# Beth D. Darnall, PhD

#### **Professor**

Stanford University School of Medicine

Department of Anesthesiology, Perioperative and Pain Medicine

Division of Pain Medicine

Director, Stanford Pain Relief Innovations Lab

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Department of Psychiatry and Behavioral Sciences (by courtesy)

Wu Tsai Neurosciences Institute (affiliate faculty)

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### **CURRENT APPOINTMENTS AND ROLES**

#### **Professor**

Anesthesiology, Perioperative and Pain Medicine. Stanford University School of Medicine. Division of Pain Medicine. Stanford, California.

Department of Psychiatry & Behavioral Sciences, (by courtesy) 2017 – present Wu Tsai Neurosciences Institute (affiliated faculty) 2018 -- present

#### **Director**

**Stanford Pain Relief Innovations Lab.** Stanford University School of Medicine; Division of Pain Medicine. https://med.stanford.edu/pril

#### PREVIOUS APPOINTMENTS

**Stanford University School of Medicine**. Anesthesiology, Perioperative and Pain Medicine; Division of Pain Medicine. Stanford, California.

- Associate Professor, 2019-2022
- Clinical Professor, 2017-2019
- Clinical Associate Professor, October 2012-2017

**Oregon Health & Science University**, Department of Anesthesiology and Perioperative Medicine; Division of Pain Medicine. Portland, Oregon. (secondary appointment in the Department of Psychiatry).

- Associate Professor, June 2012
- Assistant Professor, October 2005-May 2015

#### **EDUCATION AND TRAINING**

Post-Doctoral Fellow, 9/02-4/04

The Johns Hopkins University

School of Medicine & Bloomberg School of Public Health (joint appointment)

Department of Physical Medicine and Rehabilitation. Baltimore, Maryland.

Clinical: Catastrophic burn, spinal cord injury, amputation, post-surgical acute rehabilitation

Ph.D. Clinical Psychology, 8/02

University of Colorado, Boulder, CO

M.A. Clinical Psychology, 12/98 University of Colorado, Boulder, CO

B.A. Mass Communications, 8/94

Texas Woman's University, Denton, TX

# RECENT SERVICE AND HONORS

2024	Invited grant reviewer, National Science Foundation (NSF)							
2023-2024	ACOEM 2024 Chronic Pain Guidelines Panel, American College of Occupational and							
	Environmental Medicine							
2023	Presidential Commendation, American Academy of Pain Medicine							
2023	Invited Faculty, committee to update the Canadian 2017 Evidence-Based Clinical							
	Practice Guideline for Opioid Use in Chronic Non-Cancer Pain							
2022	Academy of Research Mentors in Anesthesiology (ARMA), Foundation for Anesthesia							
	Education and Research (FAER)							
2022	Medical Advisory Board, Facial Pain Association							
2022	Distinguished Service Award, American Academy of Pain Medicine							
2022	Presidential Commendation, American Academy of Pain Medicine							
2022	Invited Reviewer, Australian national opioid tapering guideline							
2022	U.S. Congressional Briefing on the revised CDC opioid prescribing guideline, AEI,							
	Washington, D.C., March 24, 2022.							
2022-	NCCIH grant reviewer; special emphasis study section; Feb 24-25, 2022.							
2021-2022	Co-Chair of the 2022 Annual Meeting of the American Academy of Pain Medicine							
2021-	Board of Directors, American Academy of Pain Medicine							
2021	Invited to review CDC pain-related scientific grant applications.							
2021-2022	Scientific Advisory Board, National Pain Advocacy Center							
2020-2024	NIH Interagency Pain Research Coordinating Committee (IPRCC). Appointed by							
	the U.S. Dept. of Health and Human Services Secretary Dr. Alex Azar to the IPRCC as a							
	Scientific Member. (In 2023, appointment term extended to July 2024)							
2020-	U.S. Food and Drug Administration, invited member, Center for Devices and							
	Radiological Health (CDRH) Network of Digital Health Experts program.							
2020-2021	U.S. Centers for Disease Control and Prevention (CDC) Opioid Workgroup.							
	Scientific Member; appointed by the Board of Scientific Counselors of the National							
	Center for Injury Prevention and Control (BSC/NCIPC); the opioid workgroup advised							
	the CDC on current and future opioid prescribing guidelines.							
2020	Chair, Study Section, U.S. Department of Defense (pain management grants)							
2020	NIH Study Section. Addiction Risks and Mechanisms (ARM). June 8-9, 2020							
2020	NIH Conference on Managing Chronic Pain in Individuals with Co-occurring							
	OUD, and Other Psychiatric Conditions. Invited Speaker. June 1, 2020							
2020	NIH 15th annual NIH Pain Research Consortium Symposium. Invited Speaker:							
	"Digital Behavioral Medicine for Pain Relief and Opioid Reduction". June 3, 2020							
2020	Board of Directors, Institute for Brain Potential							
2019	U.S. Food and Drug Administration (FDA), Invited Speaker, opioid tapering risks							
2019	Invited contributor for the U.S. Department of Health and Human Services (HHS)							
	opioid tapering guidance							
2019	NIH Study Section, NCCIH U01 and R34 grant applications							
2019-	Chief Science Advisor, AppliedVR							
2018	Congressional Briefing on Pain and Opioids, Washington, D.C., Invited Speaker							
2018	National Academies of Science, Engineering and Medicine (NASEM), Speaker							

2018 World Economic Forum, Invited Speaker, The Psychology of Pain Relief. Davos,

Switzerland.

2015 **Presidential Commendation**, American Academy of Pain Medicine

#### RESEARCH AWARDS

#### CURRENT RESEARCH AWARDS

1. **NIH HEAL** (MPI: Clauw, Williams, Harte)

1K12NS130673-01 10/01/2022 - 09/30/2027

Title: University of Michigan (UM) HEAL Initiative National K12 Clinical Pain Career Development Program (UM-HCPDP)

Darnall Role: K12 Advisory Committee

2. **PCORI** (Patient-Centered Outcomes Research Institute®) (PI: Darnall) 04/01/2022 – 03/30/2027 #PCS\_2021C1\_22347

Title: Comparative Effectiveness of Online Cognitive Behavioral Therapy vs. an Online Single-Session Pain Relief Skills Class for Chronic Pain

This is a 6-site national pragmatic comparative effectiveness trial of two evidence-based and online-delivered behavioral treatments for mixed-etiology chronic pain, along with three separate randomized trials in special populations: pelvic pain, young adults aged 18-23, and Lupus-related pain (total N=1,650 participants). This project was the recipient of a Diversity Supplement to enhance diversity and representativeness of the study.

\$13.4M total funding award (with supplement)

PI: Darnall

3. NIH / NIDA K24 (PI: Darnall)

04/23/2021 - 10/22/2026

DA053564-01

Title: Research and Mentoring in Innovative Patient Oriented Pain and Opioid Science

This career scientist award permits the PI to expand her research and mentoring junior investigators in patient-oriented studies focused on brief and digital treatment for pain relief and reducing health risks along the continuum of opioid use disorder. (N=220)

PI: Darnall

4. NIH / NCI (PI: Spiegel)

04/01/2021 - 10/31/2026

Title: Mechanisms of Virtual Reality treatment for pain and opioid reduction in gastrointestinal cancer

Darnall, Co-I

5. NIH / NINR (PI: Spiegel)

07/01/2021 - 01/31/2023

Title: Transcending COVID-19 Barriers to Pain Care: Pragmatic Comparative Effectiveness Trial of Evidence-Based, On-Demand, Digital Behavioral Treatments for Chronic Pain

Darnall, Co-I

6. NIH HEAL Biomarker 171063 (PI: Mackey)

10/01/2020 - 09/30/2025

Title: Prognostic biomarkers for high-impact chronic pain: Development and validation

The goal of this project is to develop and validate prognostic biomarkers for high-impact chronic pain.

Darnall, Co-I

7. **PCORI** (Patient-Centered Outcomes Research Institute®) (PI: Darnall) 02/01/18 – 1/30/2024 #1610-3700

Title: Comparative Effectiveness of Pain Cognitive Behavioral Therapy and Chronic Pain Self-Management within the Context of Opioid Reduction.

This is a multi-state pragmatic clinical trial of patient-centered opioid tapering and behavioral treatment strategies enrolling 865 patients from 12 pain and primary care clinics in 5 states. The goal is to help primary care, pain physicians and patients with chronic pain safely and effectively reduce opioid use. We are comparing two evidence-based group behavioral treatment classes (cognitive behavioral therapy and chronic pain self-management) to facilitate opioid and pain reduction within the context of a patient-centered opioid tapering program. This project includes innovative strategies to reduce patient fears and nocebo responses as a pathway to enhance patient engagement in this study. 1,000 patients are being enrolled for an observational arm; (Total project N=1400) \$8.9M

PI: Darnall

## COMPLETED GRANTS

1. **NIH / NCCIH** (MPI: Darnall & Mackey)

09/01/2015 - 05/31/2023

R01AT008561

Title: Single Session Pain Catastrophizing Treatment: Comparative Efficacy & Mechanisms

This project is a 3-arm randomized trial testing the efficacy and mechanisms of a single-session pain relief intervention developed by Beth Darnall (comparators are health education and 8-session CBT). \$4.1M

Multi-PI: Darnall & Mackey

2. NIH / NICHD (PD: Wilson)

09/01/2015 - 03/31/2022

R01 Title: Maternal Chronic Pain: Risk for Pain and Poor Outcomes in Children (PI: Wilson)

This longitudinal, multi-site study is examining the intergenerational transmission of chronic pain in high risk children of mothers with current chronic pain.

1.1M (Stanford subaward)

Darnall, Site PI for Stanford University

3. **NIH / NIDA** (PI: Maddox)

09/30/2019 - 08/31/2021

R44 Title: Virtual Reality as an Opioid Sparing Treatment for Chronic Pain (EaseVRx) This randomized controlled study is investigating virtual reality for pain and opioid reduction (Company: AppliedVR; PI: Maddox)

Darnall, Consultant

4. DEPT OF ANESTHESIOLOGY, PERIOPERATIVE AND PAIN MEDICINE

08/01/18-08/31/19

STANFORD UNIVERSITY SCHOOL OF MEDICINE

Title: "Recovery Toolkits: A behavioral medicine approach to enhanced pain control and recovery after surgery."

This project was selected for funding for the 2018-2019 Improvement Capability Development Program (ICDP) at Stanford University School of Medicine.

PI: Darnall

#### 5. DEPT OF ORTHOPEDIC TRAUMA SURGERY

07/01/17-10/31/19

STANFORD UNIVERSITY SCHOOL OF MEDICINE

Title: "My Surgical Success"

This is a randomized controlled pragmatic clinical trial of a perioperative digital behavioral medicine program ("My Surgical Success") applied in orthopedic trauma surgery patients at Stanford Hospital. This effort is a collaboration between Stanford Pain and Orthopedic Trauma Surgery.

## PI: Darnall

6. **NIH / NCCIH** 9/1/11 – 2/28/19

P01 AT006651

Title: Stanford CAM Center for Chronic Back Pain

PD: Mackey

Darnall, Co-I and Lead for the Psychophysics & Behavioral Core

(Director for patient reported outcomes across all projects in the Center; Lead of Project 2 (R01 comparing MBSR and pain-CBT); Lead for Center Marketing and Promotions).

7. **NIH/ NCCIH** 9/01/13-2/28/19

P01 AT006651-S2

Title: Sex/Gender-Specific Brain Risks for Prescription Opioids in Chronic Low Back Pain. The goal of this grant is to characterize sex/gender differences for the effect of opioids on baseline brain structure in chronic low back pain, thus clarifying sex-specific brain risks for prescription opioids in women.

PI: Mackey; Darnall, Co-I.

8. **NIH/ NCCIH** 11/01/14 - 10/31/15

P01 AT006651-S1

Title: The psychobiological and neural mechanisms of pain catastrophizing.

This career development training supplement funds 0.75 FTE, Year 2 (competitive renewal).

PI: Mackey; Darnall, Scholar PI.

9. NIH/ NCCAM 9/01/13-10/31/14

P01 AT006651-S1

Title: The psychobiological and neural mechanisms of pain catastrophizing.

This career development training supplement funds 0.75 FTE for Year 1.

10. Spectrum-Stanford Health Care Innovation Challenge Grant 01/01/16 – 12/31/16

Title: "Precision Surgical Care: Risk and Treatment Stratification Using a Novel Learning Health System"

PI: Mackey; Darnall, Co-I

## 11. Stanford Faculty Innovation Program

12/18/14 - 12/17/15

Title: Pain Clinic Optimization of Patient Experience (Pain COPE): Leveraging Open Source Learning Health System for Prescriptive Analytics Approach to Patient Satisfaction

Multi-PI: Kao and Darnall

# 12. International Association for the Study of Pain (IASP)

6/15/11-6/15/12

Grant: Initiative for improving pain education in developing countries.

Title: Mirror Therapy Outreach Workshops for Medical Providers in Vietnam

Darnall, Co-PI: Huy

### 13. National Institutes of Health/Office of Research on Women's Health

1/01/08-6/30/10

Oregon BIRCWH K-12 (Building Interdisciplinary Research Careers in Women's Health)
Title: Pain Catastrophizing as a Cause of Systemic Inflammation in Women with Chronic Pain

PI: Leslie Hallick. Darnall, Scholar PI.

### 14. Medical Research Foundation of Oregon

3/01/10 - 6/30/12

Title: Pain Catastrophizing as a Cause of Systemic Inflammation in Pre- & Post-Menopausal Women **Darnall, PI** 

**12. ZRT Laboratories** 7/01/08-7/01/12

Title: Pain Catastrophizing as a Cause of Systemic Inflammation in Women with Chronic Pain **Darnall, PI** 

# 13. N.L. Tartar Research Fellowship

6/01/10 - 6/01/11

Title: Home-Based Self-Delivered Mirror Therapy for Phantom Pain **Darnall, PI** 

## 14. OHSU Humanitarian Award

6/01/09-6/01/10

Title: Single-Session Pain Psychology for Underinsured Family Medicine Patients with Chronic Pain PI: Thayer White, MD; **Darnall, Co-I.** 

15. American Pain Society "Future Leaders in Pain Research" Award

11/01/06-6/01/08

Title: "An Investigation of Immunologic Response to Negative Cognition in Persons with Chronic Pain"

Darnall, PI

#### 16. Centers for Disease Control

Title: Self-Management of Limb Loss grant award to the Center for Injury Research & Policy. PI: Ellen J. MacKenzie, Ph.D.

Darnall, Post-Doctoral Fellow

# 17. NIH T-32 Research Fellowship Grant

11/01/02-3/30/04

The Johns Hopkins University, School of Medicine, Department of Neurology.

Darnall, Post-Doctoral Fellow

Peer-Reviewed Publications (\*based on original data; see PubMed: Darnall B for full listing)

- Edwards KE, Ziadni M, Dokyoung DS, Mackey SC, Palenski P, Perez L, **Darnall BD**. Protocol for a Randomized Trial of a Self-Directed Digital Pain Management Intervention (Empowered Relief – On Demand) for Comorbid Chronic Pain and Prescription Opioid Misuse/Disorder: The MOBILE Relief Study. (in development)
- 2. Courtney RE, Schadegg MJ, Hicks N, Truitt M, Bolton R, Dezzutti B, Cannizzo F, **Darnall B**, Radatz M, Harden S. Using Lean Six Sigma to Develop a Whole Health Interdisciplinary Program for Chronic Pain in a VA: PREVAIL. (in review)
- 3. Vu PD, Halac M, Benkli B, Mayrsohn B, Shadid I, Williams K, Hooten S, **Darnall BD**, Gilligan C, Srinivasan S, Hirani S. Interdisciplinary Innovation Frameworks and Medical Entrepreneurism Accelerate Pain Medicine. (in review)
- 4. Klein MR, **Darnall BD**, You DS. Feasibility of virtually delivered single session Empowered Relief® in patients with chronic pain taking methadone or buprenorphine: Protocol for a single arm trial. (in review, *JMIR Research Protocols*). Preprint DOI: 10.2196/preprints.53784
- 5. Courtney RE, Halsey E, Patil T, Mastronardi KV, Browne HS, **Darnall BD**. Prescription Opioid Tapering Practices and Outcomes at a Rural VA Health Care System. *Pain Med.* 2024 Mar 6:pnae013. doi: 10.1093/pm/pnae013. Online ahead of print. PMID: 38450417\*

- Jiang TE, Pascual AP, Le N, Nguyen TB, Mackey S, Darnall BD, Simard JF, Falasinnu T. The Problem of Pain in Lupus: Epidemiological Profiles of Patients Attending Multidisciplinary Pain Clinics. *Pain Manag Nurs*. 2024 Mar 16:S1524-9042(24)00021-3. doi: 10.1016/j.pmn.2024.02.012. PMID: 38494346\*
- 7. Gholamrezaei A, Magee MR, McNeilage AG, Dwyer L, Sim A, Ferreira ML, **Darnall BD**, Brake T, Aggarwal A, Craigie M, Hollington I, Glare P, Ashton-James CE. A digital health intervention to support patients with chronic pain during prescription opioid tapering: a pilot randomised controlled trial. *Pain Rep.* 2024 Feb 12;9(2):e1128. doi: 10.1097/PR9.0000000000001128. PMID: 38352024\*.
- 8. Edwards KE, Lii T, Ziadni MS, Don Shouton T, **Darnall BD**, Mackey SC, Gilam G. Is there an association between lateralization of chronic pain in the body and depression? *J Pain* 2024 Feb 8:S1526-5900(24)00371-7. doi: 10.1016/j.jpain.2024.02.004. PMID: 38341013\*
- 9. Maddox TW, Oldstone L, Sackman J, Maddox R, Judge E, Chibbaro M, Bonakdar R, **Darnall BD**. Perspective: The Promise of Virtual Reality as an Immersive Therapeutic. *Journal of Medical Extended Reality* 1(1) 2024. DOI: 10.1089/jmxr.2023.0003.
- 10. Darnall BD, Burns JW, Hong J, Roy A, Ziadni MS, You DS, Cook KF, Poupore-King H, Slater K, Jung CE, Tian L, Mackey SC. Empowered Relief, Cognitive Behavioral Therapy and Health Education for People with Chronic Pain: A Comparison of Outcomes at 6-Month Follow-up for a Randomized Controlled Trial. *Pain Rep.* 9(1):p e1116, Jan 2024. DOI: 10.1097/PR9.0000000000001116.\*
- 11. Falasinnu T, Nguyen T, En Jiang T, Tamang S, Chaichian Y, **Darnall BD**, Mackey S, Simard JF, Chen JH. The Problem of Pain in Rheumatology: Variations in Case Definitions Derived from Chronic Pain Phenotyping Algorithms using Electronic Health Records. *J Rheumatol.* 2023 Dec 15:jrheum.2023-0416. doi: 10.3899/jrheum.2023-0416. PMID: 38101917\*
- 12. You DS, Cook KF, Lannon E, Ziadni MS, **Darnall BD**, Mackey SC. Establishing the interpretability and utility of the 4-item BriefPCS. *Sci Rep.* 2023 Dec 2;13(1):21272. doi: 10.1038/s41598-023-48433-6.PMID: 38042937\*
- 13. Banerjee A, Mackey SC, Vest N, **Darnall BD**. Pain in U.S. Corrections Settings: The Promise of Digital Solutions for Better Data and Treatment Access. *Pain Med.* 2023 Nov 9:pnad150. doi: 10.1093/pm/pnad150. PMID: 37950495.
- 14. Gholamrezaei A, Magee MR, McNeilage AG, Dwyer L, Jafari H, Sim A, **Darnall BD**, Glare P, Ashton-James CE. A text messaging intervention to support patients with chronic pain during prescription opioid tapering: protocol for a double-blind randomised controlled trial. *BMJ*. Oct 24;13(10):e073297. doi: 10.1136/bmjopen-2023-073297.
- 15. Maddox TW, Sparks C, Sackman J, Oyao A, Garcia L, Maddox R, Ffrench K, Garcia H, Adair T, King A, Irvin A, Lacy T, Maislin D, Keenan B, Bonakdar R, **Darnall BD**. At-Home Virtual Reality Program for Chronic Low Back Pain: A Randomized Sham-Controlled Effectiveness Trial in a Clinically Severe and Diverse Sample. *Mayo Clinic Proceedings: Digital Health*. Volume 1, Issue 4, Dec 2023, 563-573. DOI: 10.1016/j.mcpdig.2023.09.003\*
- **16. Darnall BD**, Edwards KE, Courtney R, Ziadni MS, Simons LE, Harrison LE. Innovative Treatment Formats, Technologies, and Clinician Trainings that Improve Access to Behavioral Pain Treatment for Youth and Adults. *Front Pain Res.* June 2023; Vol 4. <a href="https://doi.org/10.3389/fpain.2023.1223172">https://doi.org/10.3389/fpain.2023.1223172</a>

