difficult Cases of Irritable Bowel Syndrome My Tricks. Canadian Digestive Diseases Week and the Fourth Annual CASL Winter Meeting, Montreal, Canada, February-March 2008.
- 176. How to make the most out of your mentoring relationship. Functional Brain-Gut Group Young Investigators Conference, San Diego, California, April 2008.
- 177. Chronic Constipation and Colonic Pseudo-Obstruction. AGA Postgraduate Course, Clinical Challenges, Digestive Diseases Week, San Diego, California, May 2008.
- 178. The Brain-Gut Interaction: Do SSRIs and TCAs Improve IBS Symptoms? Controversies in IBS symposium, AGA Digestive Diseases Week, San Diego, California, May 2008.
- 179. Narcotic Bowel Syndrome. AGA Digestive Diseases Week, San Diego, California, May 2008.
- 180. Emerging therapies in FGID. Meet-the-Professor luncheon, AGA Digestive Diseases Week, San Diego, California, May 2008.
- 181. Impact of IBS. Satellite symposium, AGA Digestive Diseases Week, San Diego, California, May 2008.
- 182. IBS: A Diagnosis of Exclusion? Satellite symposium, AGA Digestive Diseases Week, San Diego, California, May 2008.
- 183. Central dysregulations in irritable bowel syndrome: HPA axis and brain imaging. Stress and Gastrointestinal Illness. American Behavioral Medicine Research meeting, Lake Louise, Canada, June 2008.
- 184. Sex differences in visceral pain in irritable bowel syndrome, NIH Women's Health Sciences Seminar, Bethesda, Maryland, July 2008.
- 185. Sorting Through the Complexities of Irritable Bowel Disease: Advances in Patient Evaluation and Treatment Modalities. Impact, Los Angeles, California, September 2008.
- 186. Mechanisms and Treatment of Chronic Functional Abdominal Pain, Post-graduate Course, American College of Gastroenterology meeting, Orlando, Florida, October 2008.
- 187. Defining symptoms and severity in functional GI disorders. Joint Neurogastroenterology and Motility meeting, Lucerne, Switzerland, November 2008.

188. The Management of Constipation – Did We Overcome the Blockage at Last? University of Arizona GI Motility Conference, Phoenix, Arizona, November 2008.

- 189. Women's Health Issues in Gl. AGA Clinical Congress, Las Vegas, Nevada, January 2009.
- 190. Managing Slow Transit Constipation and Dyssynergic Defecation. AGA Clinical Congress, Las Vegas, Nevada, January 2009.
- 191. New Insights into the Pathophysiology of Irritable Bowel Syndrome: Implications for Future Treatments. Miami CME Winter Series, GI Update 2009, Miami, Florida, February 2009.
- 192. Management of IBS: the Evidence and the Experience. Miami CME Winter Series, GI Update 2009, Miami, Florida, February 2009.
- 193. Do I Ever Use Antibiotics for IBS? Miami CME Winter Series, GI Update 2009, Miami, Florida, February 2009.
- 194. Nausea and vomiting: old and new therapies. ACG Western Postgraduate CME Course in Las Vegas, Nevada, March 2009.
- 195. Biomarkers. 8<sup>th</sup> International Symposium on Functional GI Disorders, Milwaukee, Wisconsin, April 2009.
- 196. Challenging Cases at the Referral Centers. 8<sup>th</sup> International Symposium on Functional GI Disorders, Milwaukee, Wisconsin, April 2009.
- 197. *Gender, Age, Society and the Patient.* 8<sup>th</sup> International Symposium on Functional GI Disorders, Milwaukee, Wisconsin, April 2009.
- 198. Review of CC and IBS. Go Beyond Expectations: Successful GI Outcomes Through Improved Clinician-Patient Partnerships. American College of Physicians, Philadelphia, PA, April 2009.
- 199. How to talk to your doctor- you are not alone. Overlapping Disorders symposium, International Foundation for Functional GI Disorders and TMJ Association, Milwaukee, WI, April 2009.
- 200. Tailoring Treatment of IBS. Digestive Disease Week Postgraduate Course, American Gastroenterological Association, Chicago, Illinois, May 2009.
- 201. The Future of IBS Therapy. Digestive Disease Week symposium, American Gastroenterological Association, Chicago, Illinois, May 2009.
- 202. Women's Health Issues in IBS. GI Health Foundation IBS Initiative, Chicago, Illinois, May 2009.
- 203. Sex differences in FGID. Joint Neurogastroenterology and Motility meeting, Chicago, Illinois, August 2009.

- 204. Pathophysiology of IBS. International Pelvic Pain Society meeting, Phoenix, AZ, October 2009.
- 205. Has our understanding of the pathophysiology of IBS improved its treatment? American College of Gastroenterology Postgraduate Course, San Diego, California, October 2009.

- 206. Diagnosis of IBS: Biomarker or Symptom-based Criteria? AGA Clinical Congress, Las Vegas, Nevada, January 2010.
- 207. HPA Axis and Colonic Mucosal Changes in IBS. Center for Neurobiology of Stress Basic and Translational Science Symposium, Los Angeles, February 2010.
- 208. Clinical Presentation and Approach: But What if It is Not Lactose Intolerance? NIH Consensus Development Conference: Lactose Intolerance and Health, Bethesda, Maryland, February 2010.
- 209. Stress and HPA axis alterations in irritable bowel syndrome. 2010 Annual CURE Research Meeting, David Geffen School of Medicine at UCLA, Los Angeles, California, April 2010.
- 210. Irritable bowel syndrome: What you need to know in clinical practice. Pacific Northwest Gastroenterology Society (PNWGS) meeting, Seattle, Washington, April 2010.
- 211. Role of stress and HPA axis in irritable bowel syndrome, Frontiers in Gastroenterology, University of Washington CME Accredited Series, Seattle, Washington, April 2010.
- 212. What actually helps in managing IBS? Postgraduate Course, Digestive Diseases Week, New Orleans, LA, May 2010.
- 213. Clinical challenge session: Healing the complicated functional bowel disease patient. Postgraduate Course, Digestive Diseases Week, New Orleans, LA, May 2010.
- 214. Major Advances in IBS. Presidential Plenary, Digestive Diseases Week, New Orleans, LA, May 2010.
- 215. Lack of Correlation Between IBS Symptoms and Cytokine Markers of Inflammation in IBS Biopsies and Circulation, Translational Research symposium, Neurogastroenterology and Motility section, Digestive Diseases Week, New Orleans, LA, May 2010.
- 216. Beyond Fiber Treatment of C-IBS with SSRIs, Lubiprostone, Osmotic Laxatives, and New Agents, Clinical Practice symposium, Digestive Diseases Week, New Orleans, LA, May 2010.
- 217. Impact of Pain Attacks on Behavior and Health-Related Outcomes in Patients with Irritable Bowel Syndrome Meeting Rome III Criteria. Digestive Diseases Week, New Orleans, LA, May 2010.
- 218. Focused Clinical Updates: Treatment of functional bowel disorders. Digestive Diseases Week, New Orleans, LA, May 2010.

- 219. Gender differences and women's health issues in functional GI disorders. AGA Nurse Practitioners and Physician Assistant's meeting, San Francisco, August 2010.
- 220. Evidence-based vs. Patient-centered approach. Annual ACG meeting, San Antonio, TX, October 2010.
- 221. Controversies in Functional Bowel Diseases. Southern California Gastroenterology Society Post-DDW Course, Dana Point, California, July 2010.
- 222. Testing for bacterial overgrowth, IBS, and carbohydrate intolerance. ANMS 5th Biennial Course on GI Motility & Neurogastroenterology in Clinical Practice, Boston, Massachusetts, August 2010.
- 223. Cytokines and local effector mechanisms. 2010 Joint International Neurogastroenterology and Motility meeting, Boston, Massachusetts, August 2010.
- 224. Tissue and Serum Biomarkers in FGIDs: HPA axis, 5-HIAA, fecal calprotectin and human β-defensin-2. FDA Biomarker Workshop, Silver Springs, MD, September 2010.
- 225. Patient-Centered Care vs. Evidence Based Care, IBS breakfast symposium, Annual ACG meeting, San Antonio, Texas, October 2010.

- 226. Irritable Bowel Syndrome: What You Need To Know In Clinical Practice. Medicine Grand Rounds, Vanderbilt University Medical Center, 2011 William D. Salmon Lectures
- 227. hip, Nashville, TN, January 2011.
- 228. Role of Stress and Inflammation in IBS: What Is the Evidence. GI Grand Rounds, Vanderbilt University Medical Center, 2011 William D. Salmon Lectureship, Nashville, TN, January 2011.
- 229. Clinical Trials in Irritable Bowel Syndrome: A Year in Review. Digestive Diseases of the Caribbean, Puerto Rico Gastroenterology Association, Puerto Rico, March 2011.
- 230. Refractory Nausea, Vomiting, and Gastroparesis. Digestive Diseases of the Caribbean, Puerto Rico Gastroenterology Association, Puerto Rico, March 2011.
- 231. Challenging Cases at the Referral Centers- Mini Symposium. 9th International Symposium on Functional Gastrointestinal Disorders, Milwaukee, WI, April 2011.
- 232. Brain Gut Modulation of GI Symptoms- Workshop. 9th International Symposium on Functional Gastrointestinal Disorders, Milwaukee, WI, April 2011.
- 233. Managing Pain in Irritable Bowel Syndrome. Postgraduate Course, Digestive Diseases Week, Chicago, Illinois, May 2011.
- 234. Primer on the FDA PRO Guidance Document. Digestive Diseases Week, Chicago, Illinois, May 2011.

- 235. Controversies in Functional Bowel Diseases. Southern California Gastroenterology Society Post-DDW Course, Laguna Niguel, California, July 2011.
- 236. Diagnostic testing in IBS, Current approaches for testing in IBS, SIBO, and lactose/fructose intolerance. ANMS-FBG Annual Motility Course, St. Louis, MI, September 2011.
- 237. Secretogogues, Prokinetics, and Anti-nociceptives in IBS. Satellite symposium, ANMS-FBG Scientific Meeting, St. Louis, MI, September 2011.
- 238. How to make the most out of your mentoring relationship. Young Investigators Forum, ANMS-FBG Scientific Meeting, St. Louis, MI, September 2011.
- 239. Functional GI Disorders: Underlying Mechanisms and Appropriate Therapy. American College of Gastroenterology GI Pathophysiology Course, Washington, D.C., October 28, 2011.
- 240. Gas and Bloating Still a Problem After All of These Years? Annual ACG Scientific Meeting, Washington, D.C., November 2, 2011.
- 241. What tools are available for symptom measurement in IBS? Meeting on Measurement of Urinary Symptoms (MOMUS), NIH, Bethesda, Maryland, November 14, 2011.
- 242. Diagnosis and Treatment of Irritable Bowel Syndrome. X Semana Brasileira do Aparelho Digestivo, Brazilian Congress of Gastroenterology, Porto Alegre, Brazil, November 21, 2011.
- 243. Effect of Stress on FGIDs. X Semana Brasileira do Aparelho Digestivo, Brazilian Congress of Gastroenterology, Porto Alegre, Brazil, November 22, 2011.

