The Faculty of Medicine of Harvard University Curriculum Vitae

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Education:

08/2006- Bachelor of Arts Psychology Butler University

08/2010 Thesis Supervisor: Tara

Lineweaver, PhD

Honors Thesis: Emotionality does affect memory in children

with autism

08/2010- Master of Clinical Psychology Indiana University-Purdue 08/2013 Science Thesis Supervisor: John University Indianapolis

Thesis Supervisor. Jo

McGrew, PhD

Masters Thesis: How does emotionality affect memory in

children with autism

08/2013- Doctor of Clinical Psychology Indiana University-Purdue O8/2017 Philosophy Area of Concentration: Clinical University Indianapolis

Health Psychology

Dissertation Supervisor: Adam

Hirsh, PhD

Doctoral Dissertation: The role of prayer in race differences in

pain sensitivity

Postdoctoral Training:

09/17-09/18	Clinical Orthopedic and Musculoskeletal Education and Training (COMET) T-32 Training Program	Department of Orthopedic Surgery Primary Mentors: Elena Losina, PhD and Robert Edwards, PhD	Brigham and Women's Hospital Harvard Medical School
09/18-03/20	Research Fellowship in Pain Psychology	Department of Anesthesiology, Perioperative and Pain Management Primary Mentor: Robert Edwards, PhD	Brigham and Women's Hospital Harvard Medical School

Faculty Academic Appointments:

2016-2017	Clinical Fellow	Psychiatry	Boston University
2016-2017	Clinical Fellow	Psychiatry	Harvard Medical School
2017-2020	Research Fellow	Anesthesiology	Harvard Medical School
2018-2019	Adjunct Faculty	Department of Psychology	Suffolk University
2022-2023	Member of the Faculty	Anesthesia	Harvard Medical School
2023-	Assistant Professor	Anesthesia	Harvard Medical School

Appointments at Hospitals/Affiliated Institutions:

2020-	Clinical Pain	Department of	Brigham and Women's
	Psychologist	Anesthesiology,	Hospital
		Perioperative and Pain	L
		Medicine	
		Division of Pain Medic	cine

Other Professional Positions:

2018-2021 Consultant Bierman Autism Center

Committee Service:

Local

2021- Peer Support Committee Brigham and Women's Hospital

National

2024- Organizational Partnerships United States Association for the Study of

Pain

2024-	Co-	chair

Professional Societies:

2015-2019	American Pain Society	
	2015-2019	Member, Pain and Disparities SIG
	2015-2019	Member, Psychosocial Research SIG
	2018-2019	Board Member at Large, Pain and Disparities SIG
	2019-2019	Co-chair, Pain and Disparities SIG
2015-	American Academy of Pain Management	
2015-	International Association for the Study of Pain	
	2015-	Member, Pain, Mind, and Movement SIG
	2021-	Member, PsyFI Sig
	2022-	Member, Sex, Gender, Race, and Pain SIG
2017-	Society for Behavioral Medicine	
	2022-	Member, Integrated Health and Spirituality SIG
2018-	Society for Personality and Social Psychology	
2019-	Association for Contextual Behavioral Science	
	2019-	Member of Pain SIG
2020-	United States Association for the Study of Pain	
	2020-2023	Social and Communication co-chair, Diversity, Inclusion and Anti-Racism SIG
	2023-	Co-chair, Psychological Factors and Interventions SIG

Editorial Activities:

Ad hoc Reviewer

Clinical Journal of Pain

Pain

Pain Medicine

International Journal of Psychophysiology BMC Musculoskeletal Disorders PLOS ONE Scientific Reports

Other Editorial Roles

2022-	Editorial Board	Journal of Pain
2023-	Section Editor	Pain Medicine

Honors and Prizes:

Honors and Pr	rizes:		
2015	Educational Enhancement Grant	Graduate and Professional Student Government Indiana University-Purdue University Indianapolis	Outstanding promise in research
2015	Graduate Citizenship Award	Department of Psychology Indiana University-Purdue University Indianapolis	Showing a commitment to citizenship within the Department of Psychology as well as throughout the University community.
2015	Outstanding Graduate Teaching Award	Department of Psychology Indiana University-Purdue University Indianapolis	
2015, 2018, 2019	Young Investigator Travel Award	American Pain Society	
2016	Clinical Excellence Award	Department of Clinical Psychology Indiana University-Purdue University Indianapolis	Showing dedication toward and excellence in clinical care
2016	Junior Investigator Poster Award for Psychosocial Reesarch	American Pain Society	
2017-2018	T32 Training Grant Awardee (T32AR055885)	Clinical Orthopedic and Musculoskeletal Education and Training (COMET) Program	
2018	Investigator Travel Award	International Association for the Study of Pain	

Report of Funded and Unfunded Projects

Past

2019-2021

Personalized Non-pharmacologic Pain Treatments for Musculoskeletal Conditions

NIAMS/NIH; NIH LRP 2674-1

PI (\$70,000)

