

**Harvard Medical School
Curriculum Vitae**

Date Prepared: 3/26/2021
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Place of Birth: Boston, Massachusetts, USA

Education

9/2003-6/2007	B.A. <i>Magna Cum Laude</i>	Psychology; Italian Studies	Tufts University
9/2010-6/2013	M.S.	Clinical Psychology	Northwestern University Feinberg School of Medicine
9/2010-8/2015	Ph.D.	Clinical Psychology	Northwestern University Feinberg School of Medicine

Postdoctoral Training

9/2014-8/2015	Internship	Clinical Psychology, Behavioral Medicine	VA Boston Healthcare System
9/2014-8/2016	Clinical Fellow	Psychiatry	Harvard Medical School
9/2014-8/2016	Teaching Fellow	Psychiatry	Boston University School of Medicine
9/2015-8/2016	Post-Doctoral Clinical Fellowship	Clinical Psychology, Behavioral Medicine	VA Boston Healthcare System
9/2016-2019	Post-Doctoral Research Fellowship	Gastroenterology	Beth Israel Deaconess Medical Center

Faculty Academic Appointments:

9/2018-1/2021	Instructor	Medicine	Harvard Medical School
1/2021-present	Assistant Professor	Medicine	Harvard Medical School

Appointments at Hospitals:

9/2019-present	Staff Psychologist	Medicine	Beth Israel Deaconess Medical Center
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Other Professional Positions

2007-2010	Study Coordinator	Psychiatry	Boston Children's Hospital
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Major Administrative Leadership Positions

2019-present	Director of GI Psychology	Division of Gastroenterology	Beth Israel Deaconess Medical Center
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Committee Service

Local

2015-2016	Task force to create an Environment of Respect and Safety in Research: Member 2015-2016		VA Boston Healthcare System
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National

2018-present	Rome Psychogastroenterology Education and Training Committee		Rome Foundation
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Editorial Activities

Ad Hoc Reviewer:
 Clinical Gastroenterology and Hepatology
 Journal of Psychosomatic Research
 PLOS One
 American Journal of Gastroenterology
 Lancet Gastroenterology and Hepatology
 Neurogastroenterology and Motility
 Journal of Clinical Psychology in Medical Settings
 Digestive Diseases and Sciences
 Journal of Clinical Gastroenterology
 Nature Reviews Gastroenterology and Hepatology
 Journal of Health Psychology
 European Journal of Gastroenterology and Hepatology
 BMC Gastroenterology
 World Journal of Gastroenterology

Honors and Prizes

2006	Summer Scholars Prize	Tufts University	Awarded for 12 months of independent research on a thesis project
2007	The Sal Soraci Prize	Tufts University	Awarded for combining excellence in psychology with an interest in humanities
2007	Magna Cum Laude for Senior Honors Thesis	Tufts University	
2011-2013	Research Assistant Scholarship	Northwestern University	Scholarship award to graduate research assistant
2014	Walter F. Burke Award	Northwestern University	Excellence in Clinical Psychology
2016-2019	T32 Fellowship	Harvard Medical School; BIDMC	Title: Research Training in Gastroenterology PI: Dr. Ciaran Kelly
2018	Certificate of Recognition, Digestive Diseases Week 2018	American Gastroenterological Association	Certificate of recognition for scientific accomplishment as an early career investigator for the abstract presentation entitled "Predictors of the Placebo Response in Irritable Bowel Syndrome"

Report of Funded and Unfunded Projects

Funding Information

Past

- 2015 *Rolling to You to Fight the Flu*
Internal award funded by the Clinical Public Health Group at the U.S. Department of Veterans Affairs
Co-Investigator
Principal Investigator: DeAnna Mori, Ph.D.
Description: A quality improvement study aimed at providing access to flu vaccines for patients and staff at the VA Boston Healthcare System
- 2016 *iPad technology on the dialysis unit: seeking to improve adherence and patient experience*
Internal award funded by the VA Innovators Network
Lead innovator
Principal Investigator: DeAnna Mori, Ph.D.
Description: Major goal is to improve quality of life during dialysis treatment by providing technology to enhance education and entertainment during treatment
- 2017-2019 *Brief Behavioral Treatment for Sleep Problems in Irritable Bowel Syndrome: a pilot study*
The Cummings Foundation
Principal Investigator: Sarah Ballou, Ph.D.
Description: Pilot study aimed at testing the feasibility/acceptability of a brief behavioral therapy for insomnia among patients with IBS
- 2017-2020 *Managing side effects in clinical practice: A randomized controlled trial in functional gastrointestinal disorders*
Foundation for the Science of the Therapeutic Encounter
Principal Investigator: Sarah Ballou, Ph.D.
Description: Pilot study testing a 30-second verbal intervention to reduce side effects and improve tolerance of commonly prescribed medications for functional gastrointestinal disorders