- 244. Clinical Trials Update in IBS, Intestinal Disorders session (also moderated session). AGA Clinical Congress, Miami, Florida, January 21, 2012.
- 245. Gastroparesis: Evolving Tools, Breakout session. AGA Clinical Congress, Miami, Florida, January 20-21, 2012.
- 246. Irritable bowel syndrome: What's New? (Also served as Moderator) ACG Board of Governors/ASGE Best Practices, Huntington Beach, California, January 28, 2012.
- 247. Early Life Stress and Glucocorticoid Receptor Gene Methylation in Irritable Bowel Syndrome. Center for Neurobiology of Stress 10<sup>th</sup> Anniversary Annual Symposium, Los Angeles, CA, February 9, 2012.
- 248. Medical management of constipation, fecal incontinence, and IBS. Multidisciplinary Pelvic Floor Conference, UCLA, Los Angeles, CA, March 21, 2012.
- 249. Review of IBS and Functional Abdominal Pain. Pediatric GI Conference, UCLA, Los Angeles, CA, March 23, 2012.

- 250. Difficult FGID Cases, AGA Postgraduate Course, Digestive Diseases Week, San Diego, CA, May 19, 2012.
- 251. GI Motility, IBS and Women. Presidential Plenary, Digestive Diseases Week, San Diego, CA, May 21, 2012.
- 252. Glucocorticoid Receptor Gene Methylation is a Potential Biomarker of Irritable Bowel Syndrome. Digestive Diseases Week, San Diego, CA, May 19, 2012.
- 253. Irritable Bowel Syndrome: What's Important to Know for Clinical Practice, Harbor-UCLA Department of Medicine Grand Rounds, Torrance, CA, June 5, 2012.
- 254. Pathophysiology of IBS and Other Common FGIDs. Rome Foundation AGA Institute Communication Skills Workshop: Improving the Medical Interview and the Physician Patient Relationship with Patients Having Functional GI Disorders. Chapel Hill, NC, June 8-9, 2012.
- 255. Controversies in Functional Bowel Disorders. Southern California Gastroenterology Society Post-DDW Course, Laguna Beach, California, June 16, 2012.
- 256. State of the Art Lecture: Management of Functional Abdominal Pain. Southern California Gastroenterology Society Post-DDW Course, Laguna Beach, California, June 16, 2012.
- 257. Patient case: Chronic constipation. UCLA GI Noon Conference: Neurogastroenterology, Los Angeles, California, June 20, 2012.
- 258. Medical management of IBS. Expert Update on Treatments for Functional GI Disorders: A Symposium for Patients, Chapel Hill, North Carolina, June 23, 2012.
- 259. Bloating. Expert Update on Treatments for Functional GI Disorders: A Symposium for Patients, Chapel Hill, North Carolina, June 24, 2012.
- 260. How to find the right mentor. 2012 Tenth Annual Young Investigator Forum, American Neurogastroenterology and Motility Society (ANMS) Motility Course, Chicago, Illinois, July 27, 2012.
- 261. Pathophysiology and Treatment of IBS. Gastrointestinal Motility and Neurogastroenterology in Clinical Practice, Chicago, Illinois, July 29, 2012.
- 262. Psychosocial Factors in IBD. Served as preceptor for GI Division Journal Club, August 23, 2012.
- 263. Management of IBS. Visiting Professor GI Grand Rounds, Indiana University, Indianapolis, Indiana, September 17, 2012.
- 264. Bloating and distension patient case. UCLA GI Noon Conference, Los Angeles, CA, October 3, 2012.
- 265. Understanding IBS for Rome IV. Festival of Gastroenterology and Endoscopy (FGE) Sanya, Sanya Island, China, October 10, 2012.

- 266. Recurrent abdominal pain and disordered bowel habit. FGE Beijing, Chinese PLA General Hospital Beijing, China, October 13, 2012.
- 267. Antibiotics: What to Do After They Work? IBS: Do Microbes Matter? Symposium, ACG Annual Meeting, Las Vegas, NV, October 18, 2012.
- 268. IBS Diagnosis, Pathophysiology and Treatment. `The 6<sup>th</sup> Japan and US Collaboration Conference in Gastroenterology Program, Tokyo, Japan, November 14, 2012.

- 269. IBS: Insights Into the Pathophysiology and Treatment. GI Grand Rounds, Mount Sinai visiting professor program, New York, NY, January 4, 2013.
- 270. The Spectrum of Functional GI Disorders: Symptoms and Diagnostic Criteria. UCLA GI Fellows Conference, Los Angeles, CA, February 8, 2013.
- 271. IBS: Insights Into the Pathophysiology and Treatment. GI Grand Rounds, Stanford Hack Lectureship Program visiting professor program, Palo Alto, CA, February 27, 2013.
- 272. Treatment of IBS State-of-the-Art in 2013. Advances in Gastroenterology and Hepatology, San Diego, CA, March 2, 2013.
- 273. Chronic nausea and vomiting- causes and remedies. UCLA-Mellinkoff Gastroenterology Symposium, Beverly Hills, CA, March 8, 2013.
- 274. Chronic abdominal pain. UCLA Pediatric GI Conference, Los Angeles, CA, March 23, 2013.
- 275. Treatment of Opioid Bowel, Opioid and Narcotic Bowel Mini-symposium. 10<sup>th</sup> International Symposium on Functional Gastrointestinal Disorders, Milwaukee, Wisconsin, April 12-14, 2013.
- 276. Treatment Pearls, Clinical Pearls for the Clinician workshop. 10<sup>th</sup> International Symposium on Functional Gastrointestinal Disorders, Milwaukee, Wisconsin, April 12-14, 2013.
- 277. IBS, Clinical Trial Design and Outcome Measurement Mini-symposium. 10<sup>th</sup> International Symposium on Functional Gastrointestinal Disorders, Milwaukee, Wisconsin, April 12-14, 2013.
- 278. IBS: Insights Into the Pathophysiology and Treatment. Medical Grand Rounds, Rouse visiting professor lectureship, Baylor University Medical Center, Dallas, TX, April 16, 2013.
- 279. Chronic Nausea and Vomiting: Diagnosis and Treatment. Noon Housestaff Conference, Baylor University Medical Center, Dallas, TX, April 16, 2013.
- 280. Gastroparesis: New Treatments for a Perpetual Problem. Served as preceptor for Journal Club, Division of Digestive Diseases, UCLA.
- 281. What Causes "Functional" Bowel Disorders? Recent Insights and What It Means for the Clinician. AGA Postgraduate Course General Session, Digestive Diseases Week meeting, Orlando, FL, May 18, 2013.

- 282. The "Impossible" Abdominal Pain Patient: Treatment Strategies and Helpful Hints. AGA Postgraduate Course Clinical Challenge session, Digestive Diseases Week meeting, Orlando, FL, May 18, 2013.
- 283. Bloating and Distension: Understanding the Mechanisms and Optimizing Management. Meet-the-Professor, Digestive Diseases Week meeting, Orlando, FL, May 19, 2013.
- 284. Clinical Conversations: Getting Patients With CC and IBS-C Back on Track. DDW satellite symposium, Digestive Diseases Week meeting, Orlando, FL, May 19, 2013.
- 285. Functional Abdominal Pain Syndrome. Neurogastroenterology Clinical Conference. UCLA GI noon conference, Los Angeles, CA, May 29, 2013.
- 286. IBS: It's not that simple. First Annual GALA Conference, Austin, TX, June 21-22, 2013.
- 287. Functional GI case conference. First Annual GALA Conference, Austin, TX, June 21-22, 2013.
- 288. How to Approach Challenging Clinical Scenarios in Functional GI Disorders. UCLA GI Fellowship Curriculum Conference, Los Angeles, CA, August 23, 2013
- 289. Management of IBS, IBS Cornerstones Lecture. GI Conference, University of Washington, Seattle, WA, August 30, 2013.
- 290. Fecal Incontinence. UCLA GI Noon Conference, Los Angels, CA, September 11, 2013.
- 291. Current insights on the Causes of Functional Bowel Disorders and How They Impact Treatment. Ray Clouse Visiting Professor of Excellence Lecture, Washington University, St. Louis, September 17, 2013.
- 292. Current state of PROs for IBS, gastroparesis and functional dyspepsia. 17<sup>th</sup>
  Neurogastroenterology & Motility Scientific Meeting, Huntington Beach, CA, September 22, 2013.
- 293. Differentiating and Managing IBS-C and Chronic Constipation. Annual American College of Gastroenterology (ACG) Postgraduate Course, San Diego, CA, October 12, 2013.
- 294. Management of the Severely Constipated Patient. United European Gastroenterology (UEG) Scientific Meeting, Berlin, Germany, October 15, 2013.
- 295. Emerging Treatment for IBS. United European Gastroenterology (UEG) Scientific Meeting, Berlin, Germany, October 15, 2013.
- 296. Psycho-Pharmacology Therapies. UNC Functional GI Conference, How to Treat IBS Effectively: Expert Update for Health Professional, Raleigh-Durham, NC, November 2, 2013.
- 297. Rome Diagnostic algorithm for functional bowel disorders. UNC Functional GI Conference, How to Treat IBS Effectively: Expert Update for Health Professional, Raleigh-Durham, NC, November 2, 2013.

- 298. Evaluation and Medical Management of Chronic Constipation and Defecatory Disorders. Female Pelvic Medicine and Reconstructive Surgery lecture series. Los Angeles, CA, December 9, 2013.
- 299. Functional GI and Motility Jeopardy. UCLA GI Fellowship Curriculum lectures, Los Angeles, CA, December 20, 2013.

- 300. Functional GI cases. Second Annual UCLA-Mellinkoff Gastroenterology Symposium, Beverly Hills, CA, March 8, 2014.
- 301. Management of functional GI disorders. UCLA Pediatric Gastroenterology Conference, Los Angeles, CA, April 18, 2014.
- 302. Genetic Polymorphisms and Cytokines in Irritable Bowel Syndrome. Digestive Diseases Week, Chicago, IL, May 3. 2014.
- 303. Functional Abdominal Pain, Clinical Challenges session, Postgraduate Course. Digestive Diseases Week, Chicago, IL, May 3. 2014.
- 304. Managing Chronic Constipation and IBS with Constipation: New Evidence of Overlap, Distinctions, and Improved Treatment Strategies. Satellite Symposium, Digestive Diseases Week, Chicago, IL, May 3. 2014.
- 305. IBS and FODMAPs. ASGE/AGA Presidential Plenary. Digestive Diseases Week, Chicago, IL, May 4. 2014.
- 306. Genetics and IBS: Is there a Pattern to the Puzzle? Digestive Diseases Week, Chicago, IL, May 5. 2014.
- 307. Communication with the Patient in the Era of EHR. Digestive Diseases Week, Chicago, IL, May 6. 2014.
- 308. Irritable Bowel Syndrome. Meet the Professor luncheon. Digestive Diseases Week, Chicago, IL, May 3. 2014.
- 309. Understanding what causes symptoms in the intestines and rectum. Expert Update for Functional GI Disorders: A Symposium for Patients, Washington, D.C., June 22, 2014.
- 310. Managing your irritable bowel syndrome. Expert Update for Functional GI Disorders: A Symposium for Patients, Washington, D.C., June 22, 2014.
- 311. Multidimensional Disease Clinical Profile- Applications for Treatment and Research. UCLA Digestive Diseases Noon Conference. July 9, 2014.
- 312. What are the major updates in IBS over the past year? American Neurogastroenterology Society annual postgraduate course, Baltimore, Maryland, July 26, 2014.