Through a series of projects, I will identify factors that predict treatment efficacy for pain and painful conditions. More specifically, I will: (1) use quantitative sensory testing to identify pre-operative factors that predict pain and functioning in patients with chronic low back pain (CLBP) following acupuncture therapy; (2) identify contextual factors that impact the efficacy of acupuncture for patients with CLBP; (3) identify pre-operative risk factors for persistent pain and poor physical function following total knee replacement (TKR); (4) determine the efficacy of a brief coping skills training on improving pain and functional outcomes following TKR; and (5) compare the effectiveness of mindfulness and cognitive behavioral therapy in reducing pain, dysfunction, and opioid use in patients with CLBP, and identify psychosocial and psychophysical predictors of effectiveness of psychotherapeutic interventions for CLBP. Together, my work on these projects will allow me to meet my training goals: (1) learning advanced statistics, (2) gaining knowledge about musculoskeletal disorder treatments; (3) becoming proficient in novel research methodology; (4) gaining experience in grant writing; (5) establishing collaborations; and (6) disseminating my work.

2020-2022

Examining the effect of intersectional stigma on the treatment of negative affect in chronic low back pain NIAMS/NIH; 4UH3AR076568-02

PI (\$110,862)

This administrative supplement examined mental health, pain-related, and opioid-related stigma by capitalizing on a comparative effectiveness trial of antidepressant medication, Enhanced Fear Avoidance Rehabilitation (EFAR), or their combination in 400 patients with chronic low back pain and high negative affect. We examined intersectional health-related stigma as a treatment moderator, determine the impact of EFAR on reducing stigma, and collect qualitative data to inform a stigma-reducing intervention for chronic pain, opioid use, and mental health.

Current

2021-2026

PREventing Pain after Surgery: A feasibility and acceptability study of Acceptance and Commitment Therapy for the prevention of chronic post surgical pain (PREPS_

NIAMS/NIH; K23AR077088-01A1

PI (\$818100)

The present study aims to adapt and modify a brief presurgical ACT intervention aimed at preventing the transition to CPSP and reducing long-term opioid use. We will then assess the acceptability, feasibility, and preliminary efficacy of the finalized intervention to prevent the transition to CPSP and reduce post-surgical opioid use six months following lumbar spine surgery. Finally, we will identify psychosocial and psychophysical phenotypes associated with response to this intervention.

2024-2025

Understanding and mitigating pain-related stigma among women with chronic pelvic pain

Brigham and Women's Martignetti Award in Women's Health PI (\$25000)

Aim 1: Examine the experience of chronic pain stigma among women with CPP.

Aim 2: Determine the extent to which chronic pain stigma is related to pain severity, pain interference, depression, anxiety, and willingness to seek treatment.

Aim 3: To collect qualitative data from participants that will inform the development of an intervention aimed at reducing the impact of stigma on pain-related outcomes.

2024-2025

PREventing Pain after Surgery: A supplement to promote research continuity and retention

NIH NIAMS

PI (\$75160)

The major goals of this project are to develop and refine a 1-day ACT workshop aimed at preventing chronic postsurgical pain and examining the acceptability, feasibility, and preliminary efficacy of the intervention.

2024-

Mass General Brigham Interdisciplinary Cliical Pain Research Training Program

NIH; T90NS138001/R90NS143074

Mentor (PI: Robert Edwards

Kristin Schreiber)

The purpose of this T90/R90 training grant is to offer a group of fellows from a variety of backgrounds the opportunity to train as clinical pain researchers under the direct interdisciplinary supervision of **multiple mentors** across multiple departments and diverse backgrounds. We hope to develop broadly-educated scholars in the biopsychosocial science of pain who have the motivation, knowledge, skills, and experience to build productive academic careers in clinical research, addressing problems of importance to the field of

clinical pain science. The fellowship training program will be individualized to meet each trainee's needs, as dictated by their interests, chosen field, past experience and education. Fellowships are typically 1-2 years with the option for a 3rd year based on productivity and availability of funding.

Unfunded Current Projects

2020- Pain and Prayer Collaborative

Co-PI (Co-PI: Marta Illueca)

The purpose of this project is to assess the use and effects of prayer as a

coping strategy for chronic pain.