Current

- 2020 *Psychogastroenterology research*
Irving W. and Charlotte F. Rabb Award for Excellence in Gastroenterology Research
Description: This award provides research support to young investigators in the Division of Gastroenterology at BIDMC. Projects are currently in development.
Direct costs: \$25,000

Past Unfunded Projects

- 2016-2017 *Characterizing sleep disturbance in a tertiary care gastroenterology clinic*
Co-investigator
Principal Investigator: Anthony Lembo, MD
Description: Clinic-based survey study to evaluate sleep disturbance among patients with chronic gastrointestinal conditions
- 2020 *Nationwide survey to evaluate the emotional impact of COVID-19*
Co-investigator
Principal Investigator: Olafur Palsson, Psy.D.
Description: Nationally representative survey to evaluate the emotional impact of COVID-19

Current Unfunded Projects

- 2019-present *Gastroenterology data repository*
Co-investigator

Principal Investigator: Anthony Lembo, MD

Description: Statistical analysis of psychosocial and clinical factors associated with clinical outcomes in patients presenting to the division of Gastroenterology at BIDMC

Report of Local Teaching and Training

Teaching of Students in Courses

2013	<i>Smoking, Cardiovascular Health, and Comprehensive Tobacco Control</i> Northwestern University Medical Students	Northwestern University Feinberg School of Medicine 2-hour lecture
2014	<i>Introduction to Behavioral Medicine</i> Northwestern University Graduate Students	The Graduate School of Northwestern University Graduate Teaching Assistant

Formal Teaching of Residents, Clinical Fellows and Research Fellows (post-docs)

2013	<i>Sleep deprivation</i> Neurology Sleep Fellows	Northwestern Medical Faculty Foundation 1-hour lecture
2013	<i>Hypnosis for parasomnia</i> Neurology Sleep Fellows	Northwestern Medical Faculty Foundation 1-hour lecture
2013	<i>Cognitive Behavioral Therapy for Insomnia with comorbid alcohol dependence</i> Neurology Sleep Fellows	Northwestern Medical Faculty Foundation 1 hour lecture
2014	<i>Managing disruptive patients in group settings</i> Pharmacy residents	VA Boston Healthcare System 1-hour lecture
2015	<i>Cognitive Behavioral Therapy for Insomnia</i> Pre-doctoral interns	VA Boston Healthcare System 2-hour lecture

Clinical Supervisory and Training Responsibilities

2015-2016	Group supervision of pre-doctoral interns and practicum students	VA Boston Healthcare System 1 hr/week
2015-2016	Individual supervision of pre-doctoral interns and practicum students	VA Boston Healthcare System 1 hr/week
2018-Present	Individual and group supervision of students, residents, and fellows in the application of cognitive and behavioral principles for patients with chronic digestive conditions	Motility Clinic and IBD Clinics Division of Gastroenterology, BIDMC 4 hrs/week

Research Supervisory and Training Responsibilities

2019-present	Research mentorship provided to residents and fellows	Motility Clinic Division of Gastroenterology, BIDMC Research meetings 4 hrs/week
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Other mentored trainees

2019	Tobias Kube, Ph.D. Career stage: Research psychologist Mentoring role: Research mentorship
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- 2019 Moa Ponten
Career stage: Doctoral candidate Karolinska Institutet
Mentoring role: Research mentorship
- 2019-present Myriam Hassan, M.D.
Career stage: Pre-residency
Mentoring role: Research mentorship
- 2020-present Julia Haas, Ph.D
Career stage: Clinical Psychologist
Mentoring role: Research mentorship
- 2020-present Vanessa Yu
Career stage: Medical student
Mentoring role: Research mentorship