- 313. Current and Emerging Therapeutic Strategies for IBS-C and CC: Clinical Findings. Individualized Management of IBS-C and CC in the Primary Care Setting: Practical Strategies to Improve Patient Outcomes. Peerview Institute online medical education program.
- 314. Working team for severity in IBS. Rome symposium, Federation of Neurogastroenterology and Motility meeting, Guangzhou, China, September 5, 2014
- 315. Novel therapeutic targets. Federation of Neurogastroenterology and Motility meeting, Guangzhou, China, September 6, 2014.
- 316. Microinflammation and immune activation in functional bowel disorders. Federation of Neurogastroenterology and Motility meeting, Guangzhou, China, September 7, 2014.
- 317. Patient Management Updates: Opioid Induced Constipation. GI and Liver Association of America (GALA) conference, San Francisco, CA, September 19, 2014.
- 318. Epidemiology of IBS. IBS conference, Cedars-Sinai Medical Center, Los Angeles, CA, September 22, 2014.
- 319. A "new" source of relief? Prucalopride and Constipation (Preceptor). UCLA GI Journal Club, Los Angeles, AG, October 3, 2014.
- 320. Logic in using a diet without FODMAPs in IBS. 2014 Pan American Congress of Gastroenterology and Endoscopy, Buenos Aires, Argentina, October 7, 2014.
- 321. New treatments in FGIDs. 2014 Pan American Congress of Gastroenterology and Endoscopy, Buenos Aires, Argentina, October 7, 2014.
- 322. IBS-C and Chronic Constipation. GI News Tonight, Satellite symposium, 2014 American College of Gastroenterology (ACG) Annual Meeting in Philadelphia, PA, October 19, 2014.
- 323. Inflammatory Diarrhea. Chronic Idiopathic Diarrhea satellite symposium, 2014 American College of Gastroenterology (ACG) Annual Meeting in Philadelphia, PA, October 20, 2014.
- 324. Academic Practice. AGA Regional Practice Skills Workshop. Los Angeles, CA, October 24, 2014.
- 325. Global epidemiology of FGIDs. Postgraduate Course, Semana Nacional de Gastroenterologia meeting, Cancun, Mexico, November 15, 2014.
- 326. What's new in IBS pathophysiology? Postgraduate Course, Semana Nacional de Gastroenterologia meeting, Cancun, Mexico, November 16, 2014.
- 327. Following the evolution and prevalence of IBS. Semana Nacional de Gastroenterologia meeting, Cancun, Mexico, November 17, 2014.
- 328. Opioid induced constipation. Semana Nacional de Gastroenterologia meeting, Cancun, Mexico, November 18, 2014.

- 329. Understanding the AGA Institute IBS Treatment Guidelines. AGA Webinar, December 16, 2014.
- 330. GI Jeopardy: Functional GI Disorders. UCLA GI Fellowship curriculum lectures series. Los Angeles, CA, December 19, 2014.

- 331. Irritable bowel syndrome and SIBO. ACG Western Regional Conference, Las Vegas, NV, January 25, 2015.
- 332. SCOR Project 1 study: Hypothalamic-pituitary-adrenal axis responses to hormone challenge: IBS and sex differences. Center for Neurobiology of Stress SCOR research meeting. Los Angeles, CA, January 28, 2015.
- 333. Case Conference, Functional GI Disorders. UCLA GI Noon Conference, Los Angeles, CA, February 25, 2015.
- 334. Chronic constipation and fecal incontinence: diagnosis and management. Third annual Mellinkoff GI conference, Beverly Hills, March 13, 2015.
- 335. Emerging strategies to identify disease-specific biomarkers in the Omics era: The role of ethnicity and gender. ANMS Advisory Committee Meeting, Dallas, TX, March 21, 2015.
- 336. Patient Management Updates: Chronic Constipation. GALA Conference, Dallas, TX, April 10, 2015.
- 337. Functional Bowel Disorders. UCLA GI Fellowship Monday morning VA lectures, Los Angeles, CA, April 12, 2015.
- 338. Evaluation and Management of Constipation. Division of Pelvic Medicine and Reconstructive Surgery Lecture Series, Los Angeles, CA, April 27, 2015.
- 339. ACG GI Circle and Rome Foundation Webinar: "A Multi-Dimensional Approach to Treating Functional Gastrointestinal Disorders II, May 7, 2015.
- 340. The Problem of Abdominal Pain: How to Work Up, Evidence on Effective Treatments. Digestive Diseases Week Postgraduate Course, Washington, D.C., May 16, 2015.
- 341. Managing the Complicated IBS Patient. Clinical Challenge Session, Digestive Diseases Week Postgraduate Course, Washington, D.C., May 16, 2015.
- 342. Enhanced stimulated stress hormone response in irritable bowel syndrome (IBS) is associated with downregulation of glucocorticoid receptor expression. Research Forum, Digestive Diseases Week meeting, Washington, D. C., May 18, 2015.
- 343. Current insights on the causes and treatment of IBS. University of Alabama visiting lectureship in GI. Birmingham, AL, June 1, 2015.
- 344. Rome Multidisciplinary Clinical Profiles (MDCP) of FGID Patients. Department of Pediatrics GI Conference, Los Angeles, CA, June 12, 2015.

- 345. Novel Insights into the Pathogenesis of IBS (Diet/Gluten/Celiac/Microbiome). Joint Congress in Neurogastroenterology at Northwestern Medicine, Chicago, IL, August 27, 2015.
- 346. Clinical Cases: Globus, Dysphagia, Irritable Bowel Syndrome, Constipation. Joint Congress in Neurogastroenterology at Northwestern Medicine, Chicago, IL, August 27, 2015.
- 347. Bloating and Abdominal Distension: Diagnosis and Management. ANMS Clinical Course, Chicago, IL, August 28, 2015.
- 348. Role of Stress and Early Adverse Life Events in IBS. AGA James W. Freston Single Topic Conference, Chicago, IL, August 30, 2015.
- 349. Managing IBS: Integrating an Evidence Based and Practical Approach. 41st Annual Topics in Gastroenterology and Hepato-Biliary Update Conference, Baltimore, MD, September 10, 2015.
- 350. Chronic constipation, rectal and vaginal prolapse case presentation. UCLA GI noon conference, Los Angeles, CA, September 23, 2015.
- 351. Myths and Realities about Feeling Good: What We Should Know. Wisdom from Within conference, Division of Digestive Diseases, David Geffen School of Medicine, Los Angeles CA, September 30, 2015.
- 352. Current insights in the causes, diagnosis and treatment of IBS. UCLA GI Fellowship Core Curriculum, Los Angeles, CA, October 30, 2015.
- 353. Functional GI and Motility Disorders Jeopardy, UCLA Gastroenterology Fellowship Core Curriculum, Los Angeles, CA, December 18, 2015.

- 354. Current insights in the diagnosis, causes, and treatment of IBS. Department of Medicine Grand Rounds, Tulane University, New Orleans, LA, January 6, 2016.
- 355. Functional GI case conference: Abdominal bloating and distension. UCLA GI noon conference, Los Angeles, CA, February 24, 2016.
- 356. Role of Stress and Early Adverse Life Events in IBS. Academic Day for Center for East West Medicine, UCLA, Los Angeles, CA, March 3, 2016.
- 357. Celiac disease and IBS: What is the overlap? 7<sup>th</sup> Expert Strategies in Endoscopy, Gastrointestinal and Liver Diseases, Kansas City, MO, March 12, 2016.
- 358. Functional Diarrhea and Functional Constipation. 7<sup>th</sup> Expert Strategies in Endoscopy, Gastrointestinal and Liver Diseases, Kansas City, MO, March 12, 2016.
- 359. Emerging IBS Treatments. 4<sup>th</sup> Annual UCLA-Mellinkoff Gastroenterology and Hepatology Symposium, Beverly Hills, CA, March 13, 2016.

- 360. Chronic constipation. UCLA GI Fellowship Monday am VA lecture series, Los Angeles, CA, March 28, 2016.
- 361. Integrating Scientific Evidence and a Practical Approach in the Management of Irritable Bowel Syndrome. Department of Medicine Grand Rounds, New York University (NYU) Langone Medical Center, NY, April 6, 2016.
- 362. Diagnosis and Management of IBS. Lecture Series, Division of Pelvic Floor and Reconstructive Surgery, Department of Urology, April 25, 2016.
- 363. The role of brain-gut interactions in chronic pain and stress in IBS. GI Fellow Grand Rounds, University of Michigan, Ann Arbor, MI, May 10, 2016.
- 364. Mechanisms and management of bloating in IBS. MBCP Grand Rounds, University of Michigan, Ann Arbor, MI, May 10, 2016.
- 365. Motility Matters: An Interactive Forum to Debate What Progress the Field Has Made. IBS, constipation and fecal incontinence. Digestive Diseases Week, San Diego, CA, May 23, 2016.
- 366. Patient management update: chronic constipation and opioid induced constipation. GALA conference, Cleveland, OH, June 3, 2016.
- 367. Functional GI Disorders. GALA conference, Cleveland, OH, June 3, 2016.
- 368. Classification of Rome IV functional GI disorders and management. VA Monday morning lecture, UCLA GI Fellowship Program, Los Angeles, CA, June 13, 2016.
- 369. Biologic phenotypic of functional bowel disorders. NIDDK Functional Bowel Disorders workshop, Bethesda, Maryland, June 23, 2016.
- 370. Multidisciplinary Clinical Profiles (MDCP): Individualized Patient Care Approach for Functional Upper GI Disorders. UCLA Division of Digestive Diseases Noon Conference, Los Angeles, CA, August 10, 2016.
- 371. Update in Pathophysiology, Diagnosis and Treatment of IBS. GI conference, Rady's Children's Hospital San Diego, UC San Diego, August 11, 2016.
- 372. Role of stress and early adverse life events in IBS. Pediatric Grand Rounds, Rady's Children's Hospital San Diego, UC San Diego, August 12, 2016.
- 373. From Rome III to Rome IV...what's new about IBS? IBS in 2016: present and future challanges ...redefining history? GI Conference, San Francisco, CA, August 24, 2016.
- 374. Celiac and IBS: What is the overlap? IBS in 2016: present and future challanges ...redefining history? GI Conference, San Francisco, CA, August 24, 2016.
- 375. Rome IV Multidimensional Clinical Profile (MDCP): Augmenting Rome Criteria to Optimize Patient-Centered Treatment. Federation of Neurogastroenterology and Motility (FNM) scientific meeting, San Francisco, CA, August 25, 2016.