Report of Local Teaching and Training

Teaching of Students in Courses:

2016-2016	Statistics Undergraduate	Indiana University-Purdue University Indianapolis 3 hours / week
2016-2016	Introduction to Psychology Undergraduate	Indiana University-Purdue University Indianapolis 5 hours / week
2018-2018	Research Methods Undergraduate	Suffolk University 5 hours / week
2018-2018	Introduction to Psychological Assessment Graduate	Suffolk University 3 hours / week
2018-2018	Introduction to Psychology Undergraduate	Suffolk University 3 hours / week
2019-2019	Learning and Reinforcement Undergraduate	Suffolk University 3 hours / week

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

2023	Brief Mind-Body Pain Interventions Clinical Fellows	Brigham and Women's Hospital 1 hour / year One-hour lecture provided to clinical pain medicine fellows
2023-	Morning Lectures in Pain Psychology Residents and Clinical Fellows	Brigham and Women's Hospital Pain Management Center 12 hours / year Will provide monthly lectures

Clinical Supervisory and Training Responsibilities:

2020-2024 Clinical Supervision

Brigham and Women's Hospital Clinical Psychology Practicum Students 2 hours / week

from Suffolk University and Clark

University

Research Supervisory and Training Responsibilities:

2018-Research Supervisor Brigham and Women's Hospital

> **Undergraduate Psychology Students** 3 hours / week from Suffolk University, Simmons

University, and Emanuel University

2020-Research Supervisor Brigham and Women's Hospital

> **Graduate Medical Science Students** 5 hours / week

from Boston University

2023-Research Supervisor Brigham and Women's Hospital

> Medical Residents from Harvard Pain Management Center 1 hour / week Medical School and Cornell Medical

School and Clinical Fellows from the

Brigham and Women's Pain Management Fellowship

Formally Mentored Harvard Students (Medical, Dental, Graduate, and Undergraduate):

2022-Taylor Boyd, Medical Student

> Taylor examined disparities in the inclusion and reporting of underrepresented individuals in pain clinical trials. She has submitted a first-authored manuscript from this project to *Pain* and it is currently under

review.

Other Mentored Trainees and Faculty:

2018-2019 Abby Warren, BS

Undergraduate Research Assistant

This mentee learned how to conduct quantitative sensory testing; recruit and enroll research participants, and present scientific findings to her peers.

2019-2020 Gabriella Larson, BS/ Graduate Student in Neuropsychology at Syracuse

University

Undergraduate Research Assistant

This mentee learned to conduct quantitative sensory testing, recruited and enrolled research participants, analyze data using SPSS, and presented

scientific findings to her peers and at regional conferences.

2019-2020 Katerina Ficara, BS

Undergraduate Research Assistant

This mentee learned how to conduct quantitative sensory testing; recruit and enroll research participants, and use the electronic medical record system.

Dikachi Osaji, MS/Medical Student at University of Texas Rio Grande
Graduate Student at Boston University studying Medical Science
This mentee learned how to conduct quantitative sensory testing; recruit and enroll research participants, analyze quantitative data, write and submit manuscripts to peer-reviewed journals, and work with an interdisciplinary team.

Josephine Issenman, MS/Medical Student at Medical College of New York
Graduate Student at Boston University studying Medical Science
This mentee learned how to conduct quantitative sensory testing; recruit and enroll research participants, analyze quantitative data, write and submit manuscripts to peer-reviewed journals, and work with an interdisciplinary team.

Maria Som, MS/Medical Student at University of Maryland
Graduate Student at Boston University studying Medical Science
This mentee learned how to conduct quantitative sensory testing; recruit and enroll research participants, analyze quantitative data, write and submit manuscripts to peer-reviewed journals, and work with an interdisciplinary team.

Jasmine Jeon, MS/Medical Student at Boston University
Graduate Student at Boston University studying Medical Science
This mentee learned how to conduct quantitative sensory testing; recruit and enroll research participants, analyze quantitative data, write and submit manuscripts to peer-reviewed journals, and work with an interdisciplinary team.

Jihee Yoon, MS/Clinical research coordinator at Brigham and Women's Hospital
Graduate Student at Boston University studying Medical Science
This mentee learned how to conduct quantitative sensory testing; recruit and enroll research participants, analyze quantitative data, write and submit manuscripts to peer-reviewed journals, and work with an interdisciplinary team.

Delia Fentazi, BS/Graduate student
Graduate Student at Boston University studying Medical Science
This mentee learned how to conduct quantitative sensory testing; recruit and enroll research participants, analyze quantitative and qualitative data, write and submit manuscripts to peer-reviewed journals, present at research conferences, and work with an interdisciplinary team.

2022-2023 Savannah Kazemipour, BS/Graduate student

Graduate Student at Boston University studying Medical Science

This mentee learned how to conduct quantitative sensory testing; recruit and enroll research participants, analyze quantitative and qualitative data, write and submit manuscripts to peer-reviewed journals, present at research conferences, and work with an interdisciplinary team.

Formal Teaching of Peers (e.g., CME and other continuing education courses):

☐ Those presentations below sponsored by outside entities are so noted and the sponsor(s) is (are) identified.