Local Invited Presentations

- 2014 *Living with Irritable Bowel Syndrome: physical, emotional, and cognitive factors associated with impairment of daily functioning*
Beth Israel Deaconess Medical Center. Division of Gastroenterology, Department of Medicine.
- 2016 *An Introduction to Cognitive Behavioral Therapy for Chronic Pain.*
Brigham and Women’s Hospital. BWH Rehabilitation Services Grand Rounds
- 2017 *The effects of sleep on gastrointestinal symptoms*
Beth Israel Deaconess Medical Center. Division of Gastroenterology Journal Club
- 2018 *Brief behavioral therapy for insomnia for patients with Irritable Bowel Syndrome*
Brigham and Women’s Hospital, Division of Sleep and Circadian Disorders. Sleep Epidemiology Work in Progress Meetings and Journal Club
- 2018 *Behavioral management of excessive belching*
Beth Israel Deaconess Medical Center. Division of Gastroenterology Motility Journal Club
- 2019 *CBT for FGIDs*
20th Annual Harvard Course in Neurogastroenterology & Motility
- 2019 *GI Psychology research and clinical work*
VA Boston Healthcare System. Behavioral Medicine Rounds
- 2019 *Health Psychology for IBD*
IBD Rounds, Beth Israel Deaconess Medical Center
- 2019 *Mental Health and IBD*
Pediatric Patient Education Meeting, Crohn’s and Colitis Foundation
- 2020 *GI Psychology and Celiac Disease*
Dr. Ciaran Kelly’s lab meeting. Beth Israel Deaconess Medical Center
- 2020 *Are they side effects? Non-specific symptoms that are reported at the end of randomized controlled trials are often present at baseline*
Presentation to the Harvard-wide Program in Placebo Studies monthly meeting
- 2020 *Behavioral Therapies for Disorders of Gut Brain Interaction*
Harvard Neurogastroenterology and Motility Course

Regional, national, and international invited presentations

No presentations below were sponsored by 3rd parties/outside entities

National

- 2018** Predictors of the Placebo Response in Irritable Bowel Syndrome (abstract)
Digestive Diseases Week, Washington, DC
- 2019** Predictors of the placebo effect in IBS
American Neurogastroenterology and Motility Society (ANMS) Annual Meeting, Chicago IL
- 2020** “Growing an Integrated GI Psychology Practice”
Rome Foundation GastroPsych Workshop
This workshop was held virtually due to the COVID-19 travel/meeting ban

Report of Clinical Activities and Innovations

Current Licensure and Certification

2016-present Licensed Psychologist and Health Services Provider (Massachusetts)

Practice Activities

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|------------------|----------------------|--|--------------|
| 2016-2019 | GI Psychology Clinic | Division of Gastroenterology
Beth Israel Deaconess
Medical Center | 6 hours/week |
| 2019-
present | GI Psychology Clinic | Division of
Gastroenterology
Beth Israel Deaconess
Medical Center | 8 hours/week |

Report of Education of Patients and Service to the Community

- 2017 Guest lecture for Boston University High School Summer Challenge, Boston University, Boston MA
- 2019 *Mental Health and IBD*
Pediatric Patient Education Program, Crohn’s and Colitis Foundation. Worcester, MA
- 2019 *Mental health and Celiac Disease*
Celiac Center Q&A Evening for patients with gluten related disorders. Beth Israel Deaconess Medical Center, Boston, MA.
- 2020 *Co-host* Stronger Together: Global Virtual Support Group. Hosted by IBS Patient Support Group and Epicured. Virtual meeting,
- 2020 *Guest* The Rome Foundation Facebook Q&A with Dr. Douglas Drossman and Johanna Ruddy. An interview about findings of the Pandemic Impact Report.
- 2020 *Mental Health and IBD*
New England Education Day, Crohn’s and Colitis Foundation, Virtual Meeting
- 2020 *Mental Health and Celiac Disease*
“All Things Celiac” monthly meeting hosted by the National Celiac Association and Harvard Medical School Celiac Research Program