- 17. Sturgeon JA, Ehde DM, **Darnall BD**, Barad MJ, Clauw DJ, Jensen MP. Psychological Approaches for Migraine Management. *Anesthesiol Clin.* 2023 Jun;41(2):341-355. doi: 10.1016/j.anclin.2023.02.002. PMID: 37245946
- 18. Hohenschurz-Schmidt D, Vase L, Scott W, Annoni M, Ajayi Oluwafemi, Barth J, Bennell K, C de C Williams A, Carlino E, Cerritelli F, Chaibi A, Cote P, **Darnall BD**, Evans R, Fabre L, Faria V, French S, Gerger Heike, Janssens T, Jensen K, Johnston C, Lunde SJ, Keefe F, Kerns RD, Koechlin H, Kongsted A, Michener LA, Moerman DE, Musial F, Newell D, Nicholas M, Palermo TM, Palermo S, Peedeman KJ, Pogatzki-Zahn EM, Puhl AA, Roberts L, Rossettini G, Mattiesen ST, Underwood M, Vaucher P, Vollert J, Wartolowska K, Weimer K, Werner P, Rice ASC, Draper-Rodi J. Recommendations for the Development, Implementation, and Reporting of Control Interventions in Efficacy and Mechanistic Trials of Physical, Psychological, and Self-Management Therapies The CoPPS statement. *BMI* 2023 May 25; 381 doi: https://doi.org/10.1136/bmj-2022-072108.\*
- 19. Maddox TW, Sparks C, Oldstone L, Maddox R, French K, Garcia H, Krishamurthy P, Okhotin D, Garcia LM, Birckhead BJ, Sackman J, Mackey IG, Louis RG, Salmasi V, **Darnall BD**. Durable Chronic Low Back Pain Reductions to 24-Months Post-Treatment for An Accessible, 8-Week, In-Home Behavioral Skills-Based Virtual Reality Program. Pain Med. 2023 May 23. doi: 10.1093/pm/pnad070. Online ahead of print. PMID: 37220894.\*
- 20. Ziadni MS, Jaros S, Anderson SR, You DS, **Darnall BD**, Mackey SC. A Longitudinal Investigation of the Impact of COVID-19 on Patients with Chronic Pain. *J Pain.* 2023 May 22:S1526-5900(23)00419-4. doi: 10.1016/j.jpain.2023.05.010. Online ahead of print. PMID: 37225065\*
- 21. Gholamrezaei A, Magee MR, McNeilage AG, Dwyer L, Sim A, Ferreira ML, **Darnall BD**, Brake T, Aggarwal A, Craigie M, Hollington I, Glare P, Ashton-James CE. A digital health intervention to support patients with chronic pain during prescription opioid tapering: a pilot randomised controlled trial. *medRxiv*. 2023 May 11:2023.05.10.23289771. doi: 10.1101/2023.05.10.23289771. Preprint. PMID: 37214982\*
- 22. **Darnall BD**. On the importance of baseline pain intensity and measurement methods: Invited Commentary. *PAIN*®. 2023 May 5. doi: 10.1097/j.pain.0000000000002931. PMID: 37288940
- 23. Vertsberger D, Talman A, Ziadni MS, Kong JT, **Darnall BD**, Manber R, Mackey SC, Gross J. Intensity of Chronic Low Back Pain and Activity Interference: The Moderating Role of Daily Pain Coping Strategies. *Pain Med.* 2023 Apr 3;24(4):442-450. doi: 10.1093/pm/pnac151.PMID: 36214626\*
- 24. You DS, Hettie G, **Darnall BD**, Ziadni MS. Spontaneous self-affirmation: an adaptive coping strategy for people with chronic pain. *Scand J Pain*. 2023 Mar 20. doi: 10.1515/sjpain-2022-0099. Online ahead of print. PMID: 36935574\*
- 25. Sturgeon JA, Ehde DM, **Darnall BD**, Barad MJ, Claw DJ, Jensen MP. Psychological approaches for migraine management. *Anes Clinics*. March 2023. DOI:https://doi.org/10.1016/j.anclin.2023.02.002
- 26. Karayannis NV, Smuck M, Law CS, Mackey SC, Gross JJ, Darnall BD, Hush J. Patient-reported physical function is strongly related to pain behavior and pain interference and weakly related to physical capacity. *Musculoskelet Sci Pract.* 2023 Feb;63:102721. doi: 10.1016/j.msksp.2023.102721. Epub 2023 Jan 23. PMID: 36759316\*
- 27. Webster F, Connoy L, Longo R, Ahuja D, Amtmann D, Anderson A, Ashton-James C, Boyd H, Chambers CT, Cook KF, Cowan P, Crombez G, Feinstein AB, Fuqua A, Gilam G, Jordan I, Mackey SC, Martins E, Martire LM, O'Sullivan P, Richards DP, Turner JA, Veasley C, Würtzen H, Yang S,

- You DS, Ziadni M, **Darnall BD**. Patient Responses to the Term Pain Catastrophizing: Thematic Analysis of Cross-sectional International Data. *J Pain*. 2023 Feb;24(2):356-367. doi: 10.1016/j.jpain.2022.10.001. PMID: 36241160\*
- Maddox WT, Garcia L, Birckhead B, Krishnamurthy P, Sackman J, Mackey IG, Louis R, Salmasi V, Darnall BD. At-Home Virtual Reality Program for Chronic Low Back Pain: Durability of a Randomized, Placebo-Controlled Clinical Trial to 18-months Post-Treatment. Reg Anesth Pain Med. 2022 Nov 25:rapm-2022-104093. doi: 10.1136/rapm-2022-104093. PMID: 36427904
- 29. Magee MR, Gholamrezaei A, McNeilage AG, Sim A, Dwyer L, Ferreira ML, **Darnall BD**, Glare P, Ashton-James CE. A digital video and text messaging intervention to support people with chronic pain during opioid tapering: Content development using co-design. *JMIR Form Res.* 2022 Nov 10;6(11):e40507. doi: 10.2196/40507.PMID: 36355415\*
- Mackey SC, Gilam G, Darnall BD, Goldin PR, Kong JT, Law CSW, Kao MC, Tian L, Manber R, Gross J. Shared and Distinct Mechanisms of Mindfulness-Based Stress Reduction, Cognitive-Behavioral Therapy, and Acupuncture in Chronic Low Back Pain: Design and Implementation of Two Linked Randomized Trials. *JMIR Res Protoc.* 2022 Sep 27;11(9):e37823. doi: 10.2196/37823.PMID: 36166279
- 31. Harrison LE, Webster SN, Van Orden AR, Choate E, Jehl N, Stinson J, Wicksell RK, **Darnall BD**, Simons LE. Agile Development of a Digital Exposure Treatment for Youth with Chronic Musculoskeletal Pain: Protocol of a user-centered design approach and examination of feasibility and preliminary efficacy. *BMJ Open.* 2022 Sep 15;12(9):e065997. doi: 10.1136/bmjopen-2022-065997.PMID: 36109029.
- 32. Shraim MA, Sluka KA, Sterling M, Arendt-Nielsen L, Argoff C, Bagraith KS, Baron R, Brisby H, Carr DB, Chimenti R, Courtney CA, Curatolo M, **Darnall BD**, Ford JJ, Graven-Nielsen J, Kolski MC, Kosek E, Liebano RE, Merkle SL; Parker R, Reis FJJ, Smart K, Smeets RJ, Svensson P, Thompson BL, Treede RD; Ushida T, Williamson OD, Hodges P. Features and methods to discriminate between mechanism-based categories of pain experienced in the musculoskeletal system: a Delphi expert consensus study. *Pain*®. 2022 Sep 1; 163(9):1812-1828. doi: 10.1097/j.pain.000000000000002577. Epub 2022 Jan 19. PMID: 35319501\*
- 33. Wilson JM, Schreiber KL, Mackey SC, Flowers KM, **Darnall BD**, Edwards RR, Azizoddin DR. Increased pain catastrophizing longitudinally predicts worsened pain severity and interference in patients with chronic pain and cancer: A CHOIR study. 2022 July 25. *Psycho-Oncology*. http://doi.org/10.1002/pon.6020 \*
- 34. Falasinnu T, Nguyen T, En Jiang T, Chaichian Y, Rector A, Darnall BD, Mackey S, Simard JF. The Problem of Pain in Rheumatology: Characteristics and Clinical Profiles Associated with Concomitant Diagnoses of Chronic Overlapping Pain Conditions. ACR Open Rheumatology. 2022 Oct;4(10):890-896. doi: 10.1002/acr2.11488. Epub 2022 Jul 25. PMID: 35872631\*
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- 126. Schatman ME, **Darnall BD**. Medical Marijuana: A viable tool in the armamentaria of physicians treating chronic pain? *Pain Medicine*. 2013; Jun;14(6):799. doi: 10.1111/pme.12137.
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- 131. **Darnall BD** & Sazie E. Pain characteristics and pain catastrophizing in incarcerated women with chronic pain. *J Health Care for the Poor and Underserved.* 2012; 23(2):544-557. PMID: 22643606.\*
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- 135.**Darnall BD**, Aickin M, Zwickey H. Pilot study of inflammatory responses following a negative imaginal focus in persons with chronic pain: Analysis by sex/gender. *Gender Medicine*. 2010; 7(3) 1-13. PMID: 20638630\*
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- 137. **Darnall BD**. Self-delivered home-based mirror therapy for lower limb phantom pain. *American Journal of Physical Medicine and Rehabilitation*. 2009; Jan, 88(1):78-81. PMID: 19096290. (Editor's choice for the cover of this issue)\*
- 138. Darnall BD, Ephraim P, Wegener ST, Dillingham T, Pezzin L, Rossbach P, & MacKenzie E. Prevalence of Depressive Symptoms and Mental Health Care Utilization in Persons with Limb Loss: Results of a National Survey. *Archives of Physical Medicine &* Rehabilitation. 2005; 86: 650-8. PMID: 15827913.\*
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- 140.**Darnall BD**, Smith JE, Craighead LW, & Lamounier JA. Modification of the Cognitive Model for Bulimia via Path Analysis on a Brazilian Adolescent Sample. *Addictive Behaviors*. 1999; 24(1): 47-57. PMID: 10189972\*

### Policy Briefs & Invited Editorials

- 1. **Darnall BD**. The CDC Opioid Prescribing Guideline for Chronic Pain: Unintended consequences and a revision on the horizon. *American Society of Regional Anesthesia and Pain Medicine Newsletter*. February 2021. <a href="https://www.asra.com/news-publications/asra-newsletter/february-2021/february-2021-asra-news/asra-news/2021/02/01/the-2016-cdc-opioid-prescribing-guideline-for-chronic-pain-unintended-consequences-and-a-revision-on-the-horizon">https://www.asra.com/news-publications/asra-newsletter/february-2021/february-2021-asra-news/asra-news/2021/02/01/the-2016-cdc-opioid-prescribing-guideline-for-chronic-pain-unintended-consequences-and-a-revision-on-the-horizon</a>
- 2. **Darnall BD**. Reducing the Global Burden of Chronic Pain. *Global Solutions Journal*. March 2019, Issue 4: 243-8. https://abo.tagesspiegel.de/media/view/2019/03/gsj 4 e-mag 1198.pdf
- Darnall BD. Empowering Patients with Chronic Pain to Look Beyond Opioids. PCSS Monthly (July 2015). (Clinical Support System for Opioid Therapies and Providers' Clinical Support System for Medication Assisted Treatment). <a href="http://pcssmat.org/wp-content/uploads/2015/04/July-2015-PCSS-Monthly-Update.pdf">http://pcssmat.org/wp-content/uploads/2015/04/July-2015-PCSS-Monthly-Update.pdf</a>
- Darnall BD. Targeting a saboteur of surgical outcomes: Pain catastrophizing. Practical Pain Management. April, 2015. <a href="http://www.practicalpainmanagement.com/treatments/psychological/cognitive-behavioral-therapy/targeting-sabateur-surgical-outcomes-pain">http://www.practicalpainmanagement.com/treatments/psychological/cognitive-behavioral-therapy/targeting-sabateur-surgical-outcomes-pain</a>
- 5. **Darnall BD.** Minimize Opioids by Optimizing Pain Psychology. *Pain Management*. 2014; Jul 4(4):251-3. doi: 10.2217/pmt.14.18. PMID: 25300380

6. **Darnall BD**. Pre-amputation mirror therapy and home-based self-delivered mirror therapy for phantom pain. *O&P Business News* (Orthotics & Prosthetics) 2010; April, 26(5): 26.

### Letters to the Editor

1. Fields HL and **Darnall BD**. Optimal Opioid Treatment Requires a Consensual Approach. 2022 May 1; 163(5):e689-e690. doi: 10.1097/j.pain.0000000000002494. PMID: 34855648

# Non-peer-reviewed Op-Eds and Articles

- 1. **Darnall BD**. Single-session interventions for pain. The Psychologist. Nov 2022 issue: 38-41.
- 2. **Darnall BD**. Applause for the CDC opioid guideline authors. *The Hill*. April 26, 2019. https://thehill.com/opinion/healthcare/440837-applause-for-the-cdc-opioid-guideline-authors
- 3. **Darnall BD**. Addressing the Dual Crises of Pain and Opioids: A Case for Patient-Centeredness in Research and Treatment. *The Hill*. October 31, 2018. <a href="https://thehill.com/opinion/healthcare/414140-addressing-the-dual-crises-of-pain-and-opioids-a-case-for-patient">https://thehill.com/opinion/healthcare/414140-addressing-the-dual-crises-of-pain-and-opioids-a-case-for-patient</a> (also listed under popular press)
- 4. Darnall BD. The Tao of Pain. Spirituality & Health. (Jan/Feb 2018 issue: 50-55)
- **5. Darnall BD**. Changing Mindset for Pain Relief. *Clinical Pain Advisor*. May 23, 2017. http://www.clinicalpainadvisor.com/aapm-2015/array-of-psychology-based-treatments-to-target-pain-catastrophyzing/article/663448/
- **6. Darnall BD**. Treating Chronic Pain Requires More Than a Pill. *San Francisco Chronicle*, Op-Ed. April 4, 2016.
- 7. **Darnall BD.** Self-Management and the National Pain Strategy. *National Pain Report*, March 29, 2016. http://nationalpainreport.com/self-management-and-the-national-pain-strategy-8829933.html
- 8. **Darnall BD**. Empowering people with chronic pain to have less pain and need fewer pills. Empathic Therapy Newsletter. December, 2014 (Vol. 5, Issue 4). <a href="http://secure.campaigner.com/Campaigner/Public/t.show?7qkkr--3upqn-34674s9">http://secure.campaigner.com/Campaigner/Public/t.show?7qkkr--3upqn-34674s9</a>& v=2
- 9. **Darnall BD**. Transcending opioid injustice. July 20, 2014. <a href="http://paindr.com/transcending-opioid-injustice/">http://paindr.com/transcending-opioid-injustice/</a>
- 10. Darnall BD. Surge in opioid prescriptions for pregnant women indicates a need for safer pain management strategies. April 16, 2014.
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- 11. Darnall BD. Your psychology affects your response to medical treatments and to pain medications. National Register for Health Service Psychologists. January 10, 2014. <a href="http://www.findapsychologist.org/your-psychology-affects-your-response-to-medical-treatments-and-to-pain-medications-by-dr-beth-darnall/">http://www.findapsychologist.org/your-psychology-affects-your-response-to-medical-treatments-and-to-pain-medications-by-dr-beth-darnall/</a>

- **12. Darnall BD.** Surviving a pain flare. *Fibromyalgia & Chronic Pain LIFE* magazine 2012; Jan/Feb print edition; [Epub ahead of print] <a href="http://fibropainlife.org/2012/01/17/surviving-a-pain-flare/">http://fibropainlife.org/2012/01/17/surviving-a-pain-flare/</a>
- **13. Darnall BD**. Sex/gender disparity in pain and pain treatment: Closing the gap and meeting women's treatment needs. *Pain Management* 2011; July: 25-27.
- **14. Darnall BD**. Mirror therapy: Expanding global access to phantom pain care. *InMotion* 2010; 20 (6): 42-44.

### Book Reviews

1. **Darnall BD**. "Pain as It Presents in Clinic: Complex and Comorbid." *J Pain and Symptom Management* 2013; 45(6): 1120-1121. (Book review of *Pain comorbidities: Understanding and treating the complex patient,* Giamberardino MA and Jensen TS, Eds. IASP Press, Seattle, WA, USA 2012).

# Book Chapters

- 1. **Darnall BD**. "Empowered Relief®: An evidence-based 1-session pain relief skills intervention" *Facial Pain: A 21st Century Guide*. (accepted).
- 2. **Darnall BD**. "Pain and Psychological Factors in Older Adults: I need more pain medication not less!" *Practical Strategies in Geriatric Mental Health: Cases and Approaches*. Cassidy E and Dunn L, Eds. American Psychiatric Press (2020); 95-115. ISBN: 1615371486.
- 3. Surgeon JA & **Darnall BD**. "Facilitating Patient Resilience: Mindfulness-Based Stress Reduction, Acceptance, and Positive Social and Emotional Interventions." In *Psychological Approaches to Pain Management*. Turk D & Gatchel R, Eds. Guilford Press (2018); 250-263. IBSN-10:1462528538.
- Darnall BD and Sturgeon JA. "Pain Psychology in the Perioperative and Chronic Pain Contexts." *Anesthesiology 3<sup>rd</sup> Edition.* Longnecker and Mackey SC, Eds. McGraw Hill (2018); 1501-1505. ISBN: 978-0-07-184881-7.
- Darnall BD. "Reducing Opioids." Living a Healthy Life with Chronic Pain. LeFort SM, Webster RN, Lorig K, Holman H, Sobel D, Laurent D, Gonzalez V., Minor M. Bull Publishing (2018); online supplement.

#### **Books**

- McAnally H, Freeman L, Darnall BD. Enhanced Recovery Before Surgery: Preoperative Optimization of the Chronic Pain Patient ©2019. Oxford University Press: New York, NY. ISBN-13: 978-0190920142 (262 pages)
- 2. **Darnall BD.** Psychological Treatment for Patients with Chronic Pain ©2018 American Psychological Association Press: Washington, D.C. ISBN-13: 978-1433829420 (193 pages)
- 3. **Darnall BD**. The Opioid-Free Pain Relief Kit. 10 Simple Steps to Ease Your Pain ©2016. Bull Publishing: Boulder, CO. (130 pages)

- 4. Herndon CM, Arnstein P, **Darnall B**, Hartrick C, Hecht K, Lyons M, Maleki J, Manworren R, Miaskowski C, Sehgal N. *Principles of Analgesic Use*, 7th Edition ©2016. American Pain Society. (176 pages)
- 5. **Darnall BD**. Less Pain, Fewer Pills: Avoid the Dangers of Prescription Opioids and Gain Control Over Chronic Pain. ©2014. Bull Publishing: Boulder, CO. (240 pages)

# Therapist / Instructor Clinical Intervention Manuals

1. **Darnall BD**. Empowered Relief® Instructor Manual ©Stanford University 2016-2024. (121 pages)

# Training DVD

1. **Darnall BD.** Cognitive Behavioral Therapy for Chronic Pain ©2018. American Psychological Association Therapy Series. 90-minute training DVD for psychology students, trainees, and professionals. Includes actual client demonstration.