- 376. Genomic Biomarkers in IBS: Diagnosis. Federation of Neurogastroenterology and Motility (FNM) scientific meeting, San Francisco, CA, August 26, 2016.
- 377. New and Emerging Therapies for Managing Visceral Hyperalgesia. Federation of Neurogastroenterology and Motility (FNM) scientific meeting satellite symposium, San Francisco, CA, August 26, 2016.
- 378. Integrating Scientific Evidence and a Practical Approach in the Management of Irritable Bowel Syndrome. Wade Volwiler GI visiting professor lecture at Department of Medicine Grand Rounds, University of Washington, Seattle, WA, September 1, 2016.
- 379. Current and Emerging Treatments for Irritable Bowel Syndrome and Bloating. Pacific Northwest Gastroenterology Society, Seattle, WA, September 1, 2016.
- 380. The role of stress and resilience in IBS. Frontiers in Gastroenterology and Hepatology, Seattle, WA, September 2, 2016.
- 381. Diagnosis and management of irritable bowel syndrome. ACG Edgar Achkar Professorship, Rush University Medical Center, Chicago, IL, September 9, 2016.
- 382. Extraintestinal symptoms in IBS. 24<sup>th</sup> United European Gastroenterology Week, Austria, Vienna, October 17, 2016.
- 383. State-of-the-art in IBS: from single to multi-symptom therapy, Discover the truth about IBS: rethinking current opinions in gastroenterology satellite symposium. 24<sup>th</sup> United European Gastroenterology Week, Austria, Vienna, October 17, 2016.
- 384. A positive diagnostic strategy is preferred in IBS. 24<sup>th</sup> United European Gastroenterology (UEG) Week, Austria, Vienna, October 18, 2016.
- 385. Optimizing the Patient-Provider relationship using Effective Communication Techniques. 24<sup>th</sup> United European Gastroenterology Week, Austria, Vienna, October 18, 2016.
- 386. Chronic constipation. UCLA GI Fellowship VA clinic lecture series, Los Angeles, CA, October 31, 2016.
- 387. Highlights in Rome IV Criteria and Recommendations from Rome Experts. 15<sup>th</sup> PUMCH Symposium of Functional Gastrointestinal Disorders (FGIDs) and Psychological Disorders, Beijing, China, November 5, 2016.
- 388. Understanding Brain-Gut Interaction Disorders: Visceral Pain. 15<sup>th</sup> PUMCH Symposium of Functional Gastrointestinal Disorders (FGIDs) and Psychological Disorders, Beijing, China, November 5, 2016.
- 389. The Inspirations from Rome. PUMCH Research Workshop on Functional Gastrointestinal Disorders (FGIDs) Scientific Program, Beijing, China, November 6, 2016.
- 390. Design, Methodology and Reports. PUMCH Research Workshop on Functional Gastrointestinal Disorders (FGIDs) Scientific Program, Beijing, China, November 5, 2016.

- 391. Irritable bowel syndrome. UCLA GI Fellowship VA clinic lecture series, Los Angeles, CA, November 14, 2016.
- 392. Functional Gastroduodenal Disorders. The Rome Foundation Symposium: Launch of Rome IV. Association of Mexican Gastroenterology Conference, Mexican Digestive Diseases Week, Mazatlan, November 21, 2016.
- 393. Lower Gastrointestinal Functional Bowel Disorders. The Rome Foundation Symposium: Launch of Rome IV. Association of Mexican Gastroenterology, Mexican Digestive Diseases Week, Mazatlan, November 21, 2016.
- 394. Emerging Pharmacological Therapies for Irritable Bowel Syndrome, Keynote Conference, Association of Mexican Gastroenterology Conference, Mexican Digestive Diseases Week Mazatlan, November 22, 2016.
- 395. Myths and realities...do we move forward? Association of Mexican Gastroenterology Conference, Mexican Digestive Diseases Week Mazatlan, November 22, 2016.
- 396. Integrating Scientific Evidence and a Practical Approach in the Management of Irritable Bowel Syndrome. City Wide GI Lecture, Toronto, Canada, November 30, 2016.

- 397. Celiac Disease and IBS: What is the overlap? GI Fellowship Program Core Curriculum lecture, Division of Digestive Diseases, UCLA, Los Angeles, CA, February 17, 2017.
- 398. Integrating Scientific Evidence and a Practical Approach in the Management of Irritable Bowel Syndrome. 48<sup>th</sup> Annual Samuel D. Kushlan Visiting Professor, Yale University, New Haven, CT, March 1, 2017.
- 399. Current and Emerging Treatments for IBS, Chronic Abdominal Pain and Bloating. Department of Medicine Grand Rounds, Samuel D. Kushlan Visiting Professor, Yale University, New Haven, CT, March 2, 2017.
- 400. What's New with Rome IV for Functional GI Disorders? 5<sup>th</sup> Annual UCLA-Mellinkoff Gastroenterology and Hepatology Symposium, Beverly Hills, CA, March 10, 2017.
- 401. Chronic Bloating. ACG Western Regional Postgraduate Course and Hepatology School, Las Vegas, NV, March 11, 2017.
- 402. Disease Management of Challenging Functional GI Cases. UCLA GI noon conference, Los Angeles, CA, March 15, 2017.
- 403. CURE lecture: Role of Stress in IBS: Biologic Mechanisms and Clinical Implications. Annual CURE Digestive Disease Research Center Meeting, Los Angeles, CA, March 17, 2017.
- 404. Stress, early life adversity and sex differences in IBS. Rome visiting professorship, Centre of Neuroscience conference, Flinders University, Adelaide, Australia, March 29, 2017.

- 405. Multidisciplinary Clinical Profiles (MDCP): Individualized Patient Care Approach for Functional GI Disorders. Rome visiting professorship, IBS workshop, Flinders University, Adelaide, Australia, March 29, 2017.
- 406. Mechanisms and management of abdominal bloating. Australasian NeuroGastroenterology & Motility Association (ANMGA)- 2017 Conference, Melbourne, Australia, April 1, 2017.
- 407. Role of brain-gut interactions and stress in IBS. Keynote lecture, Australasian NeuroGastroenterology & Motility Association Inc (ANMGA)- 2017 Conference, Melbourne, Australia, April 2, 2017.
- 408. Irritable bowel syndrome. AGA Postgraduate Course: The Full Scope of GI Advances, General Session, Chicago, Illinois, May 7, 2017.
- 409. 42 Y/O Media Consultant with Severe IBS. AGA Postgraduate Course, Case-based Session, Chicago, Illinois, May 7, 2017.
- 410. Planning for An Academic Career During Fellowship, Digestive Diseases Week meeting, May 8, 2017.
- 411. Irritable Bowel Syndrome Looking Through the Crystal Glass. Meet-the-Professor luncheon, Digestive Diseases Week meeting, May 9, 2017.
- 412. IBS: Meeting the Clinical Challenge. Pri-Med West Annual Conference & Exhibition, Anaheim, CA, May 11, 2017.
- 413. Pathophysiology, Diagnosis and Treatment of IBS. Oregon Health Sciences University GI Research Conference, Portland, OR, June 9, 2017.
- 414. State-of-the-Art Lecture: Functional Bowel Disorders. Post-DDW Conference 2017, Oregon Health Sciences University, Portland, OR, June 10, 2017.
- 415. Role of Stress in IBS: Clinical and Biologic Implications. 2017 International Forum of Gastrointestinal Disorders, Wuhan Union Hospital, Wuhan, China, June 23, 2017.
- 416. What's New in Rome IV? 2017 International Forum of Gastrointestinal Disorders, Wuhan Union Hospital, Wuhan, China, June 24, 2017.
- 417. Case presentations. Non-medical treatment options for functional disease and live videostream #3. 12th Postgraduate Course on Gastrointestinal Motility & Neurogastroenterology in Clinical Practice, August 4-6, 2017, New York, New York.
- 418. Treatment of IBS. Metro Health 4<sup>th</sup> Annual GI Symposium. Cleveland, Ohio, August 18, 2017.
- 419. Making the Diagnosis of IBS. How to Conquer the Awkward Constipation and Diarrhea Conversations Symposium. American Academy of Family Practitioners meeting, San Antonio, TX, September 13, 2017.
- 420. Chronic constipation. VA GI fellow lecture series, Los Angeles, CA, October 2, 2017.

- 421. Optimizing the Diagnosis of IBS: Future Directions. 25<sup>th</sup> United European Gastroenterology (UEG) Week, Barcelona, Spain, October 31, 2017.
- 422. Emerging Therapies for IBS. 25<sup>th</sup> United European Gastroenterology (UEG) Week, Barcelona, Spain, November 1, 2017.
- 423. GI Case Conference: Functional Dyspepsia and IBS with Constipation. UCLA Division of Digestive Diseases Case Conference, Los Angeles, November 9, 2017.
- 424. Role of Stress and Resilience in IBS: Clinical Implications and Biologic Mechanisms. Charles F. Code Lecturer, Mayo Clinic, Rochester, MN, November 15, 2017.
- 425. Academics, panel discussion. AGA Practice Skills Workshop- California. Los Angeles, CA, December 9, 2017.
- 426. Irritable Bowel Syndrome. VA GI fellow lecture series, Los Angeles, CA, December 11, 2017.

- 427. Irritable Bowel Syndrome and Functional Constipation. Rome Foundation webcast for Acino, New York, NY, January 19, 2018.
- 428. Case based presentations on IBS-D, IBS-C, Functional Constipation, Functional Defecation Disorder. Rome Foundation webcast for Acino, New York, NY, January 19, 2018.
- 429. Pharmacotherapy of Functional Dyspepsia. 6<sup>th</sup> Annual UCLA-Mellinkoff Gastroenterology and Hepatology Symposium, Beverly Hills, CA, March 9, 2018.
- 430. Pharmacotherapy of Chronic Constipation. 6<sup>th</sup> Annual UCLA-Mellinkoff Gastroenterology and Hepatology Symposium, Beverly Hills, CA, March 9, 2018.
- 431. Neurobiology of Stress and IBS. American College of Gastroenterology Regional Course, New Orleans, LA, March 10, 2018.
- 432. Evaluation and management of constipation. Division of Pelvic Medicine and Reconstructive Surgery Lecture Series, Department of Urology, UCLA, Los Angeles, CA, March 26, 2018.
- 433. Effect of sex on HPA axis response and peripheral glucocorticoid receptor in IBS. 7<sup>th</sup> Annual Postgraduate Course in Neurogastroenterology and Motility (APNM) and 29<sup>th</sup> Annual Conference of the Korean Society of Neurogastroenterology and Motility, Seoul, South Korea, April 7, 2018.
- 434. State-of-the-Art in IBS. Allergan Medical Institute Canada Expert Meeting in Gastroenterology, Toronto, Canada, April 27-28, 2018.
- 435. IBS Treatment: Expanding the Evidence. Allergan Medical Institute Canada Expert Meeting in Gastroenterology, Toronto, Canada, April 27-28, 2018.
- 436. Why is Gender so Important in IBS? IBS Days Conference, Bologna, Italy, May 18, 2018.