2020	Gender Differences in Pain Sensitivity: Clinical Implications Comprehensive Review of Pain Medicine (Oakstone Publishing)	1 Lecture Oakstone Publishing, online
2022	Pain Medicine and Healthcare Disparities Comprehensive Review of Pain Medicine (Oakstone Publishing)	1 Lecture Oakstone Publishing, online
2023	Behavioral Interventions for Pain Pain Management	1 Lecture Massachusetts College of Pharmacy and Health Sciences, online

Local Invited Presentations:

No presentations below	were sponsored by 3 rd parties/outside entities
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2016	Pain and Psychology / Grand Rounds	

Spinal Cord Injury Grand Rounds

VA Boston Medical Center

2017 Memory and Aging / Grand Rounds

Spinal Cord Injury Grand Rounds

VA Boston Medical Center

2018 Basic Statistics for Biomedical Research / Invited Lecture

Department of Anesthesiology, Perioperative and Pain Medicine

Brigham and Women's Hospital

Harvard Medical School

2019 Pain and Trauma in Women / Grand Rounds

Trauma-Informed Care Series

Women's Health Center of Excellence

Brigham and Women's Hospital

Harvard Medical School

2020 Pain and Trauma / Invited Lecture

Multi-institutional Fellowship Lecture

Pain Management Fellowship Brigham and Women's Hospital

Harvard Medical School

Johns Hopkins Medical School

University of Washington Medical School

2022 Pain and Trauma / Invited Lecture

Department of Anesthesiology, Perioperative and Pain Medicine

Brigham and Women's Hospital

Harvard Medical School

The Inequitable Burden of Pain / Grand Rounds

Massachussets General Hosptial Interprofessional Pain Rounds

Report of Regional, National and International Invited Teaching and Presentations

 \boxtimes No presentations below were sponsored by 3^{rd} parties/outside entities

Regional

2020 Pain and Prayer / Invited Lecture

Yale Program for Medicine, Spirituality and Religion

Yale School of Medicine

2023- The Inequitable Burden of Pain: Racial and Ethnic Disparities in the

Experience and Treatment of Pain / Invited Lecture

Mass Pain Initiative Annual Conference

National

Social influence of disability judgments for patients with chronic pain

Selected oral abstract / Paper

35tgh Annual Meeting of the American Pain Society

The effects of race and coping on experimental pain / Invited Lecture

Psychiatry and Behavioral Sciences Grand Rounds

Johns Hopkins School of Medicine

2019 Emerging perspectives on sociodemographic disparities in pain. / Symposium

Society of Personality and Social Psychology Annual Convention

Portland, OR

2022 Preliminary validation of the Pain-related PRAYER Scale (PPRAYERS): An

exploratory factor analysis / Paper

United States Association for the Study of Pain

Cincinnati, OH

International

2016 Race, coping, and pain / Invited Lecture

North American Pain School

Chateau Montebello, Ontario, Canada

2018 QST Hands-on Workshop / Workshop

International Congress on Pain

Boston, MA

Report of Clinical Activities and Innovations

Past and Current Licensure and Certification:

2018- Clinical Psychologist, Health Service Provider, State of Massachusetts

Practice Activities:

2019- Providing diagnostic Bierman ABA Autism Center, 4 hours / week

assessment for Needham, MA

children on the autism spectrum

2020- Attending Pain Management Center 8 hours / week I was

Psychologist Brigham and Women's Hospital

Chestnut Hill, MA

previously spending 24 hours per week in clinical practice until February of 2022 at which time I decreased my clinical load due to receiving a K23 award.

My teaching and supervision did not change as a result of this

shift.

Clinical Innovations:

Pain and PRAYER Scale (PPRAYERS) Brigham and

Women's Hospital

(2020-)

I collaborated on the development and validation of the first questionnaire to assess the use of prayer as a coping mechanism among individuals with chronic pain. Religious coping, including prayer, is an important aspect of the biopsychosocial model of pain. However, measures identifying how individuals use prayer to cope with pain and the impact that has on their pain and function was lacking. This measure will be used by clergy and medical

liaisons to help maximize spiritual and physical health.

Report of Education of Patients and Service to the Community

 \boxtimes No presentations below were sponsored by 3^{rd} parties/outside entities

Activities

2019 Brigham and Women's Hospital, Assistant

I assisted the facilitator in the Empowered Relief program aimed at helping individuals with chronic pain learn self-management strategies to improve pain

and quality of life.