# National Clinical Practice Guidelines

- 1. American College of Occupational and Environmental Medicine (ACOEM) Practice Guidelines for Chronic Pain. 2023 Committee Member.
- 2. American College of Occupational and Environmental Medicine (ACOEM)
  2017 American College of Occupational and Environmental Medicine (ACOEM) Practice
  Guidelines for Chronic Pain. Chronic Pain. MDGuidelines. Westminster, CO: Reed Group, Ltd;
  2017. Available at: <a href="https://www.dir.ca.gov/dwc/MTUS/ACOEM-Guidelines/Chronic-Pain-Guideline.pdf">https://www.dir.ca.gov/dwc/MTUS/ACOEM-Guidelines/Chronic-Pain-Guideline.pdf</a>.

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Editor-in-Chief: Kurt T. Hegmann, MD, MPH, FACOEM, FACP; Assistant-Editors: Jeremy J. Biggs, MD, MSPH, Matthew A. Hughes, MD, MPH; Evidence-based Practice Chronic Pain Panel: Steven D. Feinberg, MD, MS, MPH (Chair), Gerald M. Aronoff, MD, DABPM, DABPN, FAADEP, James Ausfahl, MD, Daniel Bruns, PsyD, FAPA, **Beth D. Darnall, PhD**, Rachel Feinberg, PT, DPT, Jill S. Galper, PT, Med, Lee Glass, MD, Robert L. Goldberg, MD, FACOEM, Scott Haldeman, DC, MD, PhD, James E. Lessenger, MD, FACOEM, Steven Mandel, MD, Tom G. Mayer, MD, Russell L. Travis, MD, FACS, FAADEP, Pamela A. Warren, PhD, Thomas H. Winters, MD, FACOEM

#### 3. American Pain Society

Herndon CM, Arnstein P, **Darnall B**, Hartrick C, Hecht K, Lyons M, Maleki J, Manworren R, Miaskowski C, Sehgal N. American Pain Society's *Principles of Analgesic Use*, 7<sup>th</sup> Edition ©2016. (also listed under books)

## Resource Guides for Chronic Pain Treatment (peer reviewed)

- American Chronic Pain Association ACPA Resource Guide to Chronic Pain Medication and Treatment: An Integrated Guide to Physical, Behavioral and Pharmacologic Therapy. Co-Author: Darnall BD. Project Lead: Steven Feinberg, MD. ©2017 https://www.theacpa.org/uploads/documents/ACPA\_Resource\_Guide\_2017.pdf
- 2. American Chronic Pain Association ACPA Resource Guide to Chronic Pain Medication and Treatment. ©2015

American Chronic Pain Association. Christian J, **Darnall BD**, Feinberg R, Feinberg S, Kalauokalani D, Pasero C, Pohl M. http://www.theacpa.org/uploads/documents/ACPA\_Resource\_Guide\_2015\_Final edited (3).pdf

# INDEPENDENT MONITORING COMMITTEE (IMC) SERVICE

NIH/ NCCIH 2018 – 2023

R01 AT009541

Title: Observational Study of Cannabis and Pain

PI: Cinnamon Bidwell, University of Colorado - Boulder

Darnall, IMC member

### SCIENTIFIC ADVISORY BOARD

## NIH/ HEAL IMPOWR Center Grant

2021-2026

DA055301

Title: Integrative Treatment for Achieving Holistic Recovery from Comorbid Chronic Pain and Q Opioid Use Disorder

PI: Katie Witkiewitz, University of New Mexico

Darnall, SAB member

## CLINICAL CREDENTIALING

Stanford University Hospitals and Clinics	02/13 - present
Oregon Health & Science University Hospital	11/05 - 06/12
Portland Veterans Affairs Hospital	10/09 - 10/11

### CLINICAL LICENSURE

California Board of Psychology, License #25495	02/13 - present
Oregon Board of Psychologist Examiners, License #1697	10/05 - 02/13
Maryland Board of Examiners of Psychologists, License #3965	09/03 - 09/05

## **CLINICAL CERTIFICATION**

Examination	for	Profession	al Practice	in Ps	vchology	(EPPP)	2000
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National Register for Health Service Psychologists (ID: 51183) 2005 – present

## **VISITING PROFESSORSHIPS**

## 1. Northwestern University

The Center for Translational Pain Research. Chicago, IL. February 22, 2023.

## 2. Vanderbilt University

Department of Anesthesiology, Perioperative and Pain Medicine. Nashville, TN. December 15-16, 2022.

# 3. Cedars-Sinai Healthcare System

Distinguished Visiting Professor; Primary Care and Neurology Lecture Series "The Science of Pain Psychology: How to optimize outcomes for your patients with chronic pain." Beverly Hills, CA. June 26-27, 2017.

# 4. University of California, Davis

Department of Anesthesiology, Perioperative and Pain Medicine "The interface between psychology and opioids." Division of Pain Medicine, University of California, Davis; 12/19/2013.

# 5. Stanford University

"Sex/Gender in Chronic Pain: Mechanisms of Influence and Treatment Implications."

"Goals of Pain Education: Minimize Opioids, Empower Patients, Relieve Suffering."

Department of Anesthesiology, Perioperative and Pain Medicine. Palo Alto, CA; 1/12-13/2012

#### INTERNATIONAL CME WORKSHOP

Israel Pain Society (Israel chapter of the International Association for the Study of Pain). Behavioral Pain Management Training for All Health Care Professionals", a 2-hour workshop presented at the Israel Pain Association annual meeting (with Yacov Ezra, MD and Elon Eisenberg, MD). November 13, 2017.

### NATIONAL & REGIONAL CME WORKSHOPS

- 1. **Darnall BD**. National Practice Conference. National Register for Healthcare Psychologists. 3-hour CE workshop: "1-session Empowered Relief for acute and chronic pain." November 12, 2022. Washington, D.C.
- 2. **Darnall BD**. Institute for Brain Potential. Developer/instructor of the 6-hour CME workshop "Psychological Approaches to Managing Pain." January 29, 2021. (online delivery)
- 3. **Darnall BD**. Institute for Brain Potential. Developer/instructor of the 6-hour CME workshop "Psychological Approaches to Managing Pain." October 20, 2020. (online delivery)
- 4. **Darnall BD**. Institute for Brain Potential. Developer/instructor of the 6-hour CME workshop "Psychological Approaches to Managing Pain." June, 2020. (online delivery)
- 5. **Darnall BD** & Scheman J (Co-chairs). "AAPM Behavioral Medicine Workshop". Full day workshop features multiple faculty across a range of topics. American Academy of Pain Medicine. National Harbor, MD. February 27, 2020. (6.5 hours)
- 6. **Darnall BD** & Ziadni M. "Empowered Relief" two-day certification workshop for healthcare clinicians. San Diego Pain Summit. San Diego, CA. February 11-12, 2020. (15.5 hours)

- 7. **Darnall BD**. "Pain Psychology Workshop for Healthcare Clinicians: Tools You Can Use Right Now." West Chester Hospital. West Chester, Ohio. February 4, 2019. (2 hours)
- 8. **Darnall BD**. "Pain and Opioid Reduction Workshop for Healthcare Clinicians". Butler County Mental Health and Addiction Recovery Services Board. Sole developer and instructor for this 4-hour CME workshop. Butler County, Ohio. February 5, 2019. (3 hours)
- 9. **Darnall BD**. "Patient-Centered Opioid Tapering." 3 hour workshop for healthcare clinicians. PAINWeek 2018 annual national conference. Las Vegas, NV. Sept. 4, 2018.
- 10. Darnall BD. "Minimize Opioids by Optimizing Psychology". Sole faculty for this 4-hour CME workshop. American Psychological Association annual national conference. San Francisco, CA. August 10, 2018.
- 11. Darnall BD, Murphy JL, Scheman J, and Davin S. "Behavioral Medicine Workshop with Emphasis on High-Impact Chronic Pain". American Academy of Pain Medicine (AAPM) annual national conference. Back by popular demand, this is a 4-hour workshop for all healthcare clinicians. Vancouver, Canada. April 29, 2018.
- 12. **Darnall BD**. "Patient Engagement in Opioid Reduction Workshop". Developer and sole instructor for a 3-hour opioid reduction workshop to Cedars-Sinai Healthcare System pharmacists who will be implementing opioid tapering with patients. Content includes strategies to enhance: (1) knowledge about the role of psychological factors in the experience of pain and opioid reduction, (2) patient engagement and outcomes, (3) collaboration among the broader team, and (4) provider satisfaction. Beverly Hills, CA. December 11, 2017.
- 13. **Darnall BD**. Institute for Brain Potential. Developer/instructor of the 6-hour CME workshop "Psychological Approaches to Managing Pain." June 17, 2017. Los Altos, CA. <a href="http://www.ibpceu.com/content/pdf/PMPCAS17.pdf">http://www.ibpceu.com/content/pdf/PMPCAS17.pdf</a>
- 14. **Darnall BD** Workshop Chair and Speaker. American Academy of Pain Medicine (AAPM). "The AAPM Pain Psychology Task Force Presents: Behavioral Pain Management Training for All Health Care Professionals", a 3-hour workshop presented at the American Academy of Pain Medicine annual national conference (**Beth Darnall**, Judith Scheman, Sara Davin, Jennifer Murphy and Sean Mackey). March 17, 2017. Orlando, FL. **This workshop was the highest rated session of the 2017 AAPM conference.**

#### U.S. CONGRESS BRIEFINGS - INVITED SPEAKER

- (1) Congressional briefing on the "Opioid Crisis Response Act of 2018". Bipartisan, open session featuring three invited expert speakers including Beth Darnall. Capitol Hill; Washington D.C. October 2, 2018. <a href="https://www.pcori.org/events/2018/beyond-opioids-evidence-based-delivery-alternative-treatments-chronic-pain">https://www.pcori.org/events/2018/beyond-opioids-evidence-based-delivery-alternative-treatments-chronic-pain</a>
- (2) Congressional briefing invited speaker on the value of patient centered research. Bipartisan briefing. Alliance for Health Policy. Capitol Hill; Washington D.C. May 29, 2019.
- (3) Congressional briefing invited speaker on the CDC 2022 draft updated guideline for prescribing opioids. Hosted by AEI. March 24, 2022.

## NATIONAL ACADEMIES OF SCIENCES, ENGINEERING AND MEDICINE

Invited speaker and panelist. The Role of Nonpharmacological Approaches to Pain Management: A Workshop. National Academy of Sciences Building. Washington, DC. December 4–5, 2018. Free download of the NASEM conference proceedings available here: <a href="https://www.nap.edu/catalog/25406/the-role-of-nonpharmacological-approaches-to-pain-management-proceedings-of">https://www.nap.edu/catalog/25406/the-role-of-nonpharmacological-approaches-to-pain-management-proceedings-of</a>

# U.S. FOOD AND DRUG ADMINISTRATION (FDA)

Invited speaker in the FDA public advisory committee of the FDA Anesthetic and Analgesic Drug Products Advisory Committee (AADPAC) pertaining to high-dose opioid prescribing and de-prescribing. Talk title: "Patient-Centered Opioid De-prescribing." Washington, DC. June 11, 2019. Federal Register Notice, <a href="https://www.federalregister.gov/documents/2019/04/29/2019-08610/joint-meeting-of-the-drug-safety-and-risk-management-advisory-committee-and-the-anesthetic-and-the-anesthetic-and-the-anesthetic-and-the-anesthetic-and-the-anesthetic-and-the-anesthetic-and-the-anesthetic-and-the-anesthetic-and-the-anesthetic-and-the-anesthetic-and-the-anesthetic-and-the-anesthetic-and-the-anesthetic-and-the-anesthetic-and-the-anesthetic-and-the-anesthetic-and-the-anesthetic-and-the-anesthetic-and-the-anesthetic-and-the-anesthetic-and-the-anesthetic-and-the-anesthetic-and-the-anesthetic-and-the-anesthetic-and-the-anesthetic-and-the-anesthetic-and-the-anesthetic-and-the-anesthetic-and-the-anesthetic-and-the-anesthetic-and-the-anesthetic-and-the-anesthetic-and-the-anesthetic-and-the-anesthetic-and-the-anesthetic-and-the-anesthetic-and-the-anesthetic-and-the-anesthetic-and-the-anesthetic-and-the-anesthetic-and-the-anesthetic-and-the-anesthetic-and-the-anesthetic-and-the-anesthetic-and-the-anesthetic-and-the-anesthetic-and-the-anesthetic-and-the-anesthetic-anesthetic-anesthetic-anesthetic-anesthetic-anesthetic-anesthetic-anesthetic-anesthetic-anesthetic-anesthetic-anesthetic-anesthetic-anesthetic-anesthetic-anesthetic-anesthetic-anesthetic-anesthetic-anesthetic-anesthetic-anesthetic-anesthetic-anesthetic-anesthetic-anesthetic-anesthetic-anesthetic-anesthetic-anesthetic-anesthetic-anesthetic-anesthetic-anesthetic-anesthetic-anesthetic-anesthetic-anesthetic-anesthetic-anesthetic-anesthetic-anesthetic-anesthetic-anesthetic-anesthetic-anesthetic-anesthetic-anesthetic-anesthetic-anesthetic-anesthetic-anesthetic-anesthetic-anesthetic-anesthetic-anesthetic-anesthetic-anesthetic-anesthetic-anesthetic-anesthetic-anesthetic-anesthetic-ane

## FEDERATION OF STATE MEDICAL BOARDS

**Invited speaker**; "Patient-Centered and Whole Person Innovations in Pain Care & Opioid Stewardship". Washington, DC. Sept 27, 2022.

### STATE OF OKLAHOMA HOUSE OF REPRESENTATIVES

Invited speaker (session led by Rep. John Talley). Talk title: "Patient-Centered Methods to Ensure Patient Health and Safety in Opioid Prescribing and Deprescribing." November 1, 2021.

## STATE OF MINNESOTA HOUSE OF REPRESENTATIVES

Invited speaker (session led by Rep. Robert Bierman). Talk title: "Patient-Centered Methods to Ensure Patient Health and Safety in Opioid Prescribing and Deprescribing." March 9, 2022. Outcome: Bill passed the house unanimously during this session.

#### STATE OF MINNESOTA SENATE

Invited speaker (session led by Senator Clausen). Talk title: "Patient-Centered Methods to Ensure Patient Health and Safety in Opioid Prescribing and Deprescribing." March 22, 2022. Outcome: Bill passed the committee unanimously during this session.

#### **CME LECTURES**

International, National, and Grand Rounds CME Lectures (\*upcoming; NIH, keynotes and international bolded)

- 1. Speaker (with co-faculty Drs. Roger Knauss and Jason Busse). "Opioids for chronic pain: Time to achieve a balance (and practical tools to get there)." IASP 2024 World Congress on Pain. Amsterdam, Netherlands. August, 2024.\*
- 2. Speaker (with co-faculty Drs. Yanfei Xie and Wim van Lankfeld). "Unravelling the Power of Words: How Language Shapes Pain Expectations, Beliefs, and Stigma." IASP 2024 World Congress on Pain. Amsterdam, Netherlands. August, 2024.\*
- 3. Session Chair and Speaker. "Accessible and Evidence-Based Whole Person Pain Care: Integrative Innovations Across Veteran, Civilian, Urban, and Rural Care Settings." (co-presenters: Drs. Rena E. Courtney and Aram Mardian). USASP 2024 Annual Meeting. Seattle, WA. April 16, 2024.\*
- Session Chair and Speaker. "Accessible Whole Person Chronic Pain Care: Integrative Innovations Across Veteran, Civilian, Urban and Rural Care Settings." 40th annual meeting of the American Academy of Pain Medicine. Scottsdale, AZ. March 9, 2024.\*
- 5. Invited Speaker (also see Visiting Professor). "1-session Empowered Relief for Acute, Chronic and Post-Surgical Pain Relief". Center for Translational Pain Research at Northwestern University, Feinberg School of Medicine. Chicago, IL. February 22, 2024.
- 6. Invited Speaker, University of Minnesota Pain Interest Group. "1-Session Empowered Relief". January 17, 2024. (online)
- 7. Invited Speaker, Empowered Relief: 1-Session Pain Relief Skills Intervention. Blaustein Pain Grand Rounds, The Johns Hopkins University, Baltimore, MD. December 8, 2023.
- 8. Workshop Chair, American Headache Society, Scottsdale Headache Symposium. "Integrating Behavioral Medicine into Your Headache Practice: Tools, Strategies & Resources." Scottsdale, AZ. November 18, 2023.
- 9. Plenary Speaker, American Headache Society, Scottsdale Headache Symposium. "1-session Empowered Relief for acute, chronic and post-surgical pain." Scottsdale, AZ. November 17, 2023.
- Speaker, "Leveraging technology for patient-centered and patient-supported prescription opioid tapering: The EMPOWER study". 12th World Congress of the World Institute of Pain. Antalya, Turkey. October 30, 2023.
- 11. Session Chair and Speaker, Behavioral Medicine track of the 12th World Congress of the World Institute of Pain. "Digital treatments for procedural, chronic and surgical pain." Antalya, Turkey. October 28, 2023.
- 12. Speaker, "Rapidly Connecting Patients to Lowest Risk Pain Treatment: Empowered Relief® as an evidence-based 1-session pain relief skills intervention". DEA-MATE. Stanford University CME online national DEA compliant clinician education. October 25, 2023.
- 13. Invited Speaker, American Association of Registered Pharmacists 2023 conference (virtual). October 13, 2023.
- 14. Grand Rounds Speaker, NY Langone Health Department of Pain Medicine. "Digital Solutions that Scale Pain Treatment Access and Improve Data Quality: Empowered Relief®

- and CHOIR as an LHS data platform." October 4, 2023. (with co-presenter Sean Mackey, MD, PhD).
- 15. Grand Rounds Speaker, Scaling Access to Evidence-Based Behavioral Pain Treatment: a 1-session skills-based intervention for acute, chronic and post-surgical pain. University of Arkansas for Medical Sciences. August 24, 2023.
- 16. Medical Grand Rounds, "The Science of Empowered Relief: A 1-session evidence-based intervention for acute, chronic and post-surgical pain." VISN-6 Veterans Healthcare Administration. August 22, 2023.
- 17. Invited Speaker, "Scaling Access to Pain Care: A 1-session evidence-based intervention for acute, chronic, and post-surgical pain." Northwestern University CTRIS. June 20, 2023.
- 18. Medical Grand Rounds, "The Science of Empowered Relief: A 1-session evidence-based intervention for acute, chronic and post-surgical pain." Salem VA Healthcare System. Salem, VA. May 19, 2023.
- 19. Co-presenter, "Preparing Research Budgets", NIH HEAL PURPOSE annual meeting, National Harbor, MD. May 12, 2023.
- 20. Session Chair and Speaker, "Pain Psychology," NIH HEAL PURPOSE annual meeting, National Harbor, MD. May 12, 2023.
- 21. Plenary Speaker, "Patient-Centered Prescription Opioid Tapering". British Pain Society annual meeting. Glasgow, Scotland. May 10, 2023.
- 22. Panel Speaker, "Scaling Access to Pain Care: A 1-session evidence-based intervention for acute, chronic and post-surgical pain". British Pain Society. Glasgow, Scotland. May 10, 2023.
- 23. Plenary Speaker. New York State Pain Society 2023 Annual Meeting. "Leveraging technology for chronic and post-surgical pain management: Virtual reality and 1-session Empowered Relief". White Plains, NY. April 29, 2023.
- 24. Keynote Speaker. Annual Research Day Conference. "The Science of Empowered Relief: A single-session intervention for chronic, acute and surgical pain." Department of Anesthesia, Pain Management and Perioperative Medicine; Nova Scotia Health Authority/Dalhousie University in Halifax. Halifax, Nova Scotia, Canada. April 5, 2023.
- 25. Session Chair and Speaker. "Empowered Relief for Acute, Chronic, and Surgical Pain Management." American Academy of Pain Medicine Annual Meeting. Ft Lauderdale, FL. March 25, 2023.
- 26. SXSW Panelist. "VR to treat the universal human experience of pain." SXSW 2023 MedTech conference. March 11, 2023. Austin, TX.
- 27. Session Speaker. "Perioperative Behavioral Pain Management." ASRA Online Conference. March 11, 2023.
- 28. Panelist, American Medical Association, State Advocacy Summit. "The nation's overdose and death epidemic: What will it take for policymakers to listen to physicians?" January 14, 2023. Tucson, AZ.