Report of Scholarship

Peer reviewed publications in print or other media

Research Investigations

1. Taft TH, **Ballou S**, Keefer L. Preliminary evaluation of maternal caregiver stress in pediatric eosinophilic gastrointestinal disorders. *J Pediatr Psychol*. 2012 Jun;37(5):523–532. PMID: PMC3356561
2. Taft TH, **Ballou S**, Keefer L. A preliminary evaluation of internalized stigma and stigma resistance in inflammatory bowel disease. *J Health Psychol*. 2013 Apr;18(4):451–460. PMID: 22689587
3. Lackner JM, Ma C-X, Keefer L, Brenner DM, Gudleski GD, Satchidanand N, Firth R, Sitrin MD, Katz L, Krasner SS, **Ballou SK**, Naliboff BD, Mayer EA. Type, rather than number, of mental and physical comorbidities increases the severity of symptoms in patients with irritable bowel syndrome. *Clin Gastroenterol Hepatol*. 2013 Sep;11(9):1147–1157. PMID: PMC3779619
4. **Ballou S**, Taft T, Keefer L. Disease-specific self-efficacy in the eosinophilic gastrointestinal disorders. *J Health Psychol*. 2015 Aug;20(8):1027–1036. PMID: 24157935
5. Kinsinger SW, **Ballou S**, Keefer L. Snapshot of an integrated psychosocial gastroenterology service. *World J Gastroenterol*. 2015 Feb 14;21(6):1893–1899. PMID: PMC4323468
6. **Ballou S**, Keefer L. The impact of irritable bowel syndrome on daily functioning: Characterizing and understanding daily consequences of IBS. *Neurogastroenterol Motil*. 2017 Apr;29(4). PMID: PMC5367953
7. **Ballou S**, Keefer L. Development of the Irritable Bowel Syndrome Cognitive Affective Scale: a brief self-report measure for clinical and research settings. *Eur J Gastroenterol Hepatol*. 2017 Jul;29(7):849–854. PMID: 28338499
8. Hirsch W, Nee J, **Ballou S**, Petersen T, Friedlander D, Lee H-N, Cheng V, Lembo A. Emergency Department Burden of Gastroparesis in the United States, 2006 to 2013. *J Clin Gastroenterol*. 2019;53(2):109–113. PMID: PMC6005709
9. Bollom A, Austrie J, Hirsch W, Nee J, Friedlander D, Iturrino J, **Ballou S**, Lembo A. Emergency Department Burden of Nausea and Vomiting Associated With Cannabis Use Disorder: US Trends From 2006 to 2013. *J Clin Gastroenterol*. 2018;52(9):778–783. PMID: PMC5930153
10. Mitsuhashi S, **Ballou S**, Jiang ZG, Hirsch W, Nee J, Iturrino J, Cheng V, Lembo A. Characterizing Normal Bowel Frequency and Consistency in a Representative Sample of Adults in the United States (NHANES). *Am J Gastroenterol*. 2018;113(1):115–123. PMID: 28762379
11. **Ballou S**, Hirsch W, Singh P, Rangan V, Nee J, Iturrino J, Sommers T, Zubiago J, Sengupta N, Bollom A, Jones M, Moss AC, Flier SN, Cheifetz AS, Lembo A. Emergency department utilisation for inflammatory bowel disease in the United States from 2006 to 2014. *Aliment Pharmacol Ther*. 2018 Apr;47(7):913–921. PMID: PMC5927595
12. Nee J, Zakari M, Sugarman MA, Whelan J, Hirsch W, Sultan S, **Ballou S**, Iturrino J, Lembo A. Efficacy of Treatments for Opioid-Induced Constipation: Systematic Review and Meta-analysis. *Clin Gastroenterol Hepatol*. 2018;16(10):1569-1584.e2. PMID: 29374616
13. Singh P, Mitsuhashi S, **Ballou S**, Rangan V, Sommers T, Cheng V, Iturrino-Moreda J, Friedlander D, Nee J, Lembo A. Demographic and Dietary Associations of Chronic Diarrhea in a Representative Sample of Adults in the United States. *Am J Gastroenterol*. 2018;113(4):593–600. PMID: 29610515
14. Rangan V, Mitsuhashi S, Singh P, **Ballou S**, Hirsch W, Sommers T, Nee J, Iturrino J, Lembo A. Risk Factors for Fecal Urgency Among Individuals With and Without Diarrhea, Based on Data From the National Health and Nutrition Examination Survey. *Clin Gastroenterol Hepatol*. 2018;16(9):1450-1458.e2. PMID: PMC6098738
15. **Ballou S**, Beath A, Kaptchuk TJ, Hirsch W, Sommers T, Nee J, Iturrino J, Rangan V, Singh P, Jones M, Lembo A. Factors Associated With Response to Placebo in Patients With Irritable Bowel Syndrome and Constipation. *Clin Gastroenterol Hepatol*. 2018 Nov;16(11):1738-1744.e1. PMID: 29654913