Educational Material for Patients and the Lay Community:

Patient educational material

2020- Coping with Pain Co-creator of pamphlet

Through Prayer disseminated by the

Episcopalian Church of

Deleware

Report of Scholarship

Peer-Reviewed Scholarship in print or other media:

Research Investigations

- 1. **Meints SM**, Hirsh AT. In Vivo praying and catastrophizing mediate the race differences in experimental pain sensitivity. J Pain. 2015 May;16(5):491-497. PMID: 25725173. Epub 2015 Feb 25
- 2. Hollingshead NA, **Meints S**, Middleton SK*, Free CA*, Hirsh AT. Examining influential factors in providers' chronic pain treatment decisions: a comparison of physicians and medical students. BMC Med Educ. 2015 Oct 1;15:164. PMID: 26427937. Epub 2015 Oct 01
- 3. **Meints SM**, Miller MM, Hirsh AT. Differences in Pain Coping Between Black and White Americans: A Meta-Analysis. J Pain. 2016 Jun;17(6):642-653. PMID: 26804583. Epub 2016 Jan 12
- 4. Hollingshead NA, **Meints SM**, Miller MM, Robinson ME, Hirsh AT. A comparison of race-related pain stereotypes held by White and Black individuals. J Appl Soc Psychol. 2016 Dec;46(12):718-723. PMID: 28496282. Epub 2016 Oct 17
- 5. **Meints SM**, Stout M*, Abplanalp S*, Hirsh AT. Pain-Related Rumination, But Not Magnification or Helplessness, Mediates Race and Sex Differences in Experimental Pain. J Pain. 2017 Mar;18(3):332-339. PMID: 27908838. Epub 2016 Nov 28
- 6. **Meints SM**, Mosher C, Rand KL, Ashburn-Nardo L, Hirsh AT. An experimental investigation of the relationships among race, prayer, and pain. Scand J Pain. 2018 Jul 26;18(3):545-553. PMID: 29794272

- 7. Stout ME*, **Meints SM**, Hirsh AT. Loneliness Mediates the Relationship Between Pain During Intercourse and Depressive Symptoms Among Young Women. Arch Sex Behav. 2018 Aug;47(6):1687-1696. PMID: 29511895. Epub 2018 Mar 06
- 8. Miller MM, **Meints SM**, Hirsh AT. Catastrophizing, Pain, and functional outcomes for children with chronic pain: a meta-analytic review. Pain. 2018 Dec;159(12):2442-2460. PMID: 30015710
- 9. **Meints SM**, Wang V*, Edwards RR. Sex and Race Differences in Pain Sensitization among Patients with Chronic Low Back Pain. J Pain. 2018 Dec;19(12):1461-1470. PMID: 30025944. Epub 2018 Jul 17
- 10. Carriere JS, Martel MO, **Meints SM**, Cornelius MC, Edwards RR. What do you expect? Catastrophizing mediates associations between expectancies and pain-facilitatory processes. Eur J Pain. 2019 Apr;23(4):800-811. PMID: 30506913. Epub 2019 Jan 09
- 11. **Meints SM**, Mawla I, Napadow V, Kong J, Gerber J, Chan ST, Wasan AD, Kaptchuk TJ, McDonnell C*, Carriere J, Rosen B, Gollub RL, Edwards RR. The relationship between catastrophizing and altered pain sensitivity in patients with chronic low-back pain. Pain. 2019 Apr;160(4):833-843. PMID: 30531308
- 12. Anastas TM, **Meints SM**, Gleckman AD, Hirsh AT. Social Influences on Peer Judgments about Chronic Pain and Disability. J Pain. 2019 Jun;20(6):698-705. PMID: 30583083. Epub 2018 Dec 21
- 13. **Meints SM**, Yang HY, Collins JE, Katz JN, Losina E. Race Differences in Physical Activity Uptake Within a Workplace Wellness Program: A Comparison of Black and White Employees. Am J Health Promot. 2019 Jul;33(6):886-893. PMID: 30808208. Epub 2019 Feb 26
- 14. Moore DJ, **Meints SM**, Lazaridou A, Johnson D*, Franceschelli O, Cornelius M, Schreiber K, Edwards RR. The Effect of Induced and Chronic Pain on Attention. J Pain. 2019 Nov;20(11):1353-1361. PMID: 31077797. Epub 2019 May 09
- 15. Edwards RR, Campbell C, Schreiber KL, Meints S, Lazaridou A, Martel MO, Cornelius M, Xu X, Jamison RN, Katz JN, Carriere J, Khanuja HP, Sterling RS, Smith MT, Haythornthwaite JA. Multimodal prediction of pain and functional outcomes 6 months following total knee replacement: a prospective cohort study. BMC Musculoskelet Disord. 2022 Mar 29;23(1):302. PMID: 35351066. Epub 2022 Mar 29
- Wilson JM*, Colebaugh CA*, Flowers KM*, Meints SM, Edwards RR, Schreiber KL. Social Support and Psychological Distress among Chronic Pain Patients: The Mediating Role of Mindfulness. Pers Individ Dif. 2022 May;190:111551. PMID: 35300457. Epub 2022 Feb 04
- 17. **Meints SM**, Garcia RG, Schuman-Olivier Z, Datko M, Desbordes G, Cornelius M, Edwards RR, Napadow V. The effects of combined respiratory-gated auricular vagal afferent nerve stimulation and mindfulness meditation for chronic low back pain: A Pilot Study. Pain Med. 2022 Aug 31;23(9):1570-1581. PMID: 35148407