- 29. Grand Rounds, Vanderbilt University School of Medicine, Department of Anesthesiology, Perioperative and Pain Medicine. Nashville, TN. "1-session Empowered Relief for Chronic, Acute and Surgical Pain Management." December 16, 2022.
- 30. Visiting Professor Lecture, "Patient-Centered Opioid Tapering". Department of Anesthesiology, Perioperative and Pain Medicine. Vanderbilt University School of Medicine. Nashville, TN. December 15, 2022.
- 31. Invited Speaker, 2022 Swiss Pain Congress. Lake Geneva, Switzerland. December 10, 2022.
- 32. Keynote Speaker, Dutch Pain Society 2022 conference. "1-session Empowered Relief for Acute and Chronic Pain." Amsterdam, Netherlands. December 8, 2022.
- 33. Invited Speaker, 2022 National Practice Conference. National Register for Healthcare Psychologists. "1-session Empowered Relief for Acute and Chronic Pain." 3-hour workshop. Washington, D.C. November 12, 2022. (also listed under CEU workshops)
- 34. Invited Speaker. Beck Institute 2022 Exellence Summit. "Single-session skills-based intervention for empowered pain relief and opioid reduction." National online conference. October 28, 2022.
- 35. Invited Speaker, "Transforming Health Care: A digital health platform providing accessible, equitable and evidence-based treatment worldwide." (co-presenting with Sean Mackey, MD, PhD). World Patient Alliance. Rome, Italy. October 16, 2022.
- 36. Invited Speaker, McGill University. "Scaling single-session pain management skills interventions across populations and the continuum of care." Alan Edwards Centre for Research on Pain. Montreal, Canada. October 5, 2022.
- 37. Workshop Presenter, "Effective and scalable behavioral interventions for acute and chronic pain." International Association for the Study of Pain (IASP) 2022 biennial conference. Toronto, Canada. September 22, 2022.
- 38. Workshop Presenter, "No Singular Solution: Prescribing, Tapering, and the Opioid Pendulum Swing", International Association for the Study of Pain (IASP) 2022 biennial conference. Toronto, Canada. September 19, 2022.
- Keynote Speaker, "Effective and scalable behavioral interventions for acute and chronic pain." American Society for Pain Management Nursing. September 15, 2022. Palm Springs, CA.
- 40. Invited Lecturer. PLEX national pain faculty lecture series (hosted by the University of Washington, Seattle, WA). "Empowered Relief: Accessible Whole-Person Care for Acute and Chronic Pain." Online. August 8, 2022.
- 41. Workshop Presenter, "Virtual Reality for Chronic Pain." National Nurse Practitioner Symposium 2022. Keystone, Colorado. July 24, 2022.
- 42. Invited Lecture, "The role of self-administered VR for on-demand chronic pain treatment." Weill Cornell Medical Center. New York, NY. June 15, 2022.

- 43. Speaker, "The Promise of Adjunctive Scalable Psychological Treatment used in Combination with SCS: Pain and Opioid Reduction." International Neuromodulation Society (INS) 15th World Congress to be held in Barcelona, Spain. May 24, 2022.
- 44. Keynote Speaker, vMed22 Conference. "Virtual reality for scalable, home-based chronic pain management." Cedars-Sinai. Los Angeles, CA. March 24, 2022.
- 45. Session Chair and Speaker, "Empowered Relief: Single-session intervention for acute and chronic pain." American Academy of Pain Medicine. March 18, 2022.
- 46. Grand Rounds Speaker, Department of Anesthesiology, Perioperative and Pain Medicine. "Empowered Relief for Acute and Chronic Pain." Stanford University School of Medicine. March 6, 2022.
- 47. Keynote Speaker, "Empowered Relief: Single-session intervention for acute and chronic pain." PESI online international conference. March 3, 2022.
- 48. Invited Speaker. "Whole-Person Pain Care: Evidence-based behavioral and psychological approaches for pain and opioid reduction." Grand Rounds, Lehigh Valley Health Network, Department of Psychiatry. Allentown, PA. January 2022.
- 49. Plenary Speaker, International Back and Neck Pain Forum. Sydney, Australia. "Voluntary Patient Centered Opioid Deprescribing." November 11-13, 2021.
- 50. Invited Speaker. "Brief and accessible behavioral treatments for acute and chronic pain." University of Pittsburgh Medical Center. Department of Physical Medicine and Rehabilitation. Oct 20, 2021.
- 51. Keynote Speaker. "Achieving Patient-Centeredness in Pain Care and Opioid Stewardship: Access is Everything. Kaiser Permanente Mid-Atlantic Annual Pain Summit. October 16, 2021.
- 52. Keynote Speaker, Southern Headache Society 11th Annual Scientific Meeting. "Brief skills-based behavioral medicine for pain relief". Charlotte, NC. October 2, 2021. (COVID postponed)
- 53. Speaker, Hoag VR conference. "Virtual Reality for Chronic Pain 3 Month Post-treatment Efficacy Data". Newport Beach, CA. October 1, 2021.
- 54. Plenary Speaker, Colorado Pain Society. "Patient-Centered Prescription Opioid Tapering: Colorado Leads the Way." Avon, CO. Sept 25, 2021.
- 55. Invited Speaker, Midwest Pain Society. "Empowered pain relief: Single-session behavioral medicine interventions." Chicago, IL. Sept 25, 2021.
- 56. Speaker, American Society of Regional Anesthesia and Pain Medicine. "Perioperative Behavioral Medicine for Pain: More than CBT." (with Max Slepian, PhD). Persistent Perioperative Pain Symposium. Sept 25, 2021.
- 57. Plenary Speaker, Colorado Pain Society. "Expanding Rapid Access to Low-Cost Perioperative and Chronic Pain Care via Brief Behavioral Medicine Interventions". Avon, CO. Sept 24, 2021.
- 58. Plenary Speaker, "Advances in Addressing Pain and Pain Disparities." OutFront Ideas virtual conference (insurance industry). Sept 21, 2021.

- 59. Invited Speaker. "Why and how prescription opioid reduction should be voluntary and patient-centered." University of Pittsburgh Medical Center. Department of Physical Medicine and Rehabilitation. June 16, 2021.
- 60. Invited Speaker. "Perioperative psychological prehabilitation: is it effective and who should do it?" Royal College of Anaesthetists (UK) Pain Medicine webinar on 'Acute/In-patient pain'. London, UK. June 8, 2021.
- 61. Workshop Presenter. "Immersive virtual reality to induce a positive therapeutic experience in musculoskeletal pain patients." 2021 Society for Interdisciplinary Placebo Studies (SIPS) International Conference. Baltimore, MD. May 27, 2021
- 62. International Keynote Speaker, New Zealand Pain Society 2021 Conference. Patient Centered Opioid Tapering. Waitangi, New Zealand. March 18 20, 2021.
- 63. International Keynote Speaker. "Empowered Relief: Single-session class for chronic pain relief." Danish Pain Society. March 12, 2021.
- 64. Invited Speaker. "Strategies for Non-Opioid Pain Management." Centers for Medicare & Medicaid Services (CMS) sponsored national webinar. November 10, 2020.
- 65. Hoag Advances in Virtual Reality Conference. "Evolution of Behavioral Medicine for Chronic Pain to Virtual Reality". October 9, 2020. (online, international)
- 66. Invited Speaker. "Virtual Reality and Chronic Pain." Virtual Medicine 2020 Conference. Hosted by Cedars Sinai Healthcare; international audience. June 30, 2020.
- 67. Invited Speaker. CME webinar series on Comprehensive Review of Pain Medicine. "Scalable and Brief Behavioral Pain Medicine Interventions." (Edgar Ross series; Oakstone Publishing) June 12, 2020
- 68. Invited Speaker. CME webinar series on Comprehensive Review of Pain Medicine. "Patient-Centered Opioid Reduction: Avoiding Iatrogenic Harms and Ensuring Patient Protections." (Edgar Ross series; Oakstone Publishing). June 12, 2020.
- 69. Invited Speaker. American Psychological Association. "Psychological Treatment for Patients with Chronic Pain." June 10, 2020.
- Invited Speaker. 15th annual NIH Pain Consortium Symposium. "Digital Behavioral Medicine for Pain Relief and Opioid Reduction". June 3, 2020. (virtual event due to COVID-19)
- 71. Invited Speaker. NIH HEAL Conference on Managing Chronic Pain in Individuals with Cooccurring OUD, and Other Psychiatric Conditions. "Evolution of Opioid Tapering and Challenges." June 1, 2020. (virtual event due to COVID-19)
- 72. Co-presenter. "Patient-Centered Opioid De-Prescribing." National Register. 3-hour CME webinar presentation with Aram Mardian, MD. May 27, 2020.
- 73. International Keynote Speaker, Taiwan Pain Society 2020 Conference. Taipei, Taiwan. March 28-29, 2020. (Postponed due to COVID-19)

- 74. Featured Speaker. Kauai Pain Conference. "Patient-Centered Opioid Reduction: Avoiding Introgenic Harms and Ensuring Patient Protections." Lihue, HI. March 7, 2020.
- 75. Featured Speaker. Kauai Pain Conference. "Scalable Behavioral Pain Treatments for Pain and Opioid Reduction Across the Continuum of Care." Lihue, HI. March 6, 2020
- 76. Chair, Women in Pain Medicine Panel. American Academy of Pain Medicine Annual Conference. National Harbor, MD. March 1, 2020.
- 77. Speaker, Addressing Complexities of Opioid De-prescribing with Patient-Centered Approaches: Supportive Psychological Strategies, Low-Cost Technologies, and Self-Management Tools. American Academy of Pain Medicine Annual Conference. National Harbor, MD. February 29, 2020.\*
- 78. Session Chair and Speaker, Expanding Rapid Access to Treatment Across the Continuum of Care: "Empowered Relief" and "My Surgical Success." American Academy of Pain Medicine Annual Conference. National Harbor, MD. February 28, 2020.
- 79. Invited Faculty, "Scaling Behavioral Medicine for Pain Across the Continuum of Care: Clinical Innovations". American Psychological Association's Online Academy of Behavioral Pain Management: Interventions and Innovations. Washington, D.C. February 26, 2020.
- 80. Grand Rounds Speaker. "Patient-Centered Pain and Opioid Reduction: Scaling Solutions Across Perioperative and Outpatient Settings." Scripps Health. San Diego, CA. February 19, 2020.
- 81. Invited Speaker, National Institute of Health. National Cancer Institute (NCI): Cognitive, Affective, and Social Processes in Health Research (<u>CASPHR</u>) meeting on Cancer Pain Management Inequities. "Treating the Full Definition of Pain within the Context of Cancer Treatment and Survivorship". Rockville, MD. December 5, 2019.
- 82. Invited Speaker, Department of Defense, Walter Reed Hospital, Pain Fellows Lecture. "Scalable behavioral medicine treatments for acute and chronic pain management and opioid reduction." Bethesda, MD. December 4, 2019.
- 83. International Keynote Speaker, Descending the Ladder of Opioid Prescribing. "From overprescribing to over de-prescribing: What can we learn from the opioid crisis in the USA?" Sydney, Australia. November 29, 2019.
- International Keynote Speaker, Descending the Ladder of Opioid Prescribing. "Patient-Centered Prescription Opioid Tapering and Pain Management." Sydney, Australia. November 29, 2019.
- 85. International Keynote Speaker, Descending the Ladder of Opioid Prescribing. "Digital Behavioral Medicine for Perioperative Pain: 'My Surgical Success'." Sydney, Australia. November 29, 2019.
- 86. Invited Speaker. Personalized Medicine and Digital Interventions to Address the Complexity of Pain. McGill University. Montreal, Canada. November 7, 2019.
- 87. Invited Speaker. The Deleterious Effects of a One-size-fits-all Approach to Pain and Opioid Reduction. McGill University. Montreal, Canada. November 7, 2019.

- 88. Invited Speaker, "Patient-Centered Prescription Opioid Reduction: A Toolkit for Psychologists." National webinar, National Register of Health Service Psychologists. October 10, 2019.
- 89. Grand Rounds Invited Speaker, Department of Physical Medicine and Rehabilitation. "Leveraging Technology and Brief Interventions to Scale Rapid Access to Low-Cost Perioperative & Outpatient Behavioral Pain Care." Stanford University School of Medicine. Stanford, CA. Oct 9, 2019.
- Session Chair and Speaker, "Patient-Centered Opioid De-prescribing and Whole Person Pain Care".
   Patient-Centered Outcomes Research Institute (PCORI) annual conference. Washington, D.C.
   September 19, 2019.
- 91. Invited Speaker, "Navigating the Challenges in an Era of Opioid De-prescribing: Behavioral Strategies for Patient Engagement and Success." Co-presented with Dr. Aram Mardian. PCSS collaboration with the American Academy of Pain Medicine; online and archived CME webinar. July 11, 2019.
- 92. Speaker, "Transforming Care for Back and Neck Pain with Learning Health Systems and Integrated Digital and Brief Behavioral Treatments". XVI International Forum on Back and Neck Pain Research in Primary Care. Quebec City, Canada. July 5, 2019. (with session chair Dr. Tim Wideman and Julia Hush, PhD).
- 93. Invited Speaker, "Promising Practices for Supporting Dually Eligible Older Adults with Complex Pain Needs" Webinar. <a href="http://resourcesForIntegratedCare.com">http://resourcesForIntegratedCare.com</a> June 27, 2019.
- 94. International Keynote Speaker. Brief and Digital Behavioral Pain Medicine Across the Continuum of Care: "Empowered Relief" and "My Surgical Success." Australian Pain Society 2019 annual conference. Gold Coast, Australia. April 8, 2019.
- 95. International Keynote Speaker. Integrated Perioperative Pain Care and Patient-Centered Prescription Opioid Tapering: Pragmatic Studies Across the Continuum of Care. Australian Pain Society 2019 annual conference. Gold Coast, Australia. April 9, 2019.
- 96. Workshop Faculty, Social Dimensions of Pain. Workshop chair: Dr. Claire Ashton-James. Copresenting with Profs. Claire Ashton-James, Tor Wager and Milton Cohen. Australian Pain Society 2019 annual conference. Gold Coast, Australia. April 9, 2019.
- 97. Symposium Faculty. Multimodal Contributors to the Negative Impact of Pain Catastrophizing (with Drs. R Edwards and V Napadow). American Pain Society annual conference. Milwaukee, WI. April 4, 2019.
- 98. Session Chair and Speaker. Patient-Centered Opioid Tapering: Translating the Science of Placebo and Nocebo for Pain Relief and Successful Opioid Reduction (with Drs. L Atlas and L Colloca). American Pain Society annual conference. Milwaukee, WI. April 4, 2019.
- 99. Session Chair and Speaker. Patient-Centered Opioid Tapering: Recipes for Success Across Practice Settings (with Drs. Mardian and Karnak). American Academy of Pain Medicine annual conference. Denver, CO. March 8, 2019.\*
- 100.Grand Rounds Speaker, Kettering Fort Hamilton Hospital. "Pain Psychology for Pain and Opioid Reduction." Fort Hamilton, OH. February 5, 2019.

- 101. Grand Rounds Invited Speaker, Mercy Hospital. Fairfield, OH. "Pain Psychology for Pain and Opioid Reduction." February 4, 2019.
- 102.Invited Speaker. NIH Guest Lecture Series in Pain. "Applying Psychological Science for Pain & Opioid Reduction Across the Continuum of Care." National Institutes of Health, Bethesda, MD. October 11, 2018.
- 103. Grand Rounds, Department of Anesthesiology, Perioperative and Pain Medicine. Stanford University. "Pain and Opioid Reduction: Clinical Trials." Sept 18, 2017
- 104.Invited Faculty. International Association for the Study of Pain. IASP Workshop on Disparities for Psychological Treatment for Pain. "Brief and Digital Treatments to Improve Access to Low-Cost, High-Quality Pain Care." Boston, MA. September 15, 2018.
- 105. Podium Speaker. "The Science of Pain Psychology & Opioid Reduction." 2018 PAINWeek annual national conference. Las Vegas, NV. September 4, 2018.
- 106. Keynote Speaker. American Psychological Association 2018 annual national convention. "Applying Psychological Science for Pain and Opioid Reduction." San Francisco, CA. August 11, 2018. (invited address for APA Divisions 38, 12, 22, 45).
- 107. Invited Panelist. "Lifestyle Related Diseases: A Global Epidemic." 2018 Global Solutions Summit, Berlin, Germany. May 28, 2018. This is a G7/G20 think tank summit. Session moderated by Dr. Detlev Ganten, President of the World Health Summit (I represented the global burden of pain and needed solutions).
- 108. Podium Speaker. "Brief Psychological Interventions for Pain across the Continuum of Care: Scaling Targeted Treatments and Integration into Learning Health Systems." World Institute of Pain 2018 conference (with Chair Dr. Sean Mackey). Dublin, Ireland. May 12, 2018.
- 109. Grand Rounds Speaker, Intermountain Healthcare System. "Pain and Opioid Reduction: The National Empower Study". Layton, UT. May 21, 2018. (broadcast on IH education channel)
- 110. Podium Speaker. "Psychological Science of Pain and Relief." American Academy of Pain Medicine annual meeting. Vancouver, Canada. April 29, 2018.
- 111. Plenary Speaker (Plenary Research Highlights Awards). "Voluntary Patient-Centered Opioid Tapering in Community Outpatients with Chronic Pain." American Academy of Pain Medicine annual meeting. Vancouver, Canada. April 28, 2018.
- 112.Invited Speaker. "Overview of PCORI Pragmatic Project for Opioid and Pain Reduction in Patients Taking Long-term Opioids." Psychosocial Research Shared Interest Group meeting. American Pain Society, annual national meeting. Anaheim, CA. March 6, 2018.
- 113.Invited Speaker, "Changing Patient Mindsets to Enhance Pain Treatment Effectiveness. Kauai Pain Conference". Lihue, HI. March 2, 2018.
- 114.Invited Speaker, "Reducing Pain and Opioid Use with a Dearth of Resources Evidence-based Strategies for Improving Patient Outcomes". Kauai Pain Conference. Lihue, HI. March 2, 2018.

- 115. Grand Rounds Invited Speaker, Department of Medicine, Kaiser Permanente. "Psychological Science for Pain and Opioid Reduction". Oakland, CA. Feb 14, 2019.
- 116. Invited speaker, 2018 World Economic Forum. "Exploring the Mysteries of the Mind" with Matthieu Ricard and Daniel Dennet. Davos, Switzerland. January 24, 2018.
- 117. Invited speaker. "The Psychology of Pain Relief." 2018 World Economic Forum. Stanford Neurosciences Team. Davos, Switzerland. January 24, 2018.
- 118. Invited speaker, 2018 World Economic Forum. "Optimizing Mindset for Pain Relief." Stanford Neurosciences Team. Davos, Switzerland. January 23, 2018.
- 119.Invited Speaker. "The Science of Pain Psychology." North American Neuromodulation Society Annual Meeting. Las Vegas, NV. January 11, 2018.
- 120.Plenary Speaker. "Transforming Negative Mindset to Enhance Pain Treatment Effectiveness and Reduce Opioid Use." Pain Society of Israel. Eilat, Israel. November 12, 2017.
- 121.Invited Panelist. "Treating Pain Better" (with AAPM President Dr. Steven Stanos and Dr. James Achinson). CompLaude National Awards and Gala; WorkCompCentral. San Diego, CA. Nov 1, 2017.
- 122. Keynote Speaker. "Changing Mindsets to Enhance Pain Treatment Effectiveness" Academy of Integrative Pain Management. National annual meeting. San Diego, CA. October 21, 2017.
- 123.Invited Webinar Speaker. "Reducing Catastrophizing to Prevent and Treat Chronic Pain." Work Wellness and Disability Prevention Institute. May 17, 2017.
- 124. Grand Rounds, Internal Medicine, San Francisco VA. San Francisco, CA. "Pain Psychology and Opioid Reduction." May 9, 2017.
- 125.Invited Webinar Speaker (with AAPM President Dr. Steven Stanos). Minimizing Opioids. OutFront Ideas for Worker's Compensation. May 9, 2017.
- 126.Invited Podium Speaker. "Pain Psychology & Sex/Gender." Society for Acupuncture Research International Conference. San Francisco, CA. April 29, 2017.
- 127.Plenary Speaker and Session Chair. "Behavioral and Self-Management Resources for Immediate Implementation: Align Your Practice with the Changes in Public Healthcare". (Co-presenters Penney Cowan and Pete Moore). American Academy of Pain Medicine, 2017 Conference. Orlando, FL. March 18, 2017.
- 128. Invited Podium Speaker. "Perioperative Pain Psychology." International Association for the Study of Pain. IASP Acute Pain SIG Workshop. Yokohama, Japan. September 25, 2016.
- 129.Session Chair and Speaker. "In the Wake of the CDC Opioid Guidelines and The National Pain Strategy: Leveraging Pain Psychology and Platforms to Address the National Pain Strategy and Opioid Crises". Darnall BD and Mackey SC. PAINWeek 2016, Las Vegas, NV. Sept 8, 2016.
- 130. Speaker. "Perioperative Pain Psychology Interventions and Learning Health Systems." mHealth Conference. National University of Ireland, Galway, Ireland. June 16, 2016.