- 437. Functional GI Disorders: Diagnosis and Management of IBS and Chronic Constipation. UCLA GI Fellowship curriculum lectures series. Los Angeles, CA, May 25, 2018.
- 438. Taking the Pain out of Managing Functional GI Patients. How to Manage Difficult Gastroenterology Consultations symposium, Digestive Diseases Week, Washington, D.C., June 2, 2018.
- 439. Colorectal session: Chronic abdominal pain, Bloating and constipation cases. Motility Matters symposium, Digestive Diseases Week, Washington, D.C., June 4, 2018.
- 440. Diagnosing IBS and other Functional Bowel Disorders. Chronic Diarrhea and IBS: Current Knowledge and Update on Management Strategies symposium, Digestive Diseases Week, Washington, D.C., June 5, 2018.
- 441. Controversies in IBS. Southern California Society of Gastroenterology Post-DDW Symposium, Laguna Niguel, CA, June 24, 2018.
- 442. Managing Functional GI Disorders when the Biomarkers are Normal. American Neurogastroenterology and Motility Society (ANMS) Clinical Course, Milwaukee, Wisconsin, July 28, 2018.
- 443. Systems Approach in IBS. Federation of Neurogastroenterology and Motility meeting, Amsterdam, Netherlands, August 31, 2018.
- 444. Pharmacologic Treatment of IBS. Functional Disorders session, ACG Postgraduate Course, Philadelphia, PA, October 6, 2018.
- 445. Management of Rumination, Cyclic Vomiting, and Cannabis Hyperemesis. Learning Luncheon. ACG Postgraduate Course, Philadelphia, PA, October 6, 2018.
- 446. Irritable bowel syndrome: Pathophysiology. Diagnosing and Treating Functional GI Disorders in the Primary Care Setting, Rome Foundation Symposium on Functional GI Disorders, Santa Fe, NM, October 13-14, 2018.
- 447. Chronic constipation: Subtypes and Pathophysiology. Diagnosing and Treating Functional GI Disorders in the Primary Care Setting, Rome Foundation Symposium on Functional GI Disorders, Santa Fe, NM, October 13-14, 2018.
- 448. Diagnostic Algorithm and MDCP Concept, Case Examples and Rome IV Interactive Clinical Decision Toolkit. Diagnosing and Treating Functional GI Disorders in the Primary Care Setting, Rome Foundation Symposium on Functional GI Disorders, Santa Fe, NM, October 13-14, 2018.
- 449. Therapy update in functional gastrointestinal disorders: Constipation. United European Gastroenterology (UEG) week meeting, Vienna, Austria, October 20, 2018.
- 450. IBS: What's new in IBS?: Biomarkers. United European Gastroenterology (UEG) week meeting, Vienna, Austria, October 25, 2018.
- 451. A Multidisciplinary approach to managing functional GI disorders. UCLA GI noon conference, Los Angeles, CA, November 8, 2018.

- 452. Management of IBS. UCLA GI Fellowship Monday morning VA lectures, Los Angeles, CA, November 19, 2018.
- 453. Chronic constipation. UCLA GI Fellowship Monday morning VA lectures, Los Angeles, CA, November 26, 2018.
- 454. Chronic constipation and pelvic floor dysfunction. 2018 ACG's Hepatology School & Southern Regional Postgraduate Course. Nashville, TN, December 2, 2018.

- 455. Irritable bowel syndrome: Pathophysiology. Diagnosing and Treating Functional GI Disorders in the Primary Care Setting, Rome Foundation Symposium on Functional GI Disorders, New York, NY, January 20-21, 2019.
- 456. Irritable bowel syndrome: Treatment Approaches. Diagnosing and Treating Functional GI Disorders in the Primary Care Setting, Rome Foundation Symposium on Functional GI Disorders, New York, NY, January 20-21, 2019.
- 457. Chronic constipation: Subtypes and Pathophysiology. Diagnosing and Treating Functional GI Disorders in the Primary Care Setting, Rome Foundation Symposium on Functional GI Disorders, New York, NY, January 20-21, 2019.
- 458. Diagnostic Algorithm and MDCP Concept, Case Examples and Rome IV Interactive Clinical Decision Toolkit. Diagnosing and Treating Functional GI Disorders in the Primary Care Setting, Rome Foundation Symposium on Functional GI Disorders, New York, NY, January 20-21, 2019.
- 459. Cyclic Vomiting Syndrome and Cannabis Hyperemesis Syndrome. UCLA GI Fellowship curriculum lectures series. Los Angeles, CA, January 11, 2019.
- 460. Rome Guidelines: Lessons Learned. Making Sense of Care Guidelines session, Crohn's & Colitis Congress, Las Vegas, NV, February 7, 2019.
- 461. Irritable bowel syndrome: Pathophysiology. Diagnosing and Treating Functional GI Disorders in the Primary Care Setting, Rome Foundation Symposium on Functional GI Disorders, San Antonio, TX, February 9-10, 2019.
- 462. Chronic constipation: Subtypes and Pathophysiology. Diagnosing and Treating Functional GI Disorders in the Primary Care Setting, Rome Foundation Symposium on Functional GI Disorders, San Antonio, TX, February 9-10, 2019.
- 463. Diagnostic Algorithm and MDCP Concept, Case Examples and Rome IV Interactive Clinical Decision Toolkit. Diagnosing and Treating Functional GI Disorders in the Primary Care Setting, Rome Foundation Symposium on Functional GI Disorders, San Antonio, TX, February 9-10, 2019.
- 464. Pharmacotherapy for IBS: What Do We Have and What's New? IBS with Constipation. 7<sup>th</sup> Annual UCLA-Mellinkoff Gastroenterology and Hepatology Symposium, Beverly Hills, CA, March 1, 2019.

- 465. Pharmacotherapy for IBS: What Do We Have and What's New? IBS with Diarrhea. 7<sup>th</sup> Annual UCLA-Mellinkoff Gastroenterology and Hepatology Symposium, Beverly Hills, CA, March 1, 2019.
- 466. Diagnosis and Treatment of Irritable Bowel Syndrome. 2018 David Y. Graham & Jim T. Schwartz Distinguished Lectureship Award, Grand Rounds, Baylor College of Medicine, Houston, TX, March 7, 2019.
- 467. Role of Brain-Gut Interactions in IBS. DDC GI Research Forum, Baylor College of Medicine, Houston, TX, March 7, 2019.
- 468. Role of Stress and Resilience in IBS: Clinical Implications and Biologic Mechanisms. Arthur Atkinson Memorial Lectureship, Northwestern University Medical Grand Rounds, Chicago, IL, March 19, 2019.
- 469. The Neurobiology of Stress and IBS. 2019 Radhika Srinivasan Grand Rounds Memorial Lecture and Professorship, Philadelphia, PA, March 27, 2019.
- 470. Irritable bowel syndrome. Internal medicine residency lecture series, Department of Medicine, UCLA, Los Angeles, CA, April 3, 2019.
- 471. So, You want to be a PD. 2019 GI Training Directors' Workshop, Ft. Lauderdale, FL, April 13-14, 2019.
- 472. Mentoring the Research-Minded Fellow. 2019 GI Training Directors' Workshop, Ft. Lauderdale, FL, April 13-14, 2019.
- 473. Career Development for the PD. 2019 GI Training Directors' Workshop, Ft. Lauderdale, FL, April 13-14, 2019.
- 474. Treatment of IBS. UCLA Pediatric GI Fellowship Lecture. Los Angeles, CA, April 26, 2019.
- 475. Diagnosis Confirmed: Pharmacologic and Nonpharmacologic Options for IBS-D. Let's Talk About IBS: Cases From the Clinic, CME session, 2019 ACOG Annual meeting, Nashville, TN, May 5, 2019.
- 476. Early Life Events from Bench to Bedside: Evidence and Future Directions. Early Life Events on Pediatric Functional Bowel Disorders: What Is Their Relevance? Session, Digestive Diseases Week, San Diego, CA, May 18, 2019.
- 477. Irritable bowel syndrome: Art and Spice. AGA Postgraduate Course, San Diego, CA, May 19, 2019.
- 478. Medical and Psychological Comorbidities Influencing Therapeutic Choices. Making Treatment Choices for Functional GI Disorders. AGA-Rome Foundation lectureship, Digestive Diseases Week, San Diego, May 20, 2019.
- 479. Career Development: My 10 Rules for Success. UCLA GI Fellowship Core Curriculum Lecture, Los Angeles, CA, June 7, 2019.

- 480. Controversies in Functional GI and Motility. 2019 Southern California Society of Gastroenterology (SCSG), Laguna Niguel, CA, June 22, 2019.
- 481. Women in GI (panel member), Gastroenterology and Liver Society (GALS) event, 2019 Southern California Society of Gastroenterology (SCSG), Laguna Niguel, CA, June 22, 2019.
- 482. Women in NGM survey results and panel member, 2019 American Neurogastroenterology and Motility Society Annual Meeting, August 16, 2019, Chicago, IL.
- 483. The effects of early-life stress on the development of FGIDs. Neurodevelopmental programming of the GI tract session, American Neurogastroenterology and Motility Society Annual Meeting, August 17, 2019, Chicago, IL.
- 484. What Does and What Does Not Cause IBS? ACG's Functional GI Disorders School, September 6, 2019, Williamsburg, VA.
- 485. The Chronically Constipated Patient: Avoiding Another Shutdown. ACG's Functional GI Disorders School, September 6, 2019, Williamsburg, VA.
- 486. GI Case Conference: Management of FGID with Comorbidities. UCLA Division of Digestive Diseases Case Conference, Los Angeles, October 24, 2019.
- 487. Life in Academic Practice. AGA Academic Skills workshop webcast. November 17, 2019.
- 488. Chronic constipation. UCLA GI Fellowship Monday morning VA lectures, Los Angeles, CA, November 18, 2019.

- 489. What Does and What Does Not Cause IBS? ACG's Functional GI Disorders School, January 10, 2020, San Diego, CA.
- 490. The Chronically Constipated Patient: Avoiding Another Shutdown. ACG's Functional GI Disorders School, January 10, 2020, San Diego, CA.
- 491. Role of Stress in Digestive Health and Disease. Keynote speaker, Wazo Connect Brain Food Feast Workshop, UCLA, January 21, 2020, Los Angeles, CA.
- 492. Year in Review: IBS-D and IBS-C. 4<sup>th</sup> Annual Gastroenterology Updates in IBD and Liver, Guild Conference. February 19, 2020, Maui, HI.
- 493. Irritable bowel syndrome. UCLA GI Fellowship Monday am VA lecture series, Los Angeles, CA, February 24, 2020.
- 494. Pharmacologic treatment of chronic abdominal pain. Also served as moderator for Functional GI session. 8th Annual UCLA-Mellinkoff Gastroenterology and Hepatology Symposium, Beverly Hills, CA, March 7, 2020.
- 495. Functional GI Disorders: Management of IBS with Diarrhea Symptoms. Division of Digestive Diseases Case Conference, April 23, 2020, Los Angeles, CA.