- 18. Wilson JM*, Colebaugh CA*, **Meints SM**, Flowers KM*, Edwards RR, Schreiber KL. Loneliness and Pain Catastrophizing Among Individuals with Chronic Pain: The Mediating Role of Depression. J Pain Res. 2022;15:2939-2948. PMID: 36147455. Epub 2022 Sep 16
- 19. Sica R, Wilson JM*, Kim EJ, Culley DJ, **Meints SM**, Schreiber KL. The Relationship of Postoperative Pain and Opioid Consumption to Postoperative Delirium After Spine Surgery. J Pain Res. 2023;16:287-294. PMID: 36744116. Epub 2023 Jan 28
- 20. LE Mehok, SM Meints, MM Miller, L Ashburn-Nardo, AT Hirsh. Beliefs about race differences in pain vs. actual race differences in pain: An experimental investigation, *Journal of Health Disparities Research and Practice*, 2023: 16, 1.
- 21. Pester BD*, Wilson JM*, Yoon J*, Lazaridou A, Schreiber KL, Cornelius M, Campbell CM, Smith MT, Haythornthwaite JA, Edwards RR, **Meints SM**. Brief Mindfulness-based Cognitive Behavioral Therapy is Associated with Faster Recovery in Patients Undergoing Total Knee Arthroplasty: A Pilot Clinical Trial. Pain Med. 2023 Jun 1;24(6):576-585. PMID: 36394250
- 22. **Meints SM**, Illueca M, Miller MM, Osaji D*, Doolittle B. The Pain and PRAYER Scale (PPRAYERS): development and validation of a scale to measure pain-related prayer. Pain Med. 2023 Jul 5;24(7):862-871. PMID: 36808488
- 23. Wilson JM, Madden VJ, Pester BD*, Yoon J*, Papianou LN*, **Meints SM**, Campbell CM, Smith MT, Haythornthwaite JA, Edwards RR, Schreiber KL. Change in Pain During Physical Activity Following Total Knee Arthroplasty: Associations With Improved Physical Function and Decreased Situational Pain Catastrophizing. Innov Aging. 2023;7(10):igad045. PMID: 38094929. Epub 2023 Jul 13
- Flowers KM*, Colebaugh CA*, Hruschak V, Azizoddin DR, Meints SM, Jamison RN, Wilson JM*, Edwards RR, Schreiber KL. Introversion, Extraversion, and Worsening of Chronic Pain Impact during Social Isolation: A Mediation Analysis. J Clin Psychol Med Settings. 2023 Sep;30(3):531-542. PMID: 36076147. Epub 2022 Sep 08
- 25. Papianou LN, Wilson JM, Edwards RR, Sieberg CB, **Meints SM**. The mediating effect of social functioning on the relationship between catastrophizing and pain among patients with chronic low back pain. Pain Med. 2023 Nov 2;24(11):1244-1250. PMID: 37399110
- 26. Hamilton KR, Hughes AJ, Campbell CM, Owens MA, Pester BD*, **Meints SM**, Taylor JL, Edwards RR, Haythornthwaite JA, Smith MT. Perioperative insomnia trajectories and functional outcomes after total knee arthroplasty. Pain. 2023 Dec 1;164(12):2769-2779. PMID: 37343150. Epub 2023 Jun 21
- 27. Wilson JM*, Yoon J*, Schreiber KL, Edwards RR, Sieberg CB, **Meints SM**. Interactive effects of sleep disturbance and opioid use on pain-related interference and physical functioning among patients with chronic low back pain. Pain Med. 2023 Dec 1;24(12):1396-1398. PMID: 37467074