- 131.Session Chair and Speaker. "Boots on the Ground in Opioid Tapering: Novel Assistance for Prescribers" Darnall BD, Steig R, Kao MC. Co-presenter: "A Low-Cost, Medically Supervised Behavioral Opioid Taper Program for Community-Dwelling Chronic Pain Patients (with Dr. Richard Steig). American Academy of Pain Medicine annual national conference. Palm Springs, CA. Feb 19, 2016.
- 132. Session Chair and Speaker. "Pain Psychology: A Needs Assessment and National Call to Action (The AAPM Task Force on Pain Psychology)" Darnall BD, Scheman J, Davin S. American Academy of Pain Medicine annual national conference. Palm Springs, CA. Feb 20, 2016.
- 133. Faculty. Darnall BD. European Pain School (an educational project of the IASP)
  University of Siena, Certosa di Pontignono, Siena, Italy
  "Catastrophizing: Cognitions and emotions that amplify pain." Siena, Italy; June 7, 2016.
  "Hormones or psyche: What's more important for women in pain?" Siena, Italy; June 8, 2016.
- 134. Speaker. Darnall BD. "Opening the Medicine Box in Your Mind." Trigeminal Neuralgia Association of Australia. Annual Conference. Gold Coast, Australia. August 16, 2015.
- 135. Speaker. Darnall BD. "Minimizing Opioids by Optimizing Pain Psychology." Pain Management Research Institute. Royal North Shore Hospital. Sydney, Australia. August 13, 2015.
- 136.Session Chair and Speaker. "Basic and Clinical Pain Research Ethics: National Oversight, Data Integrity, and How and Why Your Role as Ethical Steward Outlasts Your Research Study." Darnall BD, Parkitny L, and Ambalavanar R. American Pain Society 34th annual scientific meeting. Palm Springs, CA. May 15, 2015.
- 137. Session Chair and Speaker. "Opioid Drug:Drug Interaction Pitfalls." Darnall BD, McCance-Katz EF, Kao MC. American Academy of Pain Medicine annual conference. Washington, DC. March 20, 2015. Highest rated symposium of the 2015 AAPM conference.
- 138.Session Chair and Speaker. "Stop Catastrophizing from Undermining Your Treatment Outcomes." Darnall BD & Edwards RR. American Academy of Pain Medicine annual conference. Washington, DC. March 21, 2015.
- 139. Session Chair and Speaker. "The Psychology of Opioids." Darnall BD, Sullivan M, Mackey SC. PAINWeek 2014, Las Vegas, NV. Sept 4, 2014.
- 140.Session Chair and Speaker. "Mind Over Pill." Darnall BD, Sullivan M, and Prasad R. American Academy of Pain Medicine Annual Conference. Phoenix, AZ. March 8, 2014.
- 141.Invited Podium Speaker, "Pain, Psychology & Opioids." Fundamentals of Pain Management: 2013 Primer Course, sponsored by the American Pain Society. New Orleans, LA. May 7, 2013.
- 142.Co-Presenter, "Hot Topics in Pain Psychology." Prasad R and Darnall BD. American Academy of Pain Medicine annual conference. Ft. Lauderdale, FL. April 14, 2013.
- 143.Invited Podium Speaker, "Relationships and chronic pain." Women in Pain 5th annual conference. Los Angeles, CA. Sept 14, 2012.

- 144.Invited Co-presenter. "The rational use of opioid analysesics for non-cancer chronic pain: What every prescriber needs to know." Darnall BD, Argoff C. Served as faculty representing the American Pain Society at PAINWeek. Las Vegas, NV. Sept 7, 2012.
- 145.Session Chair and Speaker. "Translating opioid research findings into clinical practice: practical and ethical implications." Darnall BD, Ballantyne J, Argoff C, Schatman M. American Pain Society 2012 scientific conference. Honolulu, HI. May 17, 2012.
- 146. Speaker. "Change your brain, change your pain." American Academy of Pain Management, 22<sup>nd</sup> annual conference. Las Vegas, NV. Sept 21, 2011.
- 147.Invited Keynote Speaker. "Pain in Women: Finding the gift and flourishing." Women in Pain 4th annual conference. Los Angeles, CA. Sept 16, 2011.
- 148. Session Chair and Moderator. "Empowering Women in Pain," Women in Pain 4th annual conference. Los Angeles, CA. Sept 16, 2011.
- 149. Invited oral presentation: "Gender Dimorphic Immunologic Response to Pain Catastrophizing." Office for Women's Health Research annual conference, NIH, Bethesda, MD. Nov 19, 2009.
- 150. Selected oral presentation: "Immunologic Response to a Pain Catastrophizing Induction." Selected oral presentation, The International Association for the Study of Pain, triennial conference; Glasgow, Scotland. Aug 20, 2008.
- 151.Invited podium speaker: "Immunologic Response to Pain Catastrophizing." American Pain Society Annual Scientific Meeting, Tampa, FL. May 10, 2008.

## State and Regional CME Lectures

- 1. Invited Speaker, SPARC Lecture Series, Department of Anesthesiology, Perioperative and Pain Medicine. University of California San Francisco (UCSF). "Patient-Centered and Scalable Innovations for Pain Relief and Opioid Stewardship." San Francisco, CA. November 9, 2022.
- 2. Invited Speaker. Laguna Honda Hospital and UCSF. "Behavioral interventions and patient-centered opioid tapering." Online. September 9, 2022.
- 3. Keynote Speaker. 11th Annual Integration Summit; Health Quality Partners. "Patient-Centered Pain Care: Accessible Behavioral Health and Opioid Stewardship." San Diego, CA. Nov 13, 2020.
- 4. Keynote Speaker. California Psychological Association annual conference. "Applying Psychological Science to Address the Dual Crises of Pain and Prescription Opioids in America." San Diego, CA. October 27, 2018.
- 5. Invited Speaker. California Psychological Association annual conference. "Alternative No More: Evidence-Based Psychological Treatments as Primary Pain Management." San Diego, CA. October 27, 2018.
- 6. Invited Speaker. Health Quality Partners of Southern California Physician Webinar Series (sponsored by the NIH Office for Research on Women's Health). "De-emphasizing Opioids: The Critical Role of Behavioral Treatments for Chronic Pain." July 13, 2018.

- 7. "Psychological Science for Pain and Opioid Reduction." Stanford Neuroscience Institute Retreat. Pajaro Dunes, CA. May 6, 2018.
- 8. "Pragmatic Opioid Reduction: A Patient-Centered Approach." University of Maryland, School of Nursing. Baltimore, MD. Feb 9, 2018.
- 9. Invited Podium Speaker. "Pain Psychology and Opioids." Santa Clara Opioid Overdose Prevention Project. Santa Clara, CA. March 29, 2017.
- 10. Invited Podium Speaker. "Pain Psychology and Opioids." Kauai Pain Conference. Lihue, HI. February 25, 2017.
- 11. Invited Podium Speaker. "The Science of Pain: Psychology". Kauai Pain Conference. Lihue, HI. February 24, 2017.
- 12. "Pain Psychology." The San Diego Pain Summit. San Diego, CA. February 10, 2017.
- "Novel Psychobehavioral Interventions for Chronic Pain and Perioperative Patients."
   Stanford/UCSF Pain Education Exchange. Department of Anesthesiology, Perioperative and Pain Medicine. University of California San Francisco. San Francisco, CA. Jan 13, 2017.
- 14. "The Tennessee Pain, Opioids, Problems and Solutions Forum." Invited Panel Speaker. Nashville, TN. April 5, 2016.
- 15. Invited Panel Moderator. "The Tennessee Pain, Opioids, Problems and Solutions Forum." Nashville, TN. April 5, 2016.
- 16. "Primer on Pain Psychology and Interventions." Invited Podium Speaker. 2016 Third Annual Addiction Medicine Conference. Santa Clara, CA. April 4, 2016.
- 17. "Are Pre- and Post-Operative Pain Catastrophizing Undermining Your Surgical Outcomes? San Francisco Surgical Society. San Francisco, CA. March 30, 2016.
- 18. "Minimizing Opioids and Optimizing Psychology." Stanford University, Western Pain Society, and the American Academy of Pain Medicine: Conquering Pain Locally, Regionally and Nationally. Stanford, CA. September 19, 2014.
- 19. "Optimizing Patient Transformation: Hot Trends in Coaching & Education." Western Pain Society annual conference (WPS is a 13-state regional pain society). Eugene, OR; September 21, 2013.
- 20. "The Interface Between Opioids and Chronic Pain." Hoag Neuroscience Symposium. Pain and Addiction: The Ultimate Challenge of the Treating Physician. Irvine, CA; March 23, 2013.
- 21. "Pain characteristics and pain catastrophizing in incarcerated women with chronic pain: Research results and implications for clinical care." State of Oregon Department of Corrections annual health provider conference. Salem, OR; April 5, 2012.
- 22. "The Interface Between Psychology and Opioids." Pain Society of Oregon. Eugene Chapter; Eugene, OR, October 19, 2011.

- 23. "The Interface Between Psychology and Opioids." Pain Society of Oregon. Portland Chapter; Portland, OR, October 18, 2011.
- 24. Session Chair and Speaker. Darnall BD, Pengally S, Schatman M. "Complex Psychological Issues." Western Pain Society annual conference. Salem, OR. October 1, 2011.
- 25. "Chronic Pain in Women," Western Pain Society annual conference. Salem, OR. October 2, 2011.
- 26. "Change Your Brain, Change Your Pain." Veterans Administration Health Care System, VISN 20 Region (telecast across Oregon, Southern Washington, Alaska, Idaho). August 25, 2011.
- 27. Co-Lecturer. Darnall BD & Wagner J. "Barriers to Care: New Models for Accessing Pain Treatment." Pain Society of Oregon annual conference. Salem, OR. May 22, 2010.
- 28. "Mirror Therapy for Phantom Pain." Pain Society of Oregon annual conference. May 22, 2010.
- 29. "Gender-Specific Treatment for Women with Chronic Pain," Pain Society of Oregon. October 20, 2009.
- 30. "Immunologic Response to Pain Catastrophizing," Western Pain Society, Annual Conference, April 24, 2008..
- 31. "Treating Chronic Pain in Corrections Settings," Oregon Department of Corrections. Salem, OR. Nov 9, 2008.
- 32. Poster selected for oral presentation. "The Immunologic Impact of In-Vivo Pain Catastrophizing." Darnall BD, Zwickey H, Byung P. American Pain Society Annual Meeting. May 9, 2008.
- 33. "Treating Patients with Chronic Pain," Seminar, Oregon Psychological Association annual meeting, May 2007.
- 34. Co-Presenter. Darnall BD & Abel JM. "Multidisciplinary Treatment of a Chronic Groin Pain Patient" Co-Presenter, Pain Society of Oregon Annual Clinical Meeting. April 15, 2006.

#### Local CME Presentations

- 1. "Digital Innovations in Pain Management." Radiation Oncology Faculty Seminar Series, Stanford University. 7/5/22.
- 2. "Power of the Brief Intervention." Division of Pain Medicine, Stanford University. 5/21/21.
- 3. "Stanford Healthcare Acute Pain Task Force: Education Subcommittee." Grand Rounds, Department of Anesthesiology, Perioperative and Pain Medicine, Stanford University. 11/1/20.
- 4. "Pain Psychology Research." Division of Pain Medicine, Stanford University. 11/6/20.
- 5. "Behavioral Medicine for Chronic Pain." Department of Psychiatry and Behavioral Sciences. Stanford, CA. 12/18/19.
- 6. "Digital interventions, opioid cessation, and VR applications in pain management." Center for Digital Health annual conference. Stanford University. Stanford, CA. 10/22/19.

- 7. "Expanding Access to Behavioral Medicine Across the Continuum of Spine Care." 8th Annual Navigating Spine Care Conference. Stanford, CA 8/24/19.
- 8. "Pain Psychology and Opioid Reduction." Palliative Medicine, faculty presentation, Stanford University. Palo Alto, CA 8/23/17.
- 9. "Pain Psychology and Opioid Reduction." Department of Primary Care, faculty presentation; Stanford University. Palo Alto, CA 8/10/17.
- 10. "Sex Differences in Psychosocial Factors and Pain." Division of Pain Medicine, Stanford University. Redwood City, CA 7/14/17.
- 11. Invited Podium Speaker. "The Role of Sex in Pain Psychology and Application of a Novel Psychobehavioral Intervention." Basic and Translational Research Symposium on Sex Differences in Neurosciences. Stanford, CA 3/8/17.
- 12. Psychological Treatment Modalities and Resources. Division of Pain Medicine, Stanford University, 4/10/15.
- 13. "Pain Catastrophizing." Division of Pain Medicine, Stanford University, 11/21/14.
- 14. "The interface between psychology and opioids." Division of Pain Medicine, Stanford University, 12/07/12.
- 15. "Home-based self-delivered mirror therapy for phantom pain." Quarterly conference, Department of Physical Medicine and Rehabilitation, Portland VA Hospital, 4/25/12.
- 16. "Goals of pain education: Minimize opioids, empower patients, relieve suffering." Grand Rounds, OHSU Department of Anesthesiology and Perioperative Medicine, 4/09/12.
- 17. "Utility of bilateral tactile stimulation in chronic pain: Rationale and applications." Portland EMDRIA practitioner group, 03/23/12.
- 18. Course organizer, panel moderator and speaker. "Opioids for chronic pain: Should we take that path?" Panel members: Stacey BR, Fromme E, Carr T, Wagner J, Darnall BD, 2<sup>nd</sup> Annual OHSU Pain Day, 2/28/12.
- 19. "Pain Psychology: Research & Clinical Updates." OHSU Division of Psychology, Spring Colloquium, 03/24/11.
- 20. "Change Your Brain, Change Your Pain," BRAINet, Portland, OR, 02/28/11.
- 21. Moderator, Panel Speaker: "Pain in Clinical Practice" OHSU Inaugural P.A.I.N. Day, 02/22/11.
- 22. "Clinical Pain Updates: Women are Not Men" OHSU Inaugural P.A.I.N. Day, 02/22/11.
- 23. "The Mystery of Pain." Bing Pain Lounge: OHSU Medical Breakthroughs. Co-Presenter with Stacey, BR; Taped and webcast. 2/09/11.
- 24. "Pain Psychology." Portland VA Mental Health, psychology intern and post-doctoral fellow lecture, 2/02/11.

- 25. "Mirror Therapy for Phantom Pain." OHSU Department of Anesthesiology & Perioperative Medicine, Departmental Grand Rounds, 1/10/11.
- 26. "The Interface Between Psychology and Opioid Use." OHSU Department of Anesthesiology & Perioperative Medicine, 09/10.
- 27. "Improving Access to Mirror Therapy for Phantom Pain." OHSU/Kaiser CHR collaborative pain research interest group meeting, 8/02/10.
- 28. "Gender-Responsive Chronic Pain Treatment for Incarcerated Women with Substance Abuse." OHSU and Kaiser Permanente collaborative pain research interest group meeting, 4/05/10.
- 29. "Psychological Stress and Inflammatory Factors." OHSU Central Sensitivity Research Group, 1/07/10.
- 30. "Pain Psychology." Portland VA Mental Health, psychology intern and post-doctoral fellow lecture, 12/09/09.
- 31. "Immune Mediators of Pain." OHSU Department of Anesthesiology, Pain Fellows Lecture, 2/09/09.
- 32. "Treating Patients with Comorbid Chronic Pain." Grand Rounds, OHSU Department of Psychiatry, 6/17/08.
- 33. "IL-6 Response to In-Vivo Pain Catastrophizing is Gender Dimorphic." OHSU Human Investigator Program, Annual Conference and Awards Ceremony, 5/30/08.
- 34. "Can Your Thoughts Affect Your Immune System?" Department of Psychology, Portland State University, 5/27/08.
- 35. "How Your Thoughts Affect Your Immune System," Marquam Hill Lecture Series, OHSU, 5/15/08.
- 36. "IL-6 Response to In-Vivo Pain Catastrophizing is Gender Dimorphic." Selected oral presentation, OHSU Human Investigator Annual Symposium and Awards Ceremony, 5/30/08.
- 37. "Chronic Pain Patient Services." Department of Psychiatry, OHSU, Psychiatry Resident Lecture; 1/21/08.
- 38. "Self-Management of Chronic Pain." Lupus Society of Portland, 1/07.
- 39. "An Investigation of Immunologic Response to Negative Cognition in Persons with Chronic Pain." Symposium for Portland Area Research on Complementary and Alternative Medicine, Annual Conference; 6/09/07.
- 40. "Adult Pain Psychology." Grand Rounds, Department of Anesthesiology and Perioperative Medicine, OHSU. 6/19/06.
- 41. Department of Bariatrics, OHSU. "Maximizing Post-Operative Success," 04/06.
- 42. Pain Fellows Didactic Lecture Series

Stanford University, Department of Anesthesiology, Perioperative and Pain Medicine Deliver ~2 pain psychology lectures each year (2012- present)

43. Pain Fellows Didactic Lecture Series
Portland VA Mental Health, Psychology Lecture Series
Annually lectured to post-doctoral fellows and interns on pain psychology, 2009-2012.

### Non-CME Presentations and University Guest Lectures (National and International bolded)

- 1. Invited Speaker. "Empowered Pain Relief." SCAN Health 2023 Pain Awareness Month Lecture. September 28, 2023. (CA statewide audience)
- 2. Invited Speaker. "Empowered Relief." Facial Pain Association 2023 national annual conference. April 29, 2023.
- 3. Invited Lecturer. "Applying Behavioral Science to Reduce Acute and Chronic Pain and Opioid Use." Stanford University undergraduate and graduate level course CHPR270 (Stefanick). Stanford University, Palo Alto, CA. April 20, 2023.
- 4. Invited Speaker. "1-Session Empowered Relief for acute, surgical, and chronic pain." Dept. of Anesthesiology, Perioperative and Pain Medicine. R&D Stanford Data Blitz. Stanford, University. March 3, 2023.
- 5. Invited Speaker. "Pain Management Skills: What it is, why it matters, and how to get it." 2022 Marfan Patient Conference. Newport Beach, CA. July 9, 2022.
- 6. Keynote Speaker. "Innovations to Improve Access to Evidence-Based Behavioral Pain Care." 2022 Stanford Pre-health Conference. Stanford University. May 7, 2022.
- 7. Invited Lecturer. "Pain: The biopsychosocial perspective and 'whole person' care." Stanford University course HMBIO Neuroethics. May 2, 2022.
- 8. Guest Speaker. "Pain Research." Stanford Department of Anesthesiology, Perioperative and Pain Medicine; Division of Obstetric Anesthesia. April 20, 2022.
- 9. Guest Lecturer. "Pain and Opioid Crises: Behavioral Medicine Treatments." Community Health and Prevention Research (CHPR) Masters program (Prevention across Medical and Surgical Disciplines). Stanford University School of Medicine. April 19, 2022.
- 10. Faculty Lecturer. "Pain Psychology Research in the Division of Pain Medicine." Pain Fellows Lecture Series. Stanford University, Division of Pain Medicine. April 8, 2022.
- 11. Guest Lecturer. "Whole Person Pain Care: Latest research on brief and scalable treatments for pain and opioid reduction." Facial Pain Association. March 9, 2022.
- 12. Guest Lecturer. "Pain: The biopsychosocial perspective and 'whole person' care." Stanford University course Psych101/HumBio128 Community Health Psychology. March 8, 2022.
- 13. Guest Lecturer. Undergraduate course. "Behavioral treatment for acute and chronic pain and opioid reduction". Pomona College. March 7, 2022.