16. **Ballou S**, Alhassan E, Hon E, Lembo C, Rangan V, Singh P, Hirsch W, Sommers T, Iturrino J, Nee J, Lembo A. Sleep Disturbances Are Commonly Reported Among Patients Presenting to a Gastroenterology Clinic. *Dig Dis Sci*. 2018;63(11):2983–2991. PMID: 30094624
17. Sommers T, Mitsuhashi S, Singh P, Hirsch W, Katon J, **Ballou S**, Rangan V, Cheng V, Friedlander D, Iturrino J, Lembo A, Nee J. Prevalence of Chronic Constipation and Chronic Diarrhea in Diabetic Individuals in the United States. *Am J Gastroenterol*. 2019;114(1):135–142. PMID: 30410038
18. Rangan V, Zakari M, Hirsch W, **Ballou S**, Singh P, Sommers T, Iturrino J, Nee J, Staller K, Lembo A. Clinical and manometric characteristics of women with paradoxical puborectalis syndrome. *United European Gastroenterol J*. 2018 Dec;6(10):1578–1585. PMID: PMC6297919
19. Nee J, Kilaru S, Kelley J, Oza SS, Hirsch W, **Ballou S**, Lembo A, Wolf J. Prevalence of Functional GI Diseases and Pelvic Floor Symptoms in Marfan Syndrome and Ehlers-Danlos Syndrome: A National Cohort Study. *J Clin Gastroenterol*. 2019 Oct;53(9):653–659. PMID: PMC6642856
20. Sommers T, Petersen T, Singh P, Rangan V, Hirsch W, Katon J, **Ballou S**, Cheng V, Friedlander D, Nee J, Lembo A, Iturrino J. Significant Morbidity and Mortality Associated with Fecal Impaction in Patients Who Present to the Emergency Department. *Dig Dis Sci*. 2019;64(5):1320–1327. PMID: PMC6499648
21. Singh P, Takazawa E, Rangan V, **Ballou S**, Katon J, McMahon C, Lee H-N, Iturrino J, Nee J, Lembo A. Fecal urgency is common in constipated patients and is associated with anxiety. *Neurogastroenterol Motil*. 2019;31(4):e13545. PMID: PMC6414071
22. **Ballou S***, Katon J* (co-first), Singh P, Rangan V, Lee HN, McMahon C, Iturrino J, Lembo A, Nee J. Chronic Diarrhea and Constipation Are More Common in Depressed Individuals. *Clin Gastroenterol Hepatol*. 2019 Dec;17(13):2696–2703. PMID: PMC6776710
23. **Ballou S**, Mitsuhashi S, Sankin LS, Petersen TS, Zubiago J, Lembo C, Takazawa E, Katon J, Sommers T, Hirsch W, Rangan V, Jones M. Emergency department visits for depression in the United States from 2006 to 2014. *Gen Hosp Psychiatry*. 2019 Aug;59:14–19. PMID: 31078012
24. **Ballou S**, McMahon C, Lee H-N, Katon J, Shin A, Rangan V, Singh P, Nee J, Camilleri M, Lembo A, Iturrino J. Effects of Irritable Bowel Syndrome on Daily Activities Vary Among Subtypes Based on Results From the IBS in America Survey. *Clin Gastroenterol Hepatol*. 2019 Nov;17(12):2471-2478.e3. PMID: 31419572
25. **Ballou S***, Singh P* (co-first), Rangan V, Iturrino J, Nee J, Lembo A. Obesity is associated with significantly increased risk for diarrhoea after controlling for demographic, dietary and medical factors: a cross-sectional analysis of the 2009-2010 National Health and Nutrition Examination Survey. *Aliment Pharmacol Ther*. 2019;50(9):1019–1024. PMID: PMC6800600
26. Shin A, **Ballou S**, Camilleri M, Xu H, Lembo A. Information- and Health-care Seeking Behaviors in Patients With Irritable Bowel Syndrome. *Clin Gastroenterol Hepatol*. 2019 Sep 20; PMID: 31546055
27. Nee J, Sugarman MA, **Ballou S**, Katon J, Rangan V, Singh P, Zubiago J, Kaptchuk TJ, Lembo A. Placebo Response in Chronic Idiopathic Constipation: A Systematic Review and Meta-Analysis. *Am J Gastroenterol*. 2019;114(12):1838–1846. PMID: 31592782
28. Nee J, Salley K, Ludwig AG, Sommers T, **Ballou S**, Takazawa E, Duehren S, Singh P, Iturrino J, Katon J, Lee H-N, Rangan V, Lembo AJ. Randomized Clinical Trial: Crofelemer Treatment in Women With Diarrhea-Predominant Irritable Bowel Syndrome. *Clin Transl Gastroenterol*. 2019 Dec;10(12):e00110. PMID: PMC6970555
29. Rangan V, **Ballou S**, Shin A, Camilleri M, Nee J, Iturrino J, Singh P, Patel R, Lembo A. Use of Treatments for Irritable Bowel Syndrome and Patient Satisfaction Based on the IBS in America Survey. *Gastroenterology*. Elsevier; 2020 Feb 1;158(3):786-788.e1. PMID: 31711922
30. Singh P, Lee H-N, Rangan V, **Ballou S**, Lembo J, Katon J, McMahon C, Friedlander D, Iturrino J, Nee J, Lembo A. Similarities in Clinical and Psychosocial Characteristics of Functional Diarrhea and Irritable Bowel Syndrome With Diarrhea. *Clin Gastroenterol Hepatol*. 2020 Feb;18(2):399-405.e1. PMID: PMC6962545