- 496. How to Manage Common Clinical Scenarios in Functional GI Disorders. UCLA GI Fellowship Core Curriculum Lecture Series, May 7, 2020, Los Angeles, CA.
- 497. Irritable Bowel Syndrome. Expert Strategies GI endoscopy virtual conference, KU/Mayo GI Course, May 15, 2020.
- 498. Functional Dyspepsia and Cyclic Vomiting Syndrome. South Orange County GI Journal Club, August 12, 2020.
- 499. Stress, Epigenetics, and Microbiome. Brain-gut microbiome research conference, UCLA G Oppenheimer Center for Neurobiology of Stress and Resilience, September 9, 2020.
- 500. Functional dyspepsia. University of Minnesota GI Citywide Conference virtual lecture, September 24, 2020.
- 501. Overview and update of chronic constipation and irritable bowel syndrome with constipation. Symposium on chronic constipation. Japanese Society of Gastroenterology meeting, virtual conference, October 3, 2020.
- 502. Management of abdominal bloating and distension. UCLA Gastroenterology Fellowship core curriculum, Los Angeles, October 2, 2020.
- 503. Chronic Constipation Subtypes and Pathophysiology. The Rome Foundation Symposium on Disorders of Gut-Brain Interaction (DGBI). Virtual symposium, October 17, 2020.
- 504. Chronic Constipation Evidence-based diagnostic approach. The Rome Foundation Symposium on Disorders of Gut-Brain Interaction (DGBI). Virtual symposium, October 17, 2020.
- 505. Chronic Constipation Treatment Approaches. The Rome Foundation Symposium on Disorders of Gut-Brain Interaction (DGBI). Virtual symposium, October 17, 2020.
- 506. Brain-Gut Axis and Its Interaction With the Enteric Microbiome. Functional GI Disorders Leveraging the Mind-Gut Connection Clinical Pearls session, ACG Postgraduate Course, virtual symposium, October 25, 2020.
- 507. Chronic abdominal pain: Approach to Evaluation and Treatment. ACG Postgraduate Course, virtual symposium, October 25, 2020.
- 508. Guidance on career opportunities in academic medicine: clinical research. AGA Career Development Workshop series on "How to Navigate Your Career Options." Virtual townhall, November 9, 2020.
- 509. What Does and What Does Not Cause IBS? ACG's Functional GI Disorders School, virtual conference, December 5, 2020.
- 510. The Chronically Constipated Patient: Avoiding Another Shutdown. ACG's Functional GI Disorders School, virtual conference, December 5, 2020.

- 511. Case presentation: Management of IBS with diarrhea symptoms. SCOPE Canada Rounds, Interactive Webinar Series, December 15, 2020.
- 512. Irritable bowel syndrome. UCLA GI Fellowship VA clinic lecture series, Los Angeles, CA, December 21, 2020.

- 513. Best Practices in the Management of Irritable Bowel Syndrome (IBS). University of Chicago Virtual Medicine Grand Rounds, January 12, 2021.
- 514. Why is Sex and Gender so Important in IBS? GI Research Conference, Beth Israel Deaconess Medical Center, virtual lecture, January 13, 2021.
- 515. 2021 ACG/LGS Annual Spring Symposium Beyond the Package Insert- Pharmacological Agents for IBS. 2021 ACG/LGS Annual Spring Symposium, virtual lecture, March 6, 2021.
- 516. Case Study: Patient with Chronic Dyspepsia: Diagnosis and Treatment. IBS and Other Disorders of the Gut-Brain Interaction session speaker and moderator. Ninth Annual UCLA-Mellinkoff Gastroenterology and Hepatology Symposium, virtual conference, March 7, 2021.
- 517. The MDCP Approach and Diagnostic Algorithms. Rome Foundation Global Epidemiology Study Virtual Symposium Sessions, March 18, 2021.
- 518. When Laxatives Aren't Enough: Expert Tips for Improving CIC Care. Digestive Diseases Week virtual satellite symposium, May 21, 2021.
- 519. The spectrum of congenital sucrase-isomaltase deficiency. Digestive Diseases Week virtual satellite symposium, May 22, 2021.
- 520. Best Practices in the Management of Irritable Bowel Syndrome (IBS). University of Nebraska medical Center GI Grand Rounds, virtual lecture, May 28, 2021.
- 521. Approach to a Patient with Difficult to Treat IBS. Summer School for Digestive Diseases and Endoscopy, virtual lecture to Middle East, June 4, 2021.
- 522. Current and Emerging Therapies for IBS-C. 2<sup>nd</sup> Annual Medical Crossfire, IBS and IBD. Virtual interactive conference, June 5, 2021.
- 523. Medical Crossfire: Challenging Cases in IBS. 2<sup>nd</sup> Annual Medical Crossfire, IBS and IBD. Virtual interactive conference, June 5, 2021.
- 524. Integrating Scientific Evidence and Practical Tips in Managing IBS. UCLA GI Fellowship Program core curriculum. June 11. 2021.
- 525. Treatment of Irritable Bowel Syndrome (IBS). Brazilian Gastro Meeting, virtual lecture, June 12, 2021.
- 526. Brain Gut Aspects in Symptom Generation and Management. Pan American meeting, Brazil, virtual lecture.

- 527. Patient cases and Communication workshop. Pan American meeting, Brazil, virtual lecture. July 13, 2021.
- 528. Pathophysiology of IBS. GI ReConnect meeting, Napa Valley, CA, June 19, 2021.
- 529. Functional constipation. Remote International Digestive Event (Ride) to iGlobe. Virtual conference, July 8, 2021.
- 530. IBS From Crib to Adulthood: Novel Clinical and Physiologic Insights. W. Jerry Dodds, MD and Sushil K. Sarna, PhD Endowed Lectureship, ANMS Annual Scientific Meeting, Boston, MA, August 15, 2021.
- 531. Brain Gut Aspects in Symptom Generation and Management. Asian Pacific Digestive Diseases week meeting, Malaysia, virtual lecture. August 19, 2021
- 532. Epigenetics in IBS Status quo. European Society of Neurogastroenterology and Motility (ESNM) 2021, virtual meeting, September 3, 2021.
- 533. Efficacy and Safety of Olorinab, a Peripherally Acting, Highly Selective, Full Agonist of Cannabinoid Receptor 2, for the Treatment of Abdominal Pain in Patients With Irritable Bowel Syndrome: Results From a Phase 2b Randomized Study (CAPTIVATE). UEG 2021 virtual meeting oral presentation, October 3-5, 2021.
- 534. Career Opportunities for Women in Gl. Panel member. ACG Virtual Grand Rounds. September 14, 2021.
- 535. Overlap of IBS, CVS and CHS. University of Arizona GI Fellows conference. Tucson, Arizona, September 22, 2021.
- 536. Novel Clinical and Physiologic Insights on IBS: From Bedside to Bench. University of Arizona Medical Grand Rounds. Tucson, Arizona, September 22, 2021.
- 537. Connecting the Dots: Using a Positive Diagnostic Strategy to Improve the Management of Abdominal Symptoms in Irritable Bowel Syndrome with Constipation. Satellite symposium, Annual ACG Scientific Meeting, Las Vegas, Nevada, October 23, 2021.
- 538. When It's Not IBS: Less Common Causes of Unexplained Diarrhea. Satellite symposium, Annual ACG Scientific Meeting, Las Vegas, Nevada, October 23, 2021.
- 539. An Evidence-Based Algorithmic Approach for IBS-C and D, Functional GI Disorders in Practice session. ACG Postgraduate Course, Las Vegas, Nevada, October 24, 2021.
- 540. Career development. UCLA GI Fellowship core curriculum. Los Angeles, CA, October 29, 2021.
- 541. Physician Introduction to Irritable Bowel Syndrome. Norton Educational Series: IFFGD's 30<sup>th</sup> Anniversary Edition, Charleston, SC, November 6-7, 2021. Co-moderator of program.
- 542. A Deep Dive into Central Neuromodulators: Lecture on their use in painful GI disorders and important side effects to consider. Rome Grand Rounds, virtual lecture, panel member. November 11, 2021.

- 543. IBS and Chronic Diarrhea. VA GI Fellow Lecture Series, virtual lecture. November 15, 2021.
- 544. When the going gets tough: An in-depth look at chronic constipation. Philippine Society of Gastroenterology virtual conference, December 11, 2021.
- 545. Chronic constipation. Monday morning first year fellow lectures, virtual, December 13, 2021.
- 546. Sex Differences in Early Adverse Life Events and Stress Response in IBS. Annual NIH SCORE meeting, SCORE 2021 Annual Meeting: Specialized Centers of Research Excellence: A U54 Program on Sex Differences, virtual, December 14, 2021.

- 547. How I approach refractory abdominal pain. The End of the Line: Notes on Refractory Symptoms, 16<sup>th</sup> Annual Clinical Course, American Neurogastroenterology and Motility Society (ANMS): *Providing the best clinical care for our patients*, Philadelphia, PA, August 5-7, 2022 at the Loews Hotel in Philadelphia, PA.
- 548. Treatment and Management of IBS-C. GI fellows conference. Metro Health Medical Center, Case Western University, virtual lecture, January 18, 2022.
- 549. Irritable bowel syndrome. AGA Master Class virtual lecture. January 28, 2022.
- 550. Novel Clinical and Physiologic Insights on IBS: From Bedside to Bench. UCLA Department of Medicine Grand Rounds. February 2, 2022.
- 551. Cannabinoid hyperemesis syndrome. ACG Advanced Practice Providers curriculum, 2022.
- 552. OTC and Prescription Therapies for IBS-D. 3<sup>rd</sup> Annual Medical Crossfire, IBS and IBD. Virtual interactive conference, February 19, 2022.
- 553. Medical Crossfire: Challenging Cases in IBS. 3<sup>rd</sup> Annual Medical Crossfire, IBS and IBD. Virtual interactive conference, February 19, 2022.
- 554. Approach to Managing Difficult to Treat IBS. University of Arizona Phoenix GI fellows lecture. February 22, 2022.
- 555. Nausea and vomiting: CVS and CHS, Functional GI, disorders of gut-brain interaction session (moderator), 10th Annual UCLA-Mellinkoff Gastroenterology and Hepatology Symposium, hybrid conference, Beverly Hills, CA, March 4, 2022.
- 556. Great Debates: Should a breath test be ordered prior to using rifaximin? 10th Annual UCLA-Mellinkoff Gastroenterology and Hepatology Symposium, hybrid conference, Beverly Hills, CA, March 4, 2022.
- 557. Understanding IBS Pathophysiology: Symptom Generation and Treatment Targets.

  Gastroenterology Grand Rounds, Brandt lecturer, virtual lecture, Montefiore, March 10, 2022.