- 14. Invited Speaker. Empowered Pain Relief: What it is and Why it Matters. Bill Nelems Pain Clinic presentation (with Maisa Ziadni, PhD). British Columbia, Canada. May 2021.
- 15. Invited Lecturer. "Applying behavioral science to reduce acute and chronic pain and opioid use." Stanford University graduate course CHPR 270: Prevention across Surgical and Medical Disciplines. 5/25/21.
- 16. Invited Lecturer. "Pain: The biopsychosocial perspective and 'whole person' care." Stanford University course HMBIO Neuroethics. 5/19/21.
- 17. Panel Moderator (with NINDS Director Dr. Walter Koroshetz). Workshop on Achieving Health Equity in the NIH HEAL Initiative. "Successful Strategies for Increasing Diversity and Inclusion in Clinical Studies." NIH webinar. 2/1/21.
- 18. Invited Speaker. "Empowered Relief: Improving access to interventions for pain relief and opioid reduction." Le Pub Scientifique international webinar. 1/20/21.
- 19. Invited Discussant. "Inclusion and Retention of Diverse Populations in NIH Clinical Pain Research Studies. NIH Interageracy Pain Research Coordinating Committee (IPRCC). National public meeting. 11/23/20.
- 20. "Patient-Centered Opioid Prescribing and Tapering." State of Minnesota Opioid Task Force. 10/22/20.
- 21. "Pain: The biopsychosocial perspective and 'whole person' care." Neuroethics guest lecture (graduate and undergraduate course). Stanford University. 5/20/20.
- 22. "Empowered Relief": A scalable, skills-based class for chronic pain. The Pain Toolkit international webinar. 4/27/20.
- 23. "Patient-Centered Prescription Opioid Tapering". University of Colorado at Denver. SNO-CAPS meeting. Denver, CO. 3/5/19.
- 24. "Transcending Barriers to Pain Care" Innovations Lab Presentation; International Association for the Study of Pain annual conference. Boston, MA. 9/13/18.
- 25. "The EMPOWER Study: Effective Management of Pain and Opioid-Free Ways to Enhance Relief." Stanford Research Management Group. Stanford, CA. 7/26/18.
- 26. Patient-Centered Opioid Tapering: The EMPOWER Study. Stanford Primary Care Faculty presentation. Stanford, CA. 7/26/18.
- 27. "Pain Psychology: Harnessing the Power of the Mind for Pain Relief." Stanford Health Improvement Program webinar. Stanford, CA. 7/24/18.
- 28. "The Power of the Mind for Pain Relief." Marfan Foundation annual conference. Santa Clara, CA. 7/14/18.
- 29. Pain psychology panelist. The Marfan Foundation annual conference. Santa Clara, CA. 7/14/18.

- 30. "Psychological Science for Pain and Opioid Reduction." Guest Lecturer, Community Health and Prevention Research (CHPR) master's degree program (Course Professor: Dr. Marcia Stefanik). Spring Quarter 2018. Stanford University. 5/1/18.
- 31. "Pain Psychology and Opioids." Stanford Faculty and Staff Lecture Series. Stanford, CA. 5/24/17.
- 32. "Pain in Women and Why Psychology Matters More." Stanford Health Matters (public event). Stanford, CA. 5/20/17
- 33. "Pain Psychology." Stanford Neurosurgery, Oncology, and Palliative Medicine. Stanford, CA. 3/22/17.
- 34. "Pain Psychology: Using the power of your brain to reduce pain and use of painkillers." Stanford Corporate Partners webinar (broadcast internationally). Stanford, CA. 1/16/17.
- 35. "The Role of Psychology in Pain and Pain Treatment." Stanford Medical Students (Continuity of Care course). Stanford, CA. 1/12/17.
- 36. "Research in the Division of Pain Medicine." Dept. of Anesthesiology, Perioperative and Pain Medicine. Stanford Hospital. Stanford, CA. 9/01/16
- 37. "Research in the Division of Pain Medicine." Dept. of Anesthesiology, Perioperative and Pain Medicine. Systems Neuroscience and Pain Lab. Palo Alto, CA. 8/31/16
- 38. Chair, Ethics SIG meeting at the annual scientific conference of the American Pain Society. "Ethical Imperative of Pain Education." SIG Guest speaker, Dr. Keela Herr. Austin, TX. 5/12/16.
- 39. "Empowering Chronic Pain Patients with Pain Psychology." Stanford University, Med School 101. Stanford, CA. 4/29/16.
- 40. "Pain Psychology: Opening the Medicine Box in Your Mind." Marfan Foundation National Speaker series. Stanford, CA. 1/30/16. (webcast internationally)
- 41. "Pain Psychology: Opening the Medicine Box in Your Mind." Stanford Health Library Series. Stanford, CA. 11/5/15 (capacity audience; live-streamed, recorded and posted online).
- 42. "Opening the Medicine Box in Your Mind." Stanford Free Back Pain Education Day. Stanford, CA. 9/13/15.
- 43. "Changing Pain, Brain and Behavior." Research and Development presentation, Department of Anesthesiology, Perioperative and Pain Medicine, Stanford University, Stanford, CA: 3/10/15.
- 44. "Perioperative Pain Psychology." Stanford University Colorectal Surgery group, Stanford, CA: 1/27/15.
- 45. "Pain Psychology: Harness the Power of Your Brain." Stanford University and Western Pain Society all-day event for people living with chronic pain, Stanford, CA: 9/21/14.
- 46. Session Chair and Panel Speaker. "Ethical Topics in Chronic Pain." (Panelists: Stacey BR, Chou R, Scheman J, Darnall BD). Ethics SIG meeting for the 2014 Annual meeting of the American Pain Society. Tampa, FL: 4/29/14.

- 47. "Less Pain, Fewer Pills: Optimizing the Mind-Body Connection in Women with Chronic Pain." The 2013 Women's Health Forum, Stanford University: 5/15/13.
- 48. Session Chair and Panel Speaker. "The Industry Conundrum: The role of industry funding within the APS and at the national conference." (Panelists: Schatman M, Jarvis M, Manworren R, Peppin J, Darnall BD). Ethics SIG meeting for the 2013 Annual meeting of the American Pain Society. New Orleans, LA: 5/9/13.

## National Education Sessions for People with Chronic Pain

- 1. Empowered Relief®. Humana Neighborhood. National session. October 14, 2021.
- 2. Empowered Relief®. Humana Neighborhood. National session. October 18, 2021.
- 3. Empowered Relief<sup>®</sup>. Humana Neighborhood. National session. October 21, 2021.

### INTERNATIONAL RESEARCH & EDUCATION PROJECTS

#### Research Director

Directed a collaboration between the Universidade Federal de Minas Gerais School of Medicine, Belo Horizonte, Brazil, the University of New Mexico and the University of Colorado (5/95-5/96). Published the first prevalence data for eating disordered behaviors among Brazilian adolescents. Darnall BD, Smith JE, Craighead LW, & Lamounier JA. "Modification of the Cognitive Model for Bulimia via Path Analysis on a Brazilian Adolescent Sample." *Addictive Behaviors* 1999; 24 (1): 47-57

# Empowered Relief Clinician Certification Workshops

Empowered Relief® is a single-session pain relief class created by Beth Darnall and copyrighted/trademarked in combination with Stanford University ©2013-2021. The class is evidence-based, skills-based self-management treatment for chronic pain. Empowered Relief research is funded by the NIH (NCCIH R01 PIs Darnall and Mackey), the Canadian Institutes for Health Research, and the Patient Centered Outcomes Research Institute (PCORI) funds a 6-site national comparative effectiveness trial of online Empowered Relief vs. online 8-session CBT (2022-2027). Empowered Relief is being studied within the context of daily prescription opioid use for chronic pain (K23, Dr. Maisa Ziadni), people with migraine (K23, Dr. Drew Sturgeon) and in spine surgery patients at Cleveland Clinic (Dr. Sara Davin).

In 2019, Empowered Relief was cited by U.S. Health and Human Services Pain Management Best Practices Task Force as a promising scalable behavioral treatment for chronic pain. Two major insurance companies have integrated Empowered Relief into their portfolio of patient care.

Dr. Darnall leads a team that trains and certifies clinicians of all professional disciplines (e.g., physicians, nurses, psychologists, physical therapists, etc) to deliver Empowered Relief as a manualized single-session treatment. Empowered Relief is available in 7 languages, 26 countries, and throughout the United States, including within various VA Medical Centers, Cleveland Clinic, Kaiser Permanente, and Intermountain Healthcare. Each certification workshop provides 11 hours of continuing medical education through Stanford University (or through the Institute for Brain Potential), or the CME equivalent for multiple other professional disciplines (e.g., APA CEUs for psychologists, and CEs for physical therapists, etc). Website for continuing education and other details: <a href="https://empoweredrelief.stanford.edu">https://empoweredrelief.stanford.edu</a>

Past and upcoming\* Empowered Relief® CME certification workshops include:

- March 16-17, 2019 Stanford University, Palo Alto, CA, USA.
- August 26-27, 2019 Stanford University, Palo Alto, CA, USA.
- November 8-9, 2019 McGill University, Montreal, Quebec, Canada.
- February 11-12, 2020 San Diego Pain Summit, San Diego, CA USA.
- May 7-8, 2020 Fort Collins, CO, USA (postponed due to COVID)
- June 17-19 McGill University, Montreal, Quebec, Canada (postponed due to COVID)
- July 22-23, 2020 Stanford University, Palo Alto, CA USA (postponed due to COVID)
- October 1-2, 2020 International online certification course
- December 11-12, 2020 International online certification course
- February 22-23, 2021 International online certification course
- April 28-29, 2021 International online certification course
- July 22-23, 2021– International online certification course
- October 8-9, 2021 International online certification course
- January 27-28, 2022 International online certification course
- April 25-26, 2022 -- International online certification course
- July 19-22, 2022 Humana; private certification workshop
- August 1-2, 2022 -- International online certification course
- November 2-3, 2022 International online certification course
- February 6-7, 2023 International online certification course
- May 18-19, 2023 International online certification course
- July 24-26, 2023 International online certification course
- September 25-26, 2023 Monterey, CA USA (Institute for Brain Potential; 12 CEUs)
- December 3-4, 2023 -- International online certification course
- February 27-28, 2024 International online certification course

# Mirror Therapy workshops

Primary developer and instructor for a full-day workshop that trained Vietnamese physicians and allied healthcare professionals in mirror therapy to treat phantom pain. Delivered workshops in 3 cities in 3 regions of Vietnam (N = 167). Workshops included live Vietnamese translation and back-translated printed materials. Participants became certified mirror therapy practitioners and trainers. Collaborators included Drs. Nguyen and End the Pain Project. Project funded by a grant from the International Association for the Study of Pain (IASP).

Certification workshops delivered:

- Phuong Chau International Obstetrics Gynecology Hospital, Can Tho, Vietnam: 11/26/11.
- Quang Tri Province, Dong Ha, Vietnam: 11/30/11.
- Vietnamese Training Centre for Orthopaedic Technologist, Hanoi, Vietnam: 12/3/11.

#### CME CONFERENCE LEADERSHIP

### International Conference Planning

Invited Psychology Symposia Track Conference Planner, Speaker, and Session Chair: World Institute of Pain (WIP) 2023 Annual conference in Antalya, Turkey.

# National and Regional Conference Co-Chair

2022 **Co-Chair:** American Academy of Pain Medicine 2022 Annual Conference

(with Drs. Marie Hanna and Salman Hirani).

2014 **Co-Chair:** Stanford, Western Pain Society, and the American Academy of Pain Medicine:

Conquering Pain Locally, Regionally, and Nationally. Co-Chaired this 3-day CME conference with

Dr. Sean Mackey. Stanford, CA: September 19-21.

# American Academy of Pain Medicine

2015-2021 Annual Conference Committee (invited).

2016-2021 Steering Committee for the AAPM Annual Conference. This invited committee is

responsible for planning the content of the annual conference, vetting and prioritizing sessions and workshop proposals. Includes an in-person planning meeting in Chicago 6-8

months prior to the conference date.

## American Pain Society Annual Meeting Scientific Program Committee

2011-2014 American Pain Society annual scientific conferences. The committee reviews workshop

and symposia proposals for the annual scientific conference, attend a full-day committee meeting in Chicago, plan conference content and areas of emphasis, and vet applications for ethical considerations and conflicts of interest. Each member rates and vets roughly 60 symposia proposals and 100 scientific abstracts for potential paper or poster presentation.

## Regional and Local Conference Planning Committees

2020	Kauai Pain Conference, Program Committee for the February 2020 conference, Lihue, HI.
2018	Kauai Pain Conference, Program Committee for the March 2-3, 2018 conference, Lihue, HI.

2009-2012 Pain Society of Oregon, annual clinical conferences.

2011-2012 "OHSU Pain Day: Scientific and Clinical Updates." Pain Awareness and Information

Network; Program committee. Played an integral role in the inaugural conference in 2011.

#### **MENTORING**

#### Current

Faculty Mentor, The Stanford Center for Clinical and Translational Research and Education (CTSA)

Council of Mentors PD: Ruth O'Hara 2018- present

Faculty Mentor, NIDA Stanford T-32 post-doctoral fellowship mentor for pain and opioid related research

PD: Sean Mackey 2017- present

#### Current Individual Mentees

## Samsuk Kim, PhD

NIDA T32 fellow (2023- present)

## Rena "Liz" Courtney, PhD

Salem VAMC; 2023- present

#### Current NIH K-Award Mentees

### Edward Lannon, PhD

NINDS K23 (2023- present; co-mentor)

## Drew Sturgeon, PhD

NINDS K23 (2022-2027; co-mentor)

# Lauren Harrison, PhD

NINDS K23 (2021-2026; co-mentor)

#### Maisa Ziadni, PhD

NIDA K23 (2019-2024)

Former NIDA T-32 post-doctoral fellow, 2016-2019 (co-mentor)

## Sophia Dokyoung You, PhD

NIDA K23 (2019-2024; co-mentor)

#### Behnaz Jarrahi, PhD

NIAMS K01 Awardee (2020-2025; co-mentor)

Former post-doctoral research fellow

# Lola Falasinnu, PhD

NIAMS K01 Awardee (2021-2026; co-mentor)

#### Past Research Trainees

Karlyn Edwards, PhD

NIDA T32 fellow (2021-2023)

#### Gail Larsen, MD, MPH

Primary research mentor, 2007

Supported by the Medical Student Anesthesia Research Fellowship

Foundation for Anesthesia and Education Research (FAER)

"The Effects of Sleep on the Immunologic Response to Negative Cognition in Persons with Chronic Pain."

## Katie Volpe, MD

Primary research mentor, 2008-2010.

"Relationship of childbirth self-efficacy to prolonged second stage of labor."

### Aaron Reposar, MD

Primary research mentor, 2010

Supported by the Medical Student Anesthesia Research Fellowship

Foundation for Anesthesia and Education Research (FAER)

"Pain Catastrophizing and Birth Satisfaction in a Sample of Healthy Nulliparious Women."

## Omar Halawaa, MD

Primary research mentor, 2011

Project: "Religiosity and Cancer Pain Experience: An international study." Collaboration with researchers at OHSU, UNC Chapel Hill, and Saudi Arabia.

#### Chloe Taub, PhD

Primary research mentor, 2014-2015

Stanford undergraduate; received the Robert A. Zajonic research award.

Topic: Sensory Perception Changes Following a Pain Catastrophizing Induction in Women with Chronic Pain: A Quantitative Sensory Testing Study.

### Yasamin Sharifzadeh, MD

Co-mentor with Drs. Mackey and Kao, 2014-2015

Topic: Opioid prescription is predicted by novel sub-clinical range of pain catastrophizing: Discovery from resampling nonparametric modeling.

## Junie Carriere, PhD

Primary mentor, pre-doctoral research internship, 07/15-12/15

Supported by Fonds de Recherche Quebec Sante Master's Training Award.

Topic: Pain Catastrophizing and its association with perceived injustice and acceptance.

## DISSERTATION EVALUATOR

Anne Burke, doctoral candidate (2018) University of Adelaide, Adelaide, Australia

Robert Schutz, doctoral candidate (2017) Curtin University, Perth, Western Australia

#### **EDITORIAL ACTIVITIES**

### Editorial Board

MedPage Today (2020- present)

Pain Medicine (Section Editor, 2013-2018)

### Ad Hoc Reviewer

PLOS One

JAMA Internal Medicine

Brain, Behavior & Immunity

PAIN®

PCORI scientific publications reviewer

Journal of Substance Abuse Treatment

Regional Anesthesia & Pain Medicine

Clinical Journal of Pain

Journal of Pain

British Medical Journal

American Journal of Physical Medicine and Rehabilitation

Journal of Healthcare for the Poor and Underserved

European Journal of Integrative Medicine

Women's Health Issues

Journal of Pain and Symptom Management

Journal of Pain Research

Pain Medicine

Journal of Medical Internet Research

British Journal of Pain

American Journal of Public Health

Family Medicine and Community Health

Biological Psychiatry

Annals of Internal Medicine

## Invited Reviewer, U.S. Federal Guidance and Reviews

AHRQ Integrated Pain Management Programs and Multidisciplinary, Multi-modal Treatment Models (2021)

AHRQ Evidence-based Practice Center Program report: Treatments for Acute Episodic Migraine. (2020)

AHRQ Evidence-based Practice Center systematic review on pain treatment (2020)

HHS Guide for Clinicians on the Appropriate Dosage Reduction or Discontinuation of Long-Term Opioid Analgesics (2019)

## NIH Study Section and Other Grant Review

#### NIH Study Section

- NIH panel, March 20, 2023
- NCCIH; special emphasis panel, February 24-25, 2022
- Addiction Risks and Mechanisms (ARM). June, 2020.
- NCCIH; U01/R34 review, February 2019

### U.S. Department of Defense and U.S. Army

- Chair, Study Section, Pain management grants. October, 2020.
- The Scientific Peer Advisory and Review Services Division of the American Institute of Biological Sciences (on behalf of US Army Medical Research and Materiel Command); 2012.

### **International**

- Raine Medical Research Foundation –Australia; July 2022.
- KWF Kankerbestrijding Dutch Cancer Society (DCS); September 2019

#### American Pain Society

- Future Leaders in Pain Research; 2013, 2014, 2015, 2016, 2018
- Sharon S. Keller research awards; 2013, 2014, 2015, 2016, 2017

#### Oregon Health & Science University

 Center for Women's Health & Department of Obstetrics/Gynecology (Circle of Giving Research Awards); 2009, 2010, 2011, 2012.

## Membership in Professional Societies

International Association for the Study of Pain (2006-present)

American Pain Society (2006-2019)

Pain Society of Oregon (2009-2012)

American Academy of Pain Medicine (2010-present)

National Register for Health Care Providers in Psychology (2004-present)

American Psychological Association (present)

Organization for the Study of Sex Differences (2008-2009)

Oregon Psychological Association (2006-2011)

American Association of University Women (2006-2009)

Maryland Psychological Association (2002-2004)

Johns Hopkins University Post-Doctoral Association (2002-2003)

Southern Arizona Psychological Association (Diversity Committee; 2001-2002)

California Psychological Association (2013-2019)

Association of University Anesthesiologists (2015-present)

North American Neuromodulation Society (2017- 2019)

Association for Psychological Science (2017- present)

US Association for the Study of Pain (2020- present)

Foundation for Education and Research in Anesthesia (2021- present)

#### LEADERSHIP IN FEDERAL & PROFESSIONAL ORGANIZATIONS

## International & National Organizations

### National Institutes of Health (NIH)

2020-2024

NIH Interagency Pain Research Coordinating Committee (IPRCC) (Scientific Member) Appointed to the IPRCC by U.S. HHS Secretary Alex Azar as a Scientific Member. Charge to the IPRCC includes: (1) develop a summary of major advances in pain care research supported by Federal Agencies relevant to the diagnosis, prevention, and treatment of pain; (2) identify critical gaps and duplications in basic and clinical pain research across Federal Agencies; (3) make recommendations on how best to disseminate information on pain care; and (4) make recommendations on how to expand public-private partnerships to expand collaborative cross-cutting research.