- 28. Wilson JM, **Meints SM**, Edwards RR, Yamin JB*, Moore DJ. The role of sleep disturbance in reduced accuracy on a divided attention task among patients with fibromyalgia. Pain Rep. 2024 Jan;9(1):e1. PMID: 38229708. Epub 2024 Jan 12
- 29. Sieberg CB, Lunde CE, Shafrir AL, **Meints SM**, Madraswalla M, Huntley D, Olsen H, Wong C, DiVasta AD, Missmer SA, Sethna N. Quantitative somatosensory testing of the abdomen: establishing initial reference values across developmental age and biological sex. Pain. 2024 Jan 1;165(1):115-125. PMID: 37530649. Epub 2023 Jul 28
- 30. Yoon J*, Kim AJ*, Wilson JM, Yamin JB*, Schreiber KL, Edwards RR, Cornelius MC, Campbell CM, Smith MT, Haythornthwaite JA, Sieberg CB, **Meints SM**. A preliminary examination of the effects of childhood abuse and resilience on pain and physical functioning in patients with knee osteoarthritis. Scand J Pain. 2024 Jan 1;24(1). PMID: 38842279. Epub 2024 Jun 06
- 31. Overstreet DS*, Strath LJ, Sorge RE, Thomas PA, He J, Wiggins AM, Hobson J, Long DL, **Meints SM**, Aroke EN, Goodin BR. Race-specific associations: inflammatory mediators and chronic low back pain. Pain. 2024 Jul 1;165(7):1513-1522. PMID: 38323608. Epub 2024 Feb 06
- 32. Boyd T*, Chibueze J*, Pester BD*, Saini R, Bar N, Edwards RR, Adams MCB, Silver JK, **Meints SM**, Burton-Murray H. Age, Race, Ethnicity, and Sex of Participants in Clinical Trials Focused on Chronic Pain. J Pain. 2024 Aug;25(8):104511. PMID: 38492711. Epub 2024 Mar 16
- 33. Wilson JM, Yoon J*, Mun CJ, **Meints SM**, Campbell CM, Haythornthwaite JA, Smith MT, Edwards RR, Schreiber KL. The association between changes in clinical pain severity and IL-6 reactivity among patients undergoing total knee Arthroplasty: The moderating role of change in insomnia. Brain Behav Immun. 2024 Aug;120:199-207. PMID: 38838835. Epub 2024 Jun 03
- 34. Thomas PA*, Goodin BR, **Meints SM**, Owens MA, Wiggins AM, Quinn T, Long L, Aroke EN, Morris MC, Sorge RE, Overstreet DS*. Adverse Childhood Experiences and Chronic Low Back Pain in Adulthood: The Role of Emotion Regulation. J Pain. 2024 Sep;25(9):104551. PMID: 38692399. Epub 2024 Apr 29
- 35. Nelson CD*, Cornelius M, Wilson JM, **Meints SM**, Edwards RR, Jamison RN. Underestimating or Overestimating Improvement in Pain on a Smartphone Pain App: Role of Disability, Negative Affect, and Pain App Engagement. J Pain. 2024 Oct;25(10):104613. PMID: 38909832. Epub 2024 Jun 21
- 36. Thomas PA*, Ditta PV, Stocking SQ, Webb C, **Meints SM**, Owens MA, Quinn T, Aroke EN, Morris MC, Sorge RE, Goodin BR, Overstreet DS*. The effects of neighborhood disadvantage and adverse childhood experiences on conditioned pain modulation in adults with chronic low back pain. J Pain. 2024 Oct 16;26:104706. PMID: 39424112. Epub 2024 Oct 16

Non-peer reviewed scholarship in print or other media:

Reviews, chapters, and editorials

- Meints SM, Edwards RR. Evaluating psychosocial contributions to chronic pain outcomes. Prog Neuropsychopharmacol Biol Psychiatry. 2018 Dec 20;87(Pt B):168-182. PMID: 29408484. Epub 2018 Jan 31
- 2. **Meints SM**, Cortes A, Morais CA, Edwards RR. Racial and ethnic differences in the experience and treatment of noncancer pain. Pain Manag. 2019 May;9(3):317-334. PMID: 31140916. Epub 2019 May 29
- 3. Cortes A, **Meints SM**, Katz JN. Characterizing the Use of Expectations in Orthopedic Surgery Research: A Scoping Review. ACR Open Rheumatol. 2019 Sep;1(7):440-451. PMID: 31777824. Epub 2019 Aug 08
- 4. **Meints SM**, Edwards RR, Gilligan C, Schreiber KL. Behavioral, Psychological, Neurophysiological, and Neuroanatomic Determinants of Pain. J Bone Joint Surg Am. 2020 May 20;102 Suppl 1(Suppl 1):21-27. PMID: 32251127
- 5. **Meints SM**, Osaji D*, Steinhilber K*, Edwards RR. Individual differences in Experience and Treatment of Pain: Race, Ethnicity, and Sex. In Benzon HM, Rathmell JP, Wu CL, Turk DC, Argoff CE, & Hurley RW (Eds). (2022). *Practical Management of Pain 6E*. Elsevier Health Sciences.
- 6. Pester BD*, Edwards RR, Martel MO, Gilligan CJ, **Meints SM**. Mind-body approaches for reducing the need for post-operative opioids: Evidence and opportunities. J Clin Anesth Intensive Care. 2022;3(1):1-5. PMID: 36590137
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- Som M*, Sieberg CB, Lunde C, Cuccia N, Madraswalla M, Dhaliwal H, Olsen H, DiVasta A, Missmer S, Sethna N, Meints SM Establishing abdominal QST reference values for healthy adults and adolescents Poster presented at the 1st Annual Meeting of the US Association for the Study of Pain. 2021.
- 2. **Meints SM**, Illueca M, Miller MM, Osaji D*, Doolittle B. Preliminary Validation of the Pain-related Prayer Scale (PPRAYERS): An Exploratory Factor Analysis. Poster presented at the Annual Meeting of the US Association for the Study of Pain. 2022
- 3. **Meints SM**, Illueca M, Miller MM, Osaji D*, Doolittle B. Preliminary Validation of the Pain-related Prayer Scale (PPRAYERS): A Confirmatory Factor Analysis. Poster presented at the International Association for the Study of Pain Meeting. 2022.
- 4. Crago, M. A.*, Wilson, J.*, Wasan, A. D., Edwards, R. R., Hooten, M. W., & **Meints, S.** M. (2023). Treating Negative Affect And Chronic Pain Reduces Stigma In Patients With Chronic Low Back Pain. *The Journal of Pain*, 24(4), 97.
- 5. Fentazi, D.*, **Meints, S. M.**, Edwards, R. R., & Pester, B. D.* (2023). Catastrophizing And Depression, But Not Anxiety, Mediate The Relationship Between Educational Attainment And Pain Outcomes. *The Journal of Pain*, 24(4), 93-94.
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- 7. **Meints SM**, Doolittle BR, Koenig HG, Illueca M. Advances in Spirituality and Religion-based Interventions Across the Continuum of Pain and Suffering. Symposium presented at the Annual Meeting of the United States Association for the Study of Pain. Durham, NC, USA.
- 8. **Meints SM**. Brief Mind-Body Interventions in the Perioperative Period. Symposium presented at the Annual Meeting of the Society for Opioid Free Anesthesia. Panama City Beach, FL, USA.
- 9. Papianou, L.*, Wilson, J.*, Edwards, R. R., Sieberg, C. B., & Meints, S. M. (2023). Mediating Effect Of Social Functioning On The Relationship Between Pain Catastrophizing And Pain Severity In Patients With Chronic Low Back Pain. *The Journal of Pain*, 24(4), 52.
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Narrative Report