31. Singh P*, **Ballou S*** (co-first), Katon J, Takazawa E, Rangan V, Mukherjee R, Iturrino J, Nee J, Lembo A. Symptom Severity, Mood, and Healthcare Use Are Associated With Satisfaction in Patients With Irritable Bowel Syndrome. *Clin Gastroenterol Hepatol*. 2020 Feb 11; PMID: 32057975
32. **Ballou S**, Katon J, Rangan V, Cheng V, Nee J, Iturrino J, Lembo A. Brief Behavioral Therapy for Insomnia in Patients with Irritable Bowel Syndrome: A Pilot Study. *Dig Dis Sci*. 2020 Mar 9; PMID: 32152868
33. Singh P, Duehren S, Katon J, Rangan V, **Ballou S**, Patel R, Iturrino J, Lembo A, Nee J. Breath Methane Does Not Correlate With Constipation Severity or Bloating in Patients With Constipation. *J Clin Gastroenterol*. 2020 Apr;54(4):365–369. PMID: 31306344
34. Rangan V, Nee J, Singh P, **Ballou S**, Iturrino J, Hirsch W, Lembo A. Fecal Urgency: Clinical and Manometric Characteristics in Patients With and Without Diarrhea. *Dig Dis Sci*. 2020 May 28; PMID: 32468228
35. **Ballou S**, Gray S, Palsson OS. Validation of the Pandemic Emotional Impact Scale. *Brain, Behavior, & Immunity - Health*. 2020 Dec 1;9:100161.
36. Shah ED, Pourmorteza M, Elmunzer BJ, **Ballou S**, Papachristou GI, Lara LF, Okafor U, Pfeil SA, Conwell DL, Krishna SG, North American Alliance for the Study of Digestive Manifestations of COVID-19. Psychological Health Among Gastroenterologists During the COVID-19 Pandemic: A National Survey. *Clin Gastroenterol Hepatol*. 2020 Dec 3; PMID: 33278574