## International Association for the Study of Pain (IASP)

2016-2018 Elected Member, IASP Education Initiatives Working Group (EIWG)

### U.S. Association for the Study of Pain (USASP)

Journal of Pain Task Force Member. Vetted candidates and made recommendations to the Board of Directors for the next editor-in-chief of the Journal of Pain.

#### American Pain Society (APS)

2013-2019 Grant Reviewer, APS Future Leaders in Pain Research and the Sharon S. Keller Research Award (see "grant review" section for specific years). 2013-2016 Chair, APS Ethics Shared Interest Group. Chair of SIG steering committee and SIG programming for the annual APS scientific conferences. 2010-2015 APS Ethics Committee. The purpose of this committee is to initiate, review and advocate for ethical pain policy and ethical pain care. Members attend yearly meetings, teleconference and/or e-conference regularly and provide recommendations on relevant issues. This is considered a competitive and prestigious committee appointment within the APS organization. 2015-2018 **APS Clinical Resources and Guidelines Committee.** The purpose of this committee is to the clinical practice resource needs of the professional pain community and lead the development of both revenue and value enhancement products, including clinical practice guidelines, to support the provision of quality evidence-based clinical pain care. Chair: Keela Herr, RN, PhD 2011-2014 APS Scientific Program Committee (see National CME Conference Leadership) 2012-2015 APS Clinical Practice Guidelines Committee and Co-Author. Developed guidelines for clinicians who treat chronic and acute pain patients. Committee considerations include best practices, evidence-based treatment, and ethics. Charge includes teleconferencing and attending a meeting at the annual conference. 2014-2015 APS Committee on the Principles of Analgesic Use in the Treatment of Acute Pain and Cancer Pain. Co-Author for the 2016 APS Principles of Analgesic Use 7th edition. Committee Chair: Chris Herndon, PharmD 2011-2013 Steering Committee, APS Ethics SIG. Developed content for Ethics SIG panel at the annual scientific conference. Online and teleconference meetings to discuss and resolve issues relevant to the SIG. APS Leadership Development Committee (Nominating Committee). This committee 2012-2013 membership of APS with candidates for all elected offices. National Pain Advocacy Center 2021-2022 Scientific Advisory Board American Academy of Pain Medicine (AAPM) **Board of Directors** 2021-2019-2020 Invited Member, Opioid Reduction Consensus Committee. 2018-2022 Co-Chair, Behavioral Medicine Committee (Presidential appointment). Co-Chair with Ajay Wasan, MD. Purpose of this committee is to address the need for education on behavioral medicine and psychological issues in treating a pain patient; expand the presence

of behavioral pain medicine professionals in AAPM through membership; and monitor and report to the Executive Committee and membership on developments and emerging research in the area of behavioral pain medicine.

- Opioid Advisory Committee (invited member). Chaired by Ed Covington, MD. The purpose of this committee is to monitor developments relating to opioids as addressed in the legislative and regulatory process; consumer media; and professional publications; provide the AAPM Executive Committee with initial review and analysis of these developments and propose and/or prepare AAPM responses (including public statements, educational programs, and Academy position statements).
- 2017-2020 Scientific Review and Guidelines Committee (invited member). The purpose of this committee is to review external guidelines in development so that AAPM can provide recommendation regarding content development and position statements related to their public release.
- Co-Chair, Behavioral Medicine / Pain Psychology Shared Interest Group. Co-Chair with Judith Scheman, PhD, and Sean Mackey, PhD, MD. Established the first Pain Psychology SIG in a national organization. Membership is multidisciplinary and open to all interested AAPM members. In-person SIG meetings take place at the annual AAPM conference.
- 2015-2017 **Co-Chair, Pain Psychology Task Force.** Co-Chair with Sean Mackey, MD, PhD and Judith Scheman, PhD, established the first national task force dedicated to Pain Psychology. Efforts include quantifying national clinical needs and barriers to meeting current needs.
- Annual Meeting Planning Committee. Invited Member. This committee is charged with the strategic planning and needs assessment related to the overall educational content selection (live programming and chair oversight of Scientific Poster Abstract Committee) content review, faculty recruitment and onsite program evaluation of Annual Meeting education related activities. Committee Chairs: Drs. Steven Cohen & Patrick Tighe.
- 2016-2021 **Annual Conference Steering Committee**. Invited Member selected from the overall Planning Committee (above) to steer the overall annual meeting and content emphasis.
- 2015-2017 **AAPM Lead, Collaborative Intermountain Healthcare Working Group.** Invited by President Bill McCarberg. This pilot project sought to enhance and integrate pain psychology into Intermountain Primary Care chronic pain care.
- 2013-2018 **Ethics Council**. Appointed Member. The Ethics Council provides advisement to the AAPM Board of Directors regarding ethical and conflict of interest issues within the organization and also nationally within the discipline of pain medicine; drafted current AAPM Conflict of Interest policy.
- 2014-2015 **Co-Chair, Membership Task Force** (with Dr. Perry Fine). Made recommendations to the board of directors toward the goal of increasing non-physician membership in the Academy while retaining the Academy's existing power / leadership structure. The Board of Directors adopted our recommendations and changed the current membership bylaws to be more inclusive. Received a 2015 Presidential Commendation (shared with Co-Chair Dr. Perry Fine) for our work.
- 2014-present Interdisciplinary Shared Interest Group. Member.

2019-present Academic Medicine Shared Interest Group. Member.

#### American College of Occupational and Environmental Medicine

2016-2017 **Committee Member and Co-Author** of the 2018 ACOEM Chronic Pain Guideline.

#### Pain Action Initiative 2010 National Task Force

2010-2011 **Task force member**. The purpose: to develop a national strategic plan for

improving treatment of chronic pain and to move the initiative forward to the policy

level.

#### For Grace

2015-2017 Legislative Committee.

2012-2017 **Board of Governors**. This non-profit organization is devoted to ensuring the ethical and

equal treatment of all women in pain. http://www.forgrace.org/women/in/pain/C28

2012-2014 **Steering Committee,** Annual Conference.

### End the Pain Project

Advisor, Board of Directors. This non-profit organization is dedicated to the global

reduction of phantom pain. The organization is using my clinical and research protocol to provide free phantom pain treatment to persons in developing countries (Vietnam,

Cambodia, and Egypt): http://endthepainproject.org/

### International Association for the Study of Pain, International Pain Summit

2010 Montreal, Canada 9/03/10.

**U.S. Delegate**. Participated in the International Pain Summit as a U.S. delegate of the International Association for the Study of pain, along with delegates from 84 nations, to discuss crucial aspects of pain management with a focus on advocacy and assistance for all countries to develop national pain strategies. Drafted language for an IASP International Bill of Human Rights regarding pain management, intended to influence global pain policy; ratified in the Fall of 2010 by the IASP Council as the

"Declaration of Montreal".

#### Center for the Study of Empathic Therapy

2014-2019 **Advisory Council.** This non-profit organization is dedicated to raising the ethical and scientific

standards in psychology and psychiatry. <a href="http://www.empathictherapy.org/">http://www.empathictherapy.org/</a>

### American Chronic Pain Association

2014-2018 **Committee Member and Co-Author.** The ACPA Resource Guide to Chronic Pain Medication and Treatment for 2015, 2016, 2018. Project Lead: Steven Feinberg, MD

# Regional Leadership

## Pain Society of Oregon

2012	President (presided over 3 regional chapters: Portland, Eugene and Bend)
2012	Representative to the Western Pain Society Board of Directors (with voting rights)
2011-2012	Chair, Board of Directors, Portland Chapter
2010-2012	Board of Directors
2010-2012	Chair, Portland Education Committee
2011	Steering Committee, 2011 Annual conference (October, Eugene, OR)
2010	Steering Committee, 2010 Annual conference (May 21-22, Portland, OR)
2009-2012	Steering Committee, Portland Chapter

# Institutional Leadership

## **Stanford University**

- 2018 Co-chair, Pain Management Task Force; Stanford Hospital and Clinics (with Einar Ottestad, MD). Chair of the Pain Education Subcommittee of the PMTF.
- 2016 2018 Chair-Designated Departmental Representative to the Stanford Women and Sex Differences in Medicine Center (WSDM)

## Oregon Health & Science University (OHSU)

2010-2012	OHSU Women in Academic Medicine Committee
2010-2011	Pain Awareness and Information Network; inaugural conference
2010-2011	Program Committee, "OHSU Pain Day: Scientific and Clinical Updates"
2010-2011	OHSU Division of Psychology Steering Committee
2010-2011	OHSU Clinical Research Management System Investigator Advisory Committee
2011-2012	Pain Awareness and Information Network; Program committee, "OHSU Pain Day: Scientific and Clinical Updates"

2011-2012OHSU Center for Integrative Medicine development task force

## Departmental Committees

2023-2025	Pain Division Representative, Research Advisory Committee, Department of Anesthesiology, Perioperative and Pain Medicine. Stanford University School of Medicine.
2016	Research working group. Stanford University, Department of Anesthesiology, Perioperative and Pain Medicine.
2012	Faculty Development and Mentoring Committee, Stanford University, Department of Anesthesiology, Perioperative and Pain Medicine
2011	Clinical Research Committee, OHSU, Department of Anesthesiology and Perioperative Medicine

# Pro-Bono Clinical Care and Community Service:

Pro-bono pain psychology classes for patients of the Stanford Pain Management Center and their family members. (2013-2016).

Volunteer psychologist, Returning Veterans Northwest, Portland, OR (2007-2009)

Pro-bono pain psychology, select underinsured patients, OHSU Comprehensive Pain Center (2005-2012)

Mentor for Northwest Web Mentoring, a mentoring program for at-risk youth, Portland, OR (2007)

#### PRODUCTS DEVELOPED

### Commercial Products and Treatments

- 1. Psychological Treatment for Patients with Chronic Pain ©2018, American Psychological Association Press. 180 page professional text for healthcare clinicians.
- 2. Psychological Treatment for Chronic Pain Training DVD ©2018. American Psychological Association. 90-minute video with client demonstration.
- 3. The Opioid-Free Pain Relief Kit. © 2016 Bull Publishing, Boulder, CO. This 130-page book is a practical guide to apply key pain psychology principles and skills that facilitate avoiding opioids, minimizing opioids, and/or tapering off opioids in individuals with chronic pain. Also relevant treatment for individuals who simply wish to learn key information and skills, and harness the power of pain psychology to reduce suffering and improve quality of life. Written at the 8th grade reading level.
- 4. Less Pain, Fewer Pills: Avoid the dangers of prescription opioids and gain control over chronic pain © 2014 Bull Publishing, Boulder, CO. Written primarily for patients, this 240 page self-help book includes opioid education and a pain psychology treatment package. Suitable for clinicians who wish to better understand how psychological influence likelihood to receive opioids and remain on them. Includes pain psychology skills and information on how to taper opioids successfully.
- 5. "Enhanced Pain Management: Binaural Relaxation" © 2013 Stanford University. This 20-minute audio CD is the first commercial pain management CD that uses binaural technology to optimize the

relaxation response for enhanced pain management. Available for purchase through Bull Publishing (subcontract with Stanford University) and at www.bethdarnall.com.

- 6. "Do It Yourself Mirror Therapy" © 2010 Oregon Health & Science University (OHSU Office of Technology Transfer and Business Development product ID# 1538). This 13-minute DVD was invented, developed, and produced by Dr. Darnall for patients with phantom limb pain and their providers. The DVD is a low-cost treatment option that improves access to phantom pain care and enables patients to treat phantom pain at home. Currently available for purchase from OHSU at <a href="https://www.bethdarnall.com">www.bethdarnall.com</a>. Received the 2010 OHSU Innovation in Technology Award.
- 7. "Pain Management Skills CD" © 2010 Oregon Health & Science University (OHSU Office of Technology Transfer and Business Development product ID# 1513). This 22-minute audio CD was developed and produced by Dr. Darnall.

### TREATMENTS DEVELOPED

#### Clinical / Research Treatment Curriculum

- 1. My Surgical Success ©2015 is a perioperative digital behavioral medicine program developed by Beth Darnall, PhD, with content adapted from the Empowered Relief® program (below).
  - A preliminary randomized controlled trial conducted in 68 women receiving breast cancer surgery revealed that on average women who engaged in My Surgical Success required 6.5 days' less opioids after surgery than women assigned to digital health education (Darnall et al, 2019).
  - Follow-on studies are currently underway in Stanford orthopedic trauma surgery patients (N=83), My Surgical Success has been translated into French and is being studies in 2 hospitals and 6 surgery types in Switzerland (PI: Christophe Perroud, MD).
- 2. Empowered Relief\* 2013-2021 is a Stanford-owned, 2-hour, single-session, skills-based psychoeducational treatment class that offers a scalable, low-cost, low-burden way to integrate behavioral pain medicine into healthcare broadly (see Clinician Certification Workshops section for details).
- 3. Developed 4-session chronic pain class curriculum for Departments of Anesthesiology & Perioperative Medicine and Family Medicine; delivered group treatment 2008-2010.
- 4. Developed single-session chronic pain / opioid education for patients in the Department of Family Medicine; delivered group treatment 2010-2012.

#### CONSULTANCY AND ADVISORY ROLES

National University of Natural Medicine

2023- NCCIH BRIDG T90/R90 Institutional Postdoctoral Training Grant.

MPDs: Cathryn Booth-LaForce, Yvonne Lin, Ryan Bradley, and Heather Zwickey

Darnall Role: Scientific Advisor.

### **AppliedVR**

2019-

**Chief Science Advisor**. Clinical content development for EaseVRx, product research strategy, advised on design and implementation of multiple clinical trials, FDA breakthrough application process and final FDA approval for EaseVRx for chronic low back pain secured in November 2021.

Advisor. This consultancy role involved advising on an array of outpatient and inpatient pain management digital therapeutics, content development, and research strategy.

#### Cedars-Sinai Healthcare

2017

**Developer of the Cedars Pain Psychology Program.** Consultancy role involves developing pain psychology program materials for physicians, allied clinicians and patients. Includes tailored CME lectures and a tailored 8-session CBT protocol. Developed and delivered a 3-hour opioid reduction workshop for Cedars pharmacists and primary care physicians.

#### U.S. Air Force

2017-2018

**Expert Reviewer for Opioid Risk Mitigation Tools** for (AF Grant # FA8650-15-C-658) entitled Implementing Prescription Monitoring to Mitigate Drug Misuse and Abuse among Military Personnel.

#### **Arthritis Foundation**

2016

Medical Content Advisor for online pain education materials for the patient Toolkits.

#### Clinical Pain Advisor

2016-2018 Editorial Advisory Board for online and print materials.

### **American Society of Pain Educators**

2015

**Pain psychology content expert** for an interdisciplinary professional committee that assisted with content development for the updated Certified Pain Educator Exam.

### MyStrength

2015

National expert consultant, content development. MyStrength is an online and mobile tool that serves as a treatment extender for healthcare providers and payers. MyStrength is a partner with the National Council for Behavior Health and over 30 clinical networks nationwide. My role was to advise in the content development for an online pain psychology treatment package for patients.

## Axial Healthcare

2014-2019

**National Scientific Advisory Board**. This for-profit company conducts big data analytics and risk stratification for payers of patients with chronic pain. Axial also optimizes the care delivery network and connects patients to non-pharmacologic pain management resources.

### Office for Research on Women's Health

2013 ORWH website scientific advisory panel.

#### MedScape Neurology

2013

Invited moderator for a 'virtual' debate on opioids for chronic pain. Panelists: Jane Ballantyne, MD, Charles Argoff, MD, and Michael Schatman, PhD. .

## Quantia MD

2012

Expert for online module for primary care physicians: "Opioid Use in Women with Chronic Pain."

#### St. Jude Medical

2012 Invited speaker, "Women in Neuromodulation" national training seminar (topic: pain psychology),

9/22-9/23; Dallas, TX.

#### **ORCAS**

2011-2012 Consultant for program development for Phase II of the NIH-

funded project, ORCAS (R44-AR054652-02A2), with a goal of developing an online, multidisciplinary intervention to manage and prevent nonspecific low back pain.

#### **Swedish Medical Center**

2010-2011

Consultant for the development and refinement of an online continuing medical education program for providers prescribing opioids (Dr. Gordon Irving). Served as consultant for a second project regarding the development and refinement of an online self-management program for chronic pain patients taking prescription opioids.

### REGIONAL PUBLIC EDUCATION

Co-Chair, 2016 Stanford Free Back Pain Education Day (Co-Chair Dr. Sean Mackey).

This day long community education event will host 600 people from living with back pain. The event is live streamed globally. Co-Sponsored by Stanford Hospital and Clinics and the Division of Pain Medicine. Stanford University, September 11, 2016.

Co-Chair, 2015 Stanford Free Back Pain Education Day (Co-Chair Dr. Sean Mackey).

This day long community education event will host up to 350 people from living with back pain. Highlights include topics on Pain and the Brain, Gold Standard Self-Management, Acupuncture, Pain Psychology, and Movement as Medicine for Back Pain. Stanford University, September 13, 2015. The event received national coverage (*National Pain Report*) and was featured on "Good Morning America" on Sept. 14, 2015.

Co-Chair, 2014 Stanford Free Chronic Pain Education Day (Co-Chair Dr. Sean Mackey)

This all day public education event included 6 Stanford and national speakers on various topics, was open to the public and free. Stanford University, September 21, 2014. (350 registrants)

### INTERNATIONAL PUBLIC EDUCATION

#### Columnist

1. Huffington Post Canada. (2016)

05/20/16 "7 Tips for Tapering Off Opioids" (Darnall BD)

05/27/16 "Quieting Your Harm Alarm" (Darnall BD)

06/05/16 "Opioids Limits Alone Is Not a Sustainable Pain Care Plan" (Darnall BD)

### National Pain Report (June 2013 –2014)

06/04/13 "Why Do Women Have More Pain Than Men?" (Darnall BD)

11/26/13 "What To Do When Someone Doubts Your Pain." (Darnall BD)

- 12/18/13 "Chronic Pain and Overeating." (Darnall BD)
- 07/23/14 "How Do I Find a Pain Psychologist?" (Darnall BD)
- 2. Psychology Today "Empowered Relief" blog https://www.psychologytoday.com/us/blog/empowered-relief
  - 06/23/14 "Pain Relief and Behavioral Medicine" (Darnall BD)
  - 07/14/14 "What is a Pain Psychologist?" (Darnall BD)
  - 08/25/14 "How to Get the Most out of Medical Treatment for Pain (Darnall BD)
  - 09/25/14 "Your Psychology Affects Your Response to Medical Treatments." (Darnall BD)
  - 12/03/14 "Social Pain = Physical Pain: 5 Tips for Relief." (Darnall BD)
  - 12/16/14 "9 Tips to Stop Anger and Injustice from Hurting You" (Darnall BD)
  - 01/09/15 "Love and Pain" (Darnall BD)
  - 03/01/15 "Fear and Pain Can Alter Memory" (Darnall BD)
  - 09/22/15 "Opening the Medicine Box in Your Mind" (Darnall BD)
  - 03/20/16 "Pain Psychology for Women: 5 Tips for Pain Relief (Darnall BD)
  - 08/28/16 "Behavioral Medicine for Chronic Pain" (Darnall BD)
  - 01/19/18 "The Power of Mindset Science for Pain Relief and Health" (Darnall BD)
  - 01/29/20 "Empowered Relief: Meeting the Needs of a Nation with Pain" (Darnall BD)
  - 03/30/20 "The COVID-19 Wellness and Coping Toolkit (Darnall BD)

#### Other Authorings

- 02/09/18 "Pain Specialist Dr. Beth Darnall Presented at the World Economic Forum Annual Meeting: Here are Her Takeaways." (Darnall BD). Clinical Pain Advisor <a href="https://www.clinicalpainadvisor.com/complementary-and-alternative-medicine/beth-darnall-world-economic-forum-davos-pain-education-pain-relief-psychology/article/742818/">https://www.clinicalpainadvisor.com/complementary-and-alternative-medicine/beth-darnall-world-economic-forum-davos-pain-education-pain-relief-psychology/article/742818/</a>
- 03/27/20 *MedPage Today* article "Staying Sane and Current on COVID-19" (Darnall BD). https://www.medpagetoday.com/infectiousdisease/covid19/85660
- 05/15/20 Stanford Pain News article "An Interview with Ed Coghlan" (Darnall BD). <a href="https://painnews.stanford.edu/2020/05/the-national-pain-report-closes-its-doors-an-interview-with-ed-coghlan/">https://painnews.stanford.edu/2020/05/the-national-pain-report-closes-its-doors-an-interview-with-ed-coghlan/</a>

# POPULAR PRESS / MEDIA

• 2009 *The Oregonian* features story on Dr. Darnall's research (author: Joe Rojas) "Studying phantom limbs and other illusions to find cures."