^{*} Mentee

Introduction

I am a licensed clinical psychologist who specializes in the care of adults with chronic pain. After completing my postdoctoral research fellowship at Brigham and Women's Hospital with a focus on psychosocial pain research, I joined the faculty here where I conduct pain research, provide clinical care, and supervise clinical and research trainees. I have made it my mission to better understand the complex biopsychosocial mechanisms that contribute to the development and treatment of chronic pain.

Area of Excellence: Investigation

Although I continue providing clinical care in the Pain Management Center, I am transitioning to a role that is more heavily research-oriented as my research funding increases. Since starting at BWH in 2020, I have secured an NIH supplement to study stigma of pain, opioid use, and negative affect that capitalizes on an ongoing NIH-funded project examining the treatment of negative affect among people with chronic low back pain. In addition, I have been wared a K23 Career Development award from the National Institute of Arthritis, Musculoskeletal, and Skin Disorders. This project will provide me with years of protected time to examine the acceptability and feasibility of a psychosocial intervention aimed at preventing chronic postsurgical pain and long-term opioid use in people undergoing spine surgery. Meanwhile, I continue to spearhead and collaborate with multidisciplinary teams across Harvard as well as the University of Pittsburgh, John Moores University, Indiana University-Purdue University Indianapolis, to study mechanisms contributing to the development and poor treatment of chronic pain across the lifespan including the role of racial and ethnic disparities in the experience and treatment of pain. My goal is that my approach to pain science will enhance our ability to provide a personalized-medicine approach to the prevention and treatment of chronic pain.

Teaching

Consistent with my passion for teaching and mentorship, I have been actively involved in the teaching, supervision, and mentorship of medical students, residents, and fellows; psychology practicum students, interns, and fellows; and research interns and fellows since I joined the BWH/HMS faculty. Each year I provide mentorship for undergraduate and graduate research interns, supervise psychology practicum students, interns, and fellows, and lecture for the medical residents and fellows within the Pain Management Center.

Supporting Activity: Clinical Expertise

My clinical interests and expertise revolve around the practice of pain psychology. I work within the interdisciplinary setting of the Brigham and Women's Pain Management Center where I provide assessment and treatment to individuals who experience chronic pain. Through this work, my patients learn to self-manage their chronic pain conditions via Cognitive Behavioral Therapy, Mindfulness Meditation, and Acceptance and Commitment Therapy in order to improve their pain, physical function, and overall quality of life. Moreover, I work closely with the providers in the Pain Management Center and throughout Brigham and Women's to offer a seamless interdisciplinary approach that includes physical therapy, anesthesiology, physical medicine and rehabilitation, neurology, orthopedic surgery, neurosurgery, rheumatology, and psychiatry.

Summary:

Since joining the faculty at BWH/HMS, I have endeavored to apply my knowledge as a pain researcher

to study the biopsychosocial mechanisms that impact the experience and treatment of chronic pain while providing excellent clinical care. My career goal is to continue as a clinican-scientists leading a research team that will identify, investigate, test, and implement new mechanisms of and treatments for chronic pain. I also hope to continue my role as an educator and mentor as we educate the next generation of pain scientists.