Other peer-reviewed scholarship

1. **Ballou SK**, Keefer L. Multicultural considerations in the diagnosis and management of irritable bowel syndrome: a selective summary. *Eur J Gastroenterol Hepatol*. 2013 Oct;25(10):1127–1133. PMID: 23778308
2. **Ballou S**, Bedell A, Keefer L. Psychosocial impact of irritable bowel syndrome: A brief review. *World J Gastrointest Pathophysiol*. 2015 Nov 15;6(4):120–123. PMID: PMC4644875
3. **Ballou S**, Keefer L. Psychological Interventions for Irritable Bowel Syndrome and Inflammatory Bowel Diseases. *Clin Transl Gastroenterol*. 2017 Jan 19;8(1):e214. PMID: PMC5288603
4. Portincasa P, Bonfrate L, de Bari O, Lembo A, **Ballou S**. Irritable bowel syndrome and diet. *Gastroenterol Rep (Oxf)*. 2017;5(1):11–19. PMID: PMC5444258
5. **Ballou S**, Kaptchuk TJ, Hirsch W, Nee J, Iturrino J, Hall KT, Kelley JM, Cheng V, Kirsch I, Jacobson E, Conboy L, Lembo A, Davis RB. Open-label versus double-blind placebo treatment in irritable bowel syndrome: study protocol for a randomized controlled trial. *Trials*. 2017 May 25;18(1):234. PMID: PMC5445390
6. Taft TH, **Ballou S**, Bedell A, Lincenberg D. Psychological Considerations and Interventions in Inflammatory Bowel Disease Patient Care. *Gastroenterol Clin North Am*. 2017 Dec;46(4):847–858. PMID: PMC5726536
7. Kube T, Blease C, **Ballou SK**, Kaptchuk TJ. Hope in Medicine: Applying Multidisciplinary Insights. *Perspect Biol Med*. 2019;62(4):591–616. PMID: 31761796
8. Palsson OS, **Ballou S**. Hypnosis and Cognitive Behavioral Therapies for the Management of Gastrointestinal Disorders. *Curr Gastroenterol Rep*. 2020 Jul;22(7):31.

Non-peer reviewed scientific or medical publications/materials in print or other media

Chapters

1. **Ballou SK**, Keefer, L. The Psychology of Irritable Bowel Syndrome. In Spiers MV, Geller, PA, Kloss JD (Eds.), *Women's Health Psychology* (pp. 514-539). Hoboken, New Jersey: John Wiley & Sons (2013).
2. **Ballou S.K.**, Lawton R.C., Keefer, L. Gastrointestinal Disorders. In Hadjistavropoulos, TH (Ed). *Health Psychology*, Oxford University Press (2014).
3. **Ballou S**, Pandit A. Stress management and mindfulness-based stress reduction (MBSR) approaches to gastrointestinal conditions. In Knowles SR, Keefer L, Molkocka-Walus AA (Eds.). *Psychogastroenterology: A Handbook for Mental Health Professionals*, Taylor & Francis/Routledge Press (2019).

Letters and editorials:

1. **Ballou S**, Lembo A. Editorial: latent class analysis to improve confidence in the diagnosis of IBS. *Aliment Pharmacol Ther.* 2017;45(9):1267–1268. PMID: 30639777
2. **Ballou S**. Reply. *Clin Gastroenterol Hepatol.* 2019;17(6):1216. PMID: 30639777
3. Shah ED, **Ballou SK**. Health Economic Studies are Important for Patients With Irritable Bowel Syndrome and Their Gastroenterologists. *Clinical Gastroenterology and Hepatology.* 2020 May; S1542356520306819.

Other:

1. *Nationwide survey to evaluate the emotional impact of COVID-19*
Ballou S, Gray S, Palsson O
Published June 29, 2020
Publicly available at www.pandemicimpactreport.com

Theses

1. **Ballou, S.** *Functional impairment in young adult women with irritable bowel syndrome (IBS): How and why does IBS affect daily functioning?* Master of Science Thesis in Clinical Psychology at Northwestern University; 2013
2. **Ballou, S.** *Living with Irritable Bowel Syndrome: physical, emotional, and cognitive factors associated with impairment of daily functioning.* Doctoral Dissertation in Clinical Psychology at Northwestern University; 2015