- 558. Managing Difficult to Treat IBS. Department of Medicine Grand Rounds, Brandt lecturer, virtual lecture, Montefiore, March 10, 2022.
- 559. Functional abdominal pain and functional dyspepsia. UCLA Department of Medicine Housestaff lecture, virtual, March 16, 2022.
- 560. Novel Clinical and Physiologic Insights on IBS: From Bedside to Bench. Cornell-Columbia GI Grand Rounds, virtual, March 24, 2022.
- 561. Management of IBS. 4<sup>th</sup> Annual Women in Digestive Diseases: At the Forefront. Hybrid conference, The University of Chicago, March 26, 2022, Chicago, Illinois.
- 562. Career Paths for Women in GI. 4<sup>th</sup> Annual Women in Digestive Diseases: At the Forefront. Hybrid conference, March 26, 2022, Chicago, Illinois.
- 563. Managing Difficult to Treat IBS. University of Arkansas for Medical Sciences GI conference, virtual, April 1, 2022.
- 564. An Integrated, Personalized Approach to Managing a Complex Case of Chronic Constipation. UCLA Division of Digestive Diseases case conference, virtual, April 14, 2022.
- 565. Treatment of IBS and Chronic Abdominal Pain. UCLA Pediatric Gastroenterology Fellowship lecture, virtual, April 15, 2022.
- 566. How to Choose Your Letter Writers. ACG Training Committee 2<sup>nd</sup> annual webinar: Gastroenterology & Hepatology Fellowship Match Application Tips & Tricks For Prospective Fellowship Applicants. Virtual webinar, May 11, 2022.
- 567. 2022 AGA Guideline Highlights: Pharmacological Management of IBS-C. Digestive Diseases Week, San Diego, California, May 21, 2022.
- 568. To Test before Treatment in Small Bowel Bacterial Overgrowth? Treat first, ask questions later. Digestive Diseases Week, San Diego, California, May 21, 2022.
- 569. Is It IBS-D or Something Else: Optimizing the Diagnostic Approach to Chronic Diarrhea. Digestive Diseases Week, San Diego, California, May 21, 2022.
- 570. Early-Life Adversity and FGID Development. Digestive Diseases Week, San Diego, California, May 21, 2022.
- 571. Revisiting IBS: Recrafting the Diagnosis for More Timely Treatment and Patient-Centered Care. Digestive Diseases Week satellite symposium, San Diego, California, May 23, 2022.
- 572. Practical Strategies for Mitigating Burnout: Moving from Burnout to Wellness. Digestive Diseases Week, San Diego, May 24, 2022.
- 573. Extraintestinal comorbidities. IBS Days, Bologna, Italy, June 21, 2022.
- 574. Focus on the use of neuromodulators in clinical practice. BSG LIVE'22. Virtual lecture, June 22, 2022.

- 575. Irritable bowel syndrome with constipation (IBS-C). AGA Gastro BITES webinar on AGA Guidelines on Pharmacotherapy for IBS-C, virtual webinar, July 7, 2022.
- 576. ACG and AGA Guidelines for Treating IBS Translating Guidelines into Clinical Practice. Rome Foundation GI Grand Rounds, virtual webinar, July 20, 2022.
- 577. Irritable bowel syndrome with diarrhea (IBS-D). AGA Gastro BITES webinar on AGA Guidelines on Pharmacotherapy for IBS-C, virtual webinar, July 21, 2022.
- 578. How I approach refractory abdominal pain. 2022 ANMS Annual Meeting Clinical Course. Philadelphia, PA, August 6, 2022.
- 579. Novel treatment approaches for chronic abdominal pain. Abdominal Pain from Pediatrics Into Adulthood. 2022 ANMS Annual Meeting Clinical Course. Philadelphia, PA, August 6, 2022.
- 580. Patient case of nausea and vomiting. Panel expert member, UCLA Department of Medicine Resident Report conference, Los Angeles, CA, September 7, 2022.
- 581. Management of patients with bloating and dyspepsia. A DAY IN THE GUT XXVII: Issues and Controversies in Gastroenterology, Albert Einstein College of Medicine, Montefiore, virtual conference, September 15, 2022.
- 582. My Journey and Latest Insights on the Pathogenesis of Irritable Bowel Syndrome. Mayo Clinic Women in Gastroenterology & Hepatology, virtual conference, September 16, 2022.
- 583. Management of IBS-C: A Multidisciplinary Approach. 30 Years of UEG Focus on IBS: Did we make any progress in the diagnosis and management? Postgraduate Teaching Program. 30<sup>th</sup> United European Gastroenterology Week, Vienna, Austria, October 8, 2022.
- 584. Clinical use of neuromodulators in FD. 30<sup>th</sup> United European Gastroenterology Week, Vienna, Austria, October 9, 2022.
- 585. View from the Top: Management of Chronic Abdominal Pain. Pharmacology Course, American College of Gastroenterology Annual Meeting, Charlotte, North Carolina, October 21, 2022.
- 586. Guide to the Guidelines: Comparing and Contrasting ACG and AGA IBS Recommendations. Satellite symposium, American College of Gastroenterology Annual Meeting, Charlotte, North Carolina, October 23, 2022.
- 587. Resident session: GI fellowship tips and tricks. Panel member. American College of Gastroenterology Annual Meeting, Charlotte, North Carolina, October 23, 2022.
- 588. Diarrhea-Predominant IBS: What We Knew, What We Know, and What We Think of the Future. American College of Gastroenterology Annual Meeting, Charlotte, North Carolina, October 25, 2022.
- 589. Irritable bowel syndrome. XXI Brazilian Digestive System Week, Florianópolis, Brazil. Virtual lecture, December 1st to 4th, 2022.

- 590. Irritable bowel syndrome. World Congress of Gastroenterology 2022 (WCOG 2022), Dubai. December 13, 2022.
- 591. Chronic constipation. UCLA GI Fellowship Monday am lecture series, Los Angeles, CA, December 19, 2022.

- 592. Best Practices in the Management of Irritable Bowel Syndrome (IBS). University of Pennsylvania Division of Gastroenterology and Hepatology visiting professor Grand Rounds lecture, Philadelphia, PA, January 4, 2023.
- 593. Gas Bloat: Better Out Than In! 2023 ACG Hepatology & Western Regional Postgraduate Course, Las Vegas, NV, January 27, 2023.
- 594. Best Practices in the Management of Irritable Bowel Syndrome (IBS). Charles Gerson Memorial Lectureship, Mount Sinai Hospital, Division of Gastroenterology and Hepatology, New York, NY, February 10, 2023.
- 595. IBS Chronic Diarrhea. UCLA GI Fellowship Monday am lecture series, Los Angeles, CA, February 13, 2023.
- 596. Disorders of Gut Brain Interaction case presentations. UCLA GI Fellowship core curriculum lecture series, Los Angeles, CA, February 17, 2023.
- 597. Pharmacotherapy of IBS. 4th Annual Live Medical Crossfire®: IBS and IBD Virtual Conference, February 24, 2023.
- 598. How to Treat Chronic Abdominal Pain. Mexican Association of Neurogastroenterology and Gastrointestinal Motility (AMNM), Mexico City, MX, March 4, 2023.
- 599. State of the Art Lecture: Are There Differences Between Men and Women in Disorders of Brain-gut Interaction? Mexican Association of Neurogastroenterology and Gastrointestinal Motility (AMNM), Mexico City, MX, March 4, 2023.
- 600. Approach to Managing Pain in the IBS Patient. 12<sup>th</sup> Annual Expert Strategies Course, Kansas City, MO, March 11, 2023.
- 601. Current State of Irritable Bowel Syndrome Management. Noon Lissauer Lecture Medicine Grand Rounds, University of Maryland School of Medicine, virtual lecture, March 15, 2023.
- 602. Novel Clinical and Pathophysiologic Insights on Brain-Gut Interactions in IBS. GI Grand Rounds, Division of Gastroenterology and Hepatology, University of Maryland School of Medicine, virtual lecture, March 15, 2023.
- 603. Multidisciplinary management of IBS-C. Functional GI/Disorders of Gut-Brain Interaction: An Interactive Case-based Discussion. Moderated session and presented two additional patient cases. 11<sup>th</sup> Annual Mellinkoff conference, Los Angeles, March 18, 2023.
- 604. Irritable bowel syndrome. UCLA Family Practice lecture, virtual presentation, March 22, 2023.

- 605. How to Approach Difficult-to-Treat IBS. Digestive 53rd Annual Meeting of GEST and 32nd Annual Meeting of DEST, Gastroenterological Society of Taiwan and the Digestive Endoscopy Society of Taiwan, Taipei, Taiwan, March 25, 2023.
- 606. Keynote lecture: Management of Constipation: An Update. Digestive 53rd Annual Meeting of GEST and 32nd Annual Meeting of DEST, Gastroenterological Society of Taiwan and the Digestive Endoscopy Society of Taiwan, Taipei, Taiwan, March 26, 2023.
- 607. Evidence-based and Practical Approaches in Irritable Bowel Syndrome. Department of Medicine Grand Rounds, Harbor-UCLA Medical Center, virtual lecture, April 11, 2023.
- 608. IBS and Disorders of Gut Brain Interactions. UCLA Primary care resident lecture series, West Los Angeles VA Healthcare System, Los Angeles, April 19, 2023.
- 609. Chronic Abdominal Pain. Digestive Diseases Week meeting, Chicago, IL, May 7, 2023.
- 610. Implications of Targeting Intestinal Permeability on Clinical Symptoms and Potential Treatments for DGBI. Digestive Diseases Week meeting, Chicago, IL, May 7, 2023.
- 611. Practical Management of IBS-C. Digestive Diseases Week meeting, Chicago, IL, May 7, 2023.
- 612. AGA Morton I. Grossman Distinguished Lecture: Brain-Gut Interactions in IBS: Novel Applications for Clinical Practice. Digestive Diseases Week meeting, Chicago, IL, May 8, 2023.
- 613. AGA/ACG Guideline: Management of Chronic Idiopathic Constipation. Digestive Diseases Week meeting, Chicago, IL, May 9, 2023.
- 614. CVS and CHS. Third Annual GI Reconnect meeting, Huntington Beach, CA, June 3, 2023.
- 615. AGA Gastro Bites: Pharmacological management of chronic idiopathic constipation. Speaker and panel member, virtual lecture, August 8, 2023.
- 616. How Do I Apply AGA IBS-C Guidelines to My Practice? ANMS Annual Meeting 2023, Clinical Course, Austin, TX, August 11, 2023.
- 617. Risk Factors for DGBI: Interaction in Adults and Children. Keynote address, Second World Congress of Pediatric Neurogastroenterology and Motility, Columbus, OH, September 7, 2023.
- 618. Are You Sure It's IBS? 2nd Annual Pacific Northwest GI and Liver Update, Seattle, WA, September 16, 2023.
- 619. American Gastroenterological Association-American College of Gastroenterology Clinical Practice Guideline: Pharmacological Management of Chronic Idiopathic Constipation, ACG Virtual Grand Rounds, September 21, 2023.

- 620. Rome Foundation Symposium: Communication Skills to Improve the Patient-Provider Relationship. Panel member, Pan American Week of Digestive Diseases SPED 2023, Santiago, Chile, October 8, 2023.
- 621. Gut-Brain Aspects of Symptom Generation and Management, Plenary Session: Neurogastroenterology. Pan American Week of Digestive Diseases – SPED 2023, Santiago, Chile, October 9, 2023.
- 622. Gender and sex-based aspects of DGBI, Rome Foundation Symposium: Disorders of Gut-Brain Interaction. Pan American Week of Digestive Diseases – SPED 2023, Santiago, Chile, October 9, 2023.
- 623. Case-Based Discussion using MDCP, A patient with IBS and Avoidance Restrictive Food Intake Disorder. Pan American Week of Digestive Diseases SPED 2023, Santiago, Chile, October 9, 2023.
- 624. Taking Out the Word "Functional" in GI Disorders? Redefining Functional as DGBI. American College of Gastroenterology 2024 Postgraduate Course, Vancouver, Canada, October 21, 2023.
- 625. Chronic Constipation: Is It a Motility Disorder or Something Else? American College of Gastroenterology 2024 meeting, Vancouver, Canada, October 21, 2023.
- 626. Sex Differences in Adverse Childhood Experiences and Their Effect on Brain-Gut Microbiome Interactions in IBS. 2023 Annual SCORE conference, Bethesda, Maryland, November 3, 2023.
- 627. Chronic constipation. UCLA GI Fellowship Monday morning VA lectures, Los Angeles, CA, November 12, 2023.
- 628. Update on Scientific Studies Associating Adverse Child Events with GI Illness. Abuse, Trauma and GI Illness: What is the Link?, Rome GI Grand Rounds, February 7, 2024.

- 629. Transition to Faculty, Monthly STAR conference, virtual, January 3, 2024.
- 630. IBS Insights: Evidence-Based Diagnosis and Practical Treatment Strategies. TPMG GI Grand Rounds, virtual conference, January 11, 2024.
- 631. IBS: Role of Stress, Sex Differences and the Microbiome. ROSA Center SCORE Career Enhancement Core seminar, virtual conference, January 17, 2024.
- 632. IBS Insights: Evidence-Based Diagnosis and Practical Treatment Strategies. Duke GI Grand Rounds, virtual lecture, January 24, 2024.
- 633. Rome Foundation Train the Trainer workshop. Cofacilitator and speaker, Chapel Hill, North Carolina, Feb 2-4, 2024.

- 634. IBS/Chronic diarrhea. UCLA Gastroenterology Fellowship Program Monday VA lecture, virtual lecture, February 5, 2024.
- 635. Update on Scientific Studies Associating Adverse Child Events with GI Illness. Rome Grand Rounds: Abuse, Trauma and GI Illness: What is the Link?, virtual symposium, February 7, 2024.
- 636. Updates on the management of IBS-C and IBS-D. SCOPE Rounds: Gastroenterology, virtual conference, February 13, 2024.
- 637. Management of Chronic Functional Abdominal Pain. Cleveland Clinic GI fellows lecture. Cleveland, OH, February 22, 2024.
- 638. Highlights of the AGA and ACG IBS Guidelines: Similarities and Differences. Cleveland Neurogastroenterology & Motility Citiwide Rounds, Cleveland, OH, February 22, 2024.
- 639. IBS Insights: Evidence-Based Diagnosis and Practical Treatment Strategies. Pacific Northwest Gastroenterology Society, Seattle, WA, February 29, 2024.
- 640. Unraveling Brain-Gut Interactions in IBS: The Link Between Stress, Resilience, and Clinical Symptoms. University of WA Frontiers in Gastroenterology and Hepatology, Seattle, WA, March 1, 2024.
- 641. Managing IBS: What's New? 13<sup>th</sup> Annual Expert Strategies Course, Kansas City, MO, March 2, 2024.

#### MEDIA, BLOGS, WEBCAST INTERVIEWS:

- **A. TV interviews:** The View (IBS), The Doctors (Constipation; 9/25/09), Good Day LA (Gut health during the holidays, IBS, constipation; 12/19/18)
- **B.** Radio interviews: "Embodied" program, State of Things on WUNC, North Carolina Public Radio (8/22/19); Doctor Radio, Sirius radio, linaclotide and IBS with constipation (07/29/21).
- C. Magazine articles: Health magazine, Vogue, Men's Health, Dr. Oz Magazine, Reader's Digest, Healthy Living Made Simple, Self, Cosmopolitan, Women's Health Today, Vivmag, Good Housekeeping, Ladies' Home Journal, GI & Hepatology News MDEdge (Differences between IBS-C and CIC, 02/04/22). Gastroenterology and Endoscopy News (Between the Guidelines, New AGA-ACG Joint Guideline On Chronic Idiopathic Constipation, 10/21/23). AARP magazine (December 2023), "Women, Menopause and IBS".
- D. News articles: Wall Street Journal, Healio IBS, NIH News in Health, The New Gastroenterologist, WebMD, Llfescript, everdayhealth.com, Healio Linaclotide, Healio on CIC (4/8/20), Medscape (01/22), Inverse (07/22), New York Times on food sensitivity tests (9/22), Physician's weekly (09/23) on "The Latest Guidance on IBS-C Pharmacological Management: The Lead Author's Perspective". Today.com on "Budget Ozempic" (09/23). Healio Gastroenterology, cover story on management of IBS (2024).
- **E. Blogs:** Alliance for Patient Access (IBS Awareness month; 04/20), Rome Foundation Gut Feelings (IBS Awareness month; 04/20)
- **F. Webcast interviews:** Gender in Disorders of Gut-Brain Interactions, Rome Foundation, August 21, 2020.

- G. Podcast: 1) Embodied" program, Pooped: Second Brain Inside of Us, September 2020 (https://apple.co/3hXaQ6z); 2) AGA Podcast: About Small Talk, Big Topics: Mentorship, February 21, 2021. 3) Tuesday Night's IBS: Sex differences and early life trauma in IBS. Podcast and twitter chat, February 8, 2022. 4) Healio Gut Talk: career, leadership, IBS, April 3, 2022. 5) Podcast host for Medscape series on IBS- 6 segment series in 2023, April June 2023. 6) Gut Check podcast on AGA-ACG guidelines on chronic idiopathic constipation, August 2023. 7) npr Life kit podcast: What to do when you're constipated, July 18, 2023.
- **H.** Educational webinar modules AGA IBS Treatment module, AGA University, 2023.
- I. Twitter chats: @TuesdayNightsIBS: Sex differences and early life trauma in IBS (02/08/2022); @TuesdayNightsIBS: AGA IBS-C treatment guidelines (07/12/2022)

#### **PUBLICATIONS:**

#### A. RESEARCH PAPERS – PEER REVIEWED

#### 1990-1995

- 1. Boyar A, Nussmeier M, **Chang L**, Beall G. Eosinophilia as a presentation in metastatic gastric carcinoma. **Immunol All Pract** 12: 17-20, 1990.
- 2. de Virgilio C, Klein S, **Chang L**, Klassen M, Bongard F. Clostridial bacteremia: Implications for the surgeon. **Am Surg** 57: 388-393, 1991.
- 3. de Virgilio C, Verbin C, **Chang L**, Lindor S, Stabile B, Klein S. Gallstone pancreatitis: The role of preoperative ERCP. **Arch Surg** 129: 909-913, 1994.

## 1996-1999

- 4. Arnell T, de Virgilio C, **Chang L**, Bongard F, Stabile BE. Admission factors can predict the need for ICU monitoring in gallstone pancreatitis. **Am Surg** 62: 815-819, 1996.
- 5. Munakata J, Naliboff B, Harraf F, Kodner A, Lembo T, **Chang L**, Silverman DHS, Mayer EA. Repetitive sigmoid stimulation induces rectal hyperalgesia in patients with irritable bowel syndrome. **Gastroenterology** 112: 55-63, 1997.
- 6. Toosie K, **Chang L**, Renslo R, Arnell T, Bongard F, Stabile BE, de Virgilio C. Early computed tomography is rarely necessary in gallstone pancreatitis. **Am Surg** 10: 904-907, 1997.
- 7. **Chang L**, de Virgilio C, Lo SK, Lewis R, Stabile BE. Gallstone pancreatitis: A prospective study on the incidence of cholangitis and clinical predictors of retained common bile duct stones. **Am J Gastroenterol** 93: 527-531, 1998.
- 8. Schmulson M, Lee O, **Chang L**, Naliboff B, Mayer EA. Symptom differences in moderate to severe IBS patients based on predominant bowel habit. **Am J Gastroenterol** 94:2929-2935 1999.

 Lee OY, FitzGerald LZ, Naliboff B, Liu C, Schmulson M, Fullerton S, Mayer EA, Chang L. Impact of advertisement and clinic populations in symptoms and perception of irritable bowel syndrome. Aliment Pharmacol Ther 13:1631-1638, 1999.

### 2000

- 10. **Chang L**, Lo SK, Lewis R, Stabile BE, de Virgilio C. Gallstone pancreatitis: a prospective randomized trial of preoperative vs. postoperative ERCP. **Ann Surg** 231:82-87, 2000.
- 11. Meek K, Toosie K, Stabile BE, Elbassir M, Murrell Z, Lewis RJ, **Chang L**, de Virgilio C. Simplified admission criterion for predicting severe complications of gallstone pancreatitis. **Arch Surg** 135:1048-54, 2000.
- 12. **Chang L**, Mayer EA, FitzGerald L, Stains J, Naliboff B. Differences in somatic perception in patients with irritable bowel syndrome with and without fibromyalgia. **Pain** 84:297-307, 2000.
- 13. Schmulson M, **Chang L**, Naliboff B, Lee O, Mayer EA. Correlation of symptom criteria with perception thresholds during rectosigmoid distension in irritable bowel syndrome. **Am J Gastroenterol** 95:152-156, 2000.
- 14. **Chang L**, Munakata J, Mayer EA, Schmulson MJ, Johnson TD, Bernstein CN, Saba L, Naliboff B, Anton PA, Matin K. Perceptual responses in patients with inflammatory and functional bowel disease. **Gut** 47:497-505, 2000. PMCID: PMC1728092
- 15. Berman S, Munakata J, Naliboff B, **Chang L**, Mandelkern MA, Silverman D, Kovalik E, Mayer EA. Gender differences in regional brain response to visceral pressure in IBS patients. **Eur J Pain** 4:157-172, 2000.

## 2001

- 16. Naliboff B, Derbyshire SWG, Munakata J, Berman S, Mandelkern M, **Chang L**, Mayer EA. Cerebral activation in irritable bowel syndrome patients and control subjects during rectosigmoid stimulation. **Psychosom Med** 63(3):365-75, 2001.
- 17. Lee OY, Mayer EA, Schmulson M, **Chang L**, Naliboff B. Gender related differences in irritable bowel syndrome symptoms. **Am J Gastroenterol** 96:2184-2193, 2001.
- 18. Heitkemper M, Olden K, Gordon S, Carter E, **Chang L**. Irritable bowel syndrome: a survey of nurses' knowledge. **Gastroenterol Nurs** 24:281-287, 2001.
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### K. BLOGS

 Stress, Chronic Stress and IBS. Rome Foundation Gut Feelings – Blog. https://theromefoundation.org/gut-feelings-blog/

#### L. PAPERS IN PREPARATION

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#### M. ABSTRACTS

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