Abstracts, Poster Presentations and Exhibits Presented at Professional Meetings

1. **Ballou S.**, Hirsch W., Singh P., Rangan V., Nee J., Iturrino J., Sommers T., Zubiago J., Sengupta N., Bollom A., Jones M., Moss A., Flier S., Cheifetz A., Lembo A. Emergency Department Utilization For Inflammatory Bowel Disease From 2006-2014. Poster Presentation at Digestive Diseases Week, Washington, DC, 2018
2. Rangan V., **Ballou S.**, Singh P., Sommers T., Hirsch W., Nee J., Lembo A. Clinical Symptoms And Anorectal Manometry Findings In Fecal Urgency Patients: Differences Based On Underlying Bowel Habits. Poster Presentation at Digestive Diseases Week, Washington, DC, 2018
3. Rangan V., Mitsuhashi S., Singh P., **Ballou S.**, Hirsch W., Sommers T., Nee J., Lembo A. Fecal Urgency In A Representative Sample Of Us Adults: Risk Factors In Individuals With And Without Diarrhea. Poster Presentation at Digestive Diseases Week, Washington, DC, 2018
4. Singh P., Yoonjin S., Ballou S., Hirsch W., Ludwig A., Rangan V., Iturrino J., Lembo A., Nee J. Pelvic Floor Symptom Related Distress In Chronic Constipation Correlates With A Diagnosis Of IBS-C And Constipation Severity But Not Pelvic Floor Dyssynergia. Poster Presentation at Digestive Diseases Week, Washington, DC, 2018.
5. **Ballou S.**, Katon J, Rangan V., Cheng V., Nee J., Iturrino J., Lembo A. Brief Behavioral Therapy For Insomnia In Patients With Irritable Bowel Syndrome – A Pilot Study. Poster presentation at Digestive Diseases Week, held virtually, 2020.
6. Ballou S., Rangan V., Nee J., Iturrino J., Shin A., Camilleri M., Lembo A., Taft T. Individuals with IBS report high rates of perceived and internalized stigma: data from the IBS in America Survey. Poster presentation at Digestive Diseases Week, held virtually, 2020.

Narrative Report (limit to 500 words)

I am a licensed clinical psychologist specializing in Health Psychology with clinical and research specialization in psychosocial gastroenterology. Since joining Beth Israel Deaconess Medical Center in September, 2016, I have been involved in a range of research activities consistent with my goal of establishing an independent research career in the subspecialty area of psychosocial gastroenterology. In October, 2019, I joined the division of Gastroenterology as the Director of GI Psychology.

Research

My research interests focus on gastrointestinal disorders, with a particular emphasis on Irritable Bowel Syndrome (IBS) and Inflammatory Bowel Disease (IBD). Recent research efforts have involved two randomized pilot studies, one evaluating a behavioral sleep intervention for patients with IBS, and another evaluating the effects of patient-provider interaction on reported satisfaction with medications in a clinical setting. The pilot study of behavioral sleep intervention in IBS marked the first time that sleep treatment has been tested in any GI population and results suggested trends towards improvement in IBS symptom severity after sleep quality improved. As a result of my research fellowship, I have also developed a keen interest in the study of placebo, especially in IBS and other functional disorders that are known to have very high placebo response rates. I completed a study evaluating predictors of the placebo response in a randomized controlled drug trial in IBS, which revealed several baseline factors associated with response to placebo. I am currently working with the motility team to test the results of that study in prospective clinical trials in order to evaluate whether there might be ways to reduce, or control for, the very high placebo response rates seen in clinical trials of IBS. Other ongoing research interests are focused on the application of behavioral and mind-body interventions, including placebo, for patients with chronic gastrointestinal symptoms.

Clinical and teaching

As a clinical psychologist with an expertise in Behavioral Medicine, I provide short-term, cognitive behavioral therapy to patients with a variety of chronic and/or acute gastrointestinal illnesses as part of a multidisciplinary team. As part of this multidisciplinary team I am involved in the teaching of psychosocial gastroenterology (i.e. the application of scientifically based psychological principles and techniques to the alleviation of digestive symptoms) to students, residents, and fellows in both the motility and the IBD clinics. I have approximately 240 contact hours with trainees during these clinics in which I teach cognitive and behavioral approaches to symptom management and case conceptualization. In addition, I provide didactic teaching to the residents and fellows in both GI and liver diseases 6 times a year with formal lecturing for one hour per session.