- 2010 invited expert guest on **KATU TV's** *AM Northwest* live morning talk show: "Pain psychology for women."
- 2010 *PT Today* story (author: Heather Stringer) 'Mirror therapy's potential to treat pain."
- 2010 scientific opinion published in *U.S. News & World Report* (author: Randy Dotinga) "Self-touch may reduce pain."
- 2011 *Daily Health News* feature Dr. Darnall and bilateral touch. "Amazingly simple pain relief trick: Use self-touch to banish pain."
- 2011 *Portland Tribune* front-page feature (author: Peter Korn)

  "The pain is all in your head (and researchers say that's OK): OHSU program moves beyond mirrors to retrain patients' brains."
- 2011 The Lund Report (author: Amanda Waldroupe)
   Clinical and scientific opinion featured in "Pain Specialists Urge Stronger Use of Holistic Therapies: They believe that such therapies should replace prescription opiates as the dominant method of treatment."
- 2011 ABC News health story (author: Susan Donaldson James)
   Chronic pain is no laughing matter features Dr. Darnall's clinical work with women and discusses her upcoming keynote presentation at the Women in Pain 4th annual conference in Los Angeles, CA.
- 2011 *The Lund Report* article featuring Dr. Darnall's upcoming trip to Vietnam to deliver mirror therapy practitioner training workshops.
- 2011 *O&P Business News* features Dr. Darnall's upcoming trip to Vietnam to deliver mirror therapy practitioner training workshops.
- 2011 Vietnamese television news aired a prime time news feature on Dr. Darnall's mirror therapy workshops in Vietnam (aired Nov. 26, 2011). Subtitled video may be viewed on the homepage at <a href="https://www.bethdarnall.com">www.bethdarnall.com</a>
- 2012 *KATU-TV* featured Dr. Darnall's 90 second video segment "Pain & the Brain" in the "*Did you know*?" scientific expert series (sponsored by the OHSU Brain Institute and the Oregon Museum of Science and Industry). Commercial segments aired throughout the day and during primetime in November and December 2011 and throughout January 2012 (viewership 24,000 per run).
- 2012 **Radio show** *KXL 750* featured Dr. Darnall as an expert guest in January. Interview on phantom pain, mirror therapy, and the Vietnam outreach project here: <a href="http://www.ohsu.edu/blogs/news/2012/01/28/heres-what-you-missed/">http://www.ohsu.edu/blogs/news/2012/01/28/heres-what-you-missed/</a>
- 2012 *O&P Business News* February issue (author: Megan Gilbride) two feature stories on mirror therapy includes discussion on Dr. Darnall's research, outreach work in Vietnam, and DVD.
- 2012 The Asian Reporter covered Dr. Darnall's IASP-funded mirror therapy training workshops in

- Vietnam (page 9): http://www.asianreporter.com/paper/2012-02-Jan%2016-part1.pdf
- 2012 *OregonLive* and *The Oregonian* feature Dr. Darnall's mirror therapy research with an updated report on her 2012 study findings (author: Joe Rojas): http://www.oregonlive.com/health/index.ssf/2012/03/using illusions to treat pain.html
- 2012 Everyday Health published an interview with Dr. Darnall on the topic of how to maximize efficiency when challenged with fibromyalgia:
   <a href="http://www.everydayhealth.com/fibromyalgia-pictures/fibromyalgia/ways-to-take-back-your-time.aspx?xid=fb">http://www.everydayhealth.com/fibromyalgia-pictures/fibromyalgia/ways-to-take-back-your-time.aspx?xid=fb</a> EH 20120309 fibromyalgia#/slide-1
- 2012 American News Report discusses Drs. Darnall & Stacey's JAMA Internal Medicine commentary on the risks of long term opioid use in women:
   http://americannewsreport.com/older-patients-more-at-risk-of-painkiller-addiction-after-surgery-8813525.html
- 2012 myRegence.com story entitled "Managing the Stress of Chronic Pain" features Dr. Darnall and her approach to treating patients via pain psychology (author: Maureen Healy). <a href="https://www.myregence.com/mxp-theme/readarticle.do?articleID=28742&WT.mc\_id=2">https://www.myregence.com/mxp-theme/readarticle.do?articleID=28742&WT.mc\_id=2</a>
- 2012 The International Association for the Study of Pain discusses Dr. Darnall's Vietnam mirror therapy workshops and expansion of this outreach work into Cambodia (p16). <a href="http://www.iasp-pain.org/Insight/June2012Insight.pdf">http://www.iasp-pain.org/Insight/June2012Insight.pdf</a>
- 2012 The Portland Tribune features Dr. Darnall as an expert in an article on the placebo effect: "A Pill to Cure All Ills? It's Just in Our Heads" (author: Peter Korn).
   http://discoverforestgrove.com/pt-rss/9-news/111744-a-pill-to-cure-all-ills?-its-just-in-our-heads
- 2012 *The Lund Report* features Dr. Darnall and colleagues' research on the risks and consequences of long-term opioid use in women (author: Raymond Redelman). http://thelundreport.org/resource/study\_targets\_opiate\_use\_epidemic'\_risks\_for\_women
- 03/13. Drs. Darnall & Stacey's recommendations for safe opioid prescribing practices in women are quoted in this article in the *National Pain Report* feature, "Older Patients More at Risk of Painkiller Addiction After Surgery."
   <a href="http://americannewsreport.com/nationalpainreport/older-patients-more-at-risk-of-painkiller-addiction-after-surgery-8813525.html">http://americannewsreport.com/nationalpainreport/older-patients-more-at-risk-of-painkiller-addiction-after-surgery-8813525.html</a>
- 04/13. Dr. Darnall provides commentary on research that describes the link between history of abuse and the development of chronic pain in this *National Pain Report* article: <a href="http://americannewsreport.com/nationalpainreport/abused-women-more-susceptible-to-pain-8819453.html">http://americannewsreport.com/nationalpainreport/abused-women-more-susceptible-to-pain-8819453.html</a>
- 05/13. Dr. Darnall provides expert opinion in a story discussing research on the links between trauma, stress, and chronic pain.
   <a href="http://americannewsreport.com/nationalpainreport/chronic-pain-linked-to-stress-8819812.html">http://americannewsreport.com/nationalpainreport/chronic-pain-linked-to-stress-8819812.html</a>

- 06/13. Dr. Darnall's opinion on medical education for chronic pain care is featured here in the *American News Report* (Editor: Pat Anson): <a href="http://americannewsreport.com/nationalpainreport/treating-chronic-pain-can-doctors-do-better-8820182.html">http://americannewsreport.com/nationalpainreport/treating-chronic-pain-can-doctors-do-better-8820182.html</a>
- 07/13. *Natural Medicine Journal* podcast show features Dr. Darnall in a pain management expert podcast a wide variety of issues associated with opioid use (host: Karolyn Gazella) <a href="http://www.naturalmedicinejournal.com/article\_content.asp?article=439">http://www.naturalmedicinejournal.com/article\_content.asp?article=439</a>
- 07/13. Dr. Darnall is featured in a *National Pain Report* story of the CDC press release discussing a rapid rise in opioid-related deaths among American women in the past decade. <a href="http://americannewsreport.com/nationalpainreport/deaths-from-painkillers-rise-sharply-among-women-8820699.html">http://americannewsreport.com/nationalpainreport/deaths-from-painkillers-rise-sharply-among-women-8820699.html</a> (Author: Pat Anson)
- 7/13. Dr. Darnall was the featured guest on *Five to Thrive* live radio show. In this hourlong show she discussed chronic pain, stress, and the immune system. Audio is also available on iTunes. <a href="https://www.w4cs.com">www.w4cs.com</a>
- 8/13. Dr. Darnall's radio program was rebroadcast on *Five to Thrive* radio show. Topic: chronic pain, stress and the immune system.
- 8/13. Dr. Darnall was the featured guest on *Five to Thrive* live radio show. In this hourlong show she discussed the risks and consequences of long-term opioid therapy for chronic pain.
- 9/13. Dr. Darnall's radio show on the risks of long-term opioid use in chronic pain was rebroadcast on *Five to Thrive* radio show.
- 12/13. Dr. Darnall was the featured guest on 103.3 fm WXOJ radio program (live streamed at <a href="https://www.valleyfreeradio.com">www.valleyfreeradio.com</a>). Topics of discussion were pain catastrophizing, pain psychology, and her forthcoming book, Less Pain, Fewer Pills.
- 03/14 Coverage of Dr. Darnall's "Mind Over Pill" symposium at the 2014 Annual Conference of the American Academy of Pain Medicine (Darnall, Session Chair; Sullivan and Prasad, speakers) is featured: <a href="http://www.hcplive.com/conferences/2014-aapm/Mindfulness-based-Pain-Care-Provides-Opioid-Taper-Support">http://www.hcplive.com/conferences/2014-aapm/Mindfulness-based-Pain-Care-Provides-Opioid-Taper-Support</a>
- 5/14 The Pain and Injury Doctor posts a video of Dr. Darnall and features her in the
  article "How Having a 'Fear Avoidance' State of Mind Promotes Pain."
  <a href="http://www.painandinjurydoctor.com/psychosomatic-pain/how-having-a-fear-avoidance-state-of-mind-promotes-pain/">http://www.painandinjurydoctor.com/psychosomatic-pain/how-having-a-fear-avoidance-state-of-mind-promotes-pain/</a>
- 7/14 Dr. Darnall is interviewed on *The Pain Free Podcast*.
   <a href="https://itunes.apple.com/us/podcast/the-pain-free-podcast/id895525760?mt=2">https://itunes.apple.com/us/podcast/the-pain-free-podcast/id895525760?mt=2</a>
- 7/14 Dr. Darnall is interviewed and *Less Pain, Fewer Pills* is reviewed <a href="http://www.painweek.org/wp-content/uploads/2014/07/Darnall\_book\_review.pdf">http://www.painweek.org/wp-content/uploads/2014/07/Darnall\_book\_review.pdf</a>

## (author: Holly Caster).

- 7/14 Dr. Darnall is the featured guest on the live radio show, The *Dr. Peter Breggin Hour*.
   <a href="http://drpeterbregginshow.podbean.com/e/the-dr-peter-breggin-hour-070914/">http://drpeterbregginshow.podbean.com/e/the-dr-peter-breggin-hour-070914/</a>. She discusses pain psychology, her book *Less Pain*, *Fewer Pills*, and the power of the mind to influence sensory perception <a href="http://prn.fm/tag/beth-darnall/">http://prn.fm/tag/beth-darnall/</a>
- 7/14 National Pain Report interviews Dr. Darnall about Less Pain, Fewer Pills
   <a href="http://americannewsreport.com/nationalpainreport/less-pain-fewer-pills-8824242.html">http://americannewsreport.com/nationalpainreport/less-pain-fewer-pills-8824242.html</a>
   (author: Pat Anson)
- 7/14 **Falls Radio**, Little Falls, MN (syndicate radio show) features Dr. Darnall and *Less Pain, Fewer Pills* (**Host: Ron Specker**).
- 7/14 "Body Talk" features a one-hour live interview with Dr. Darnall on KTIP-AM radio, syndicated throughout California (host: Mimi Stoneburner).
- 7/14 *Healthline* features Dr. Darnall in the story "For Pain Patients, the Physical and Emotional are Entertwined" <a href="http://www.healthline.com/health-news/chronic-pain-is-physical-and-emotional-072814#3">http://www.healthline.com/health-news/chronic-pain-is-physical-and-emotional-072814#3</a> (author: Shawn Radcliffe)
- 8/14 KR WM Radio features Dr. Darnall and Less Pain, Fewer Pills (host: Kate Daniels).
- 8/14 *The People's Pharmacy* radio show, Austin, TX, features Dr. Darnall and Less Pain, Fewer Pills.
- 9/14 Paul Costello's Stanford University Podcast "1:2:1" features Dr. Darnall: "Chronic Pain: Getting your head around it." <a href="http://med.stanford.edu/news/all-news/one-to-one/2014/beth-darnall-discusses--less-pain--fewer-pills-.html">http://med.stanford.edu/news/all-news/one-to-one/2014/beth-darnall-discusses--less-pain--fewer-pills-.html</a>
- 9/14 e-MPR features Dr. Darnall's symposium at PAINWeek 2014 Las Vegas: "Calming Patients' Nervous Systems Reduces Pain Intensity and Distress, Opioid Use." (author: Debra Hughes). <a href="http://www.empr.com/calming-patients-nervous-systems-reduces-pain-intensity-and-distress-opioid-use/article/368982/">http://www.empr.com/calming-patients-nervous-systems-reduces-pain-intensity-and-distress-opioid-use/article/368982/</a>
- 9/14 *Positivity in Pain* blog features Dr. Darnall's research and treatment approach in the article "When Thinking About Pain" (author: Jennifer Corter) http://positivityinpain.net/2014/09/when-thinking-about-pain.html
- 9/14 Dr. Darnall is an invited guest on *Health Revolution Radio* (host: Peter Abaci, MD) <a href="http://www.iheart.com/show/Health-Revolution-Radio/">http://www.iheart.com/show/Health-Revolution-Radio/</a>
- 10/14 One-hour interview with **R. Gallyot** on *KWMR Radio* 89.9 & 90.5 "Airwaves" live show. Topic: Pain psychology and *Less Pain, Fewer Pills*.
- 11/14 Dr. Darnall is interviewed on **Radio MD** *NaturallySavvy*, a nationally-syndicated <a href="http://click2site.co/ib/click.php?s2s=&cid=0&subd=&id=70250&cm="http://click2site.co/ib/click.php?s2s=&cid=0&subd=&id=70250&cm="radio show.">http://click2site.co/ib/click.php?s2s=&cid=0&subd=&id=70250&cm=</a> radio show. Topic: Pain psychology (host: Lisa Davis).

- 12/14 **Women's Health** magazine includes an interview with Dr. Darnall in a feature on chronic pain for the December 2014 issue.
- 12/14 *Practical Pain Management* features Dr. Darnall and colleague's research on the single session catastrophizing treatment she developed, and it's application in the perioperative setting: <a href="http://www.practicalpainmanagement.com/resources/news-and-research/preoperative-fears-affect-postoperative-recovery">http://www.practicalpainmanagement.com/resources/news-and-research/preoperative-fears-affect-postoperative-recovery</a> (author Thomas G. Ciccone)
- 12/14 *National Pain Report* features a patient story describing the impact that Dr. Darnall's work and Less Pain has had on his pain experience and life: <a href="http://americannewsreport.com/nationalpainreport/my-story-what-doctors-dont-tell-us-8825365.html">http://americannewsreport.com/nationalpainreport/my-story-what-doctors-dont-tell-us-8825365.html</a> (Author: Kerry Smith)
- 12/14 *PainMaps* interviews Dr. Darnall on pain psychology, the relaxation response, and opioid risks. Hour-long radio broadcast: <a href="http://www.painmaps.com/neuroscience-of-pain/">http://www.painmaps.com/neuroscience-of-pain/</a>
- 03/15 *National Pain Report* features Dr. Darnall's opinion about the value of patient bloggers in the chronic pain community. <a href="http://bit.ly/1APKHZo">http://bit.ly/1APKHZo</a>
- 03/15 *Men's Health* magazine features Dr. Darnall in a story on sex differences in the experience of pain: <a href="http://www.menshealth.com/best-life/6-pains-worse-than-childbirth">http://www.menshealth.com/best-life/6-pains-worse-than-childbirth</a>
- 03/15 *Newswire* reports on the Dr. Darnall as a recipient of a 2015 Presidential Commendation from the American Academy of Pain Medicine: <a href="http://www.newswise.com/articles/view/631180/?sc=rsla">http://www.newswise.com/articles/view/631180/?sc=rsla</a>
- 04/15 *Practical Pain Management* features Dr. Darnall as a pain expert in the article "Pain in Women" (p22-24) (author: Kristin Della Volpe).
- 04/15 Practical Pain Management features Dr. Darnall as an expert on catastrophizing treatment in the article "Parent's Play a Role in their Child's Post-Operative Pain" (author: Tom Ciccone). <a href="http://www.practicalpainmanagement.com/resources/news-and-research/parents-play-role-childs-postop-pain">http://www.practicalpainmanagement.com/resources/news-and-research/parents-play-role-childs-postop-pain</a>
- 04/15 *MORE Magazine* features Dr. Darnall as an expert on aspects of chronic pain, including sex differences and the psychobiology of pain (author: Nissa Simon) <a href="http://www.more.com/health/wellness/when-pain-just-wont-stop">http://www.more.com/health/wellness/when-pain-just-wont-stop</a>
- 04/15 *Pain News Network* features Dr. Darnall's opinion of opioid prescribing in chronic low back pain. <a href="http://www.painnewsnetwork.org/stories/2015/4/7/study-one-in-five-opioid-prescriptions-for-low-back-pain">http://www.painnewsnetwork.org/stories/2015/4/7/study-one-in-five-opioid-prescriptions-for-low-back-pain</a> (author: Pain Anson).
- 04/15 *National Pain Report* publishes "A Conversation About Chronic Pain with Beth Darnall, PhD." In this feature article Dr. Darnall discusses the state of pain treatment in the US and what's needed to for collective advancement. <a href="http://nationalpainreport.com/a-conversation-about-chronic-pain-8825995.html">http://nationalpainreport.com/a-conversation-about-chronic-pain-8825995.html</a> (author: Ed Coughlan).
- 06/15 Dr. Darnall provides expert commentary in the story "Anxiety & Chronic Pain Link Defined". <a href="http://nationalpainreport.com/anxiety-chronic-pain-link-defined-8826402.html">http://nationalpainreport.com/anxiety-chronic-pain-link-defined-8826402.html</a>

- 06/15 *The Sydney Morning Herald* quotes Dr. Darnall in a story on back pain "Emotional back pain: the cause for our country's biggest problem?" (author: Sarah Berry) <a href="http://www.smh.com.au/lifestyle/diet-and-fitness/emotional-back-pain-the-cause-for-our-countrys-biggest-problem-20150612-ghm6n3.html">http://www.smh.com.au/lifestyle/diet-and-fitness/emotional-back-pain-the-cause-for-our-countrys-biggest-problem-20150612-ghm6n3.html</a>
- 07/15 Dr. Darnall discusses how her patients are among her greatest mentors in the "Pundit Profile" feature of *PainWeek Journal* (p
   58): <a href="http://issuu.com/painweek/docs/pwj\_15\_q2\_6.3/58">http://issuu.com/painweek/docs/pwj\_15\_q2\_6.3/58</a>
- 07/15 Kerry Smith gives a heartfelt testimonial of Less Pain, Fewer Pills in "What Doctor's Don't Tell Us": <a href="http://nationalpainreport.com/my-story-what-doctors-dont-tell-us-8825365.html">http://nationalpainreport.com/my-story-what-doctors-dont-tell-us-8825365.html</a>
- 09/15 Stanford ScopeBlog interviews Beth Darnall about back pain and the Stanford Back Pain Free Education Day: <a href="http://scopeblog.stanford.edu/2015/09/03/stanford-expert-on-back-pain-the-important-thing-for-people-to-know-is-that-its-treatable/">http://scopeblog.stanford.edu/2015/09/03/stanford-expert-on-back-pain-the-important-thing-for-people-to-know-is-that-its-treatable/</a> (author Rina Shaikh-Lesko)
- 09/15 The National Pain Report interviews Beth Darnall and promotes the Stanford Back Pain Free Education Day <a href="http://nationalpainreport.com/back-pain-seminar-at-stanford-wants-you-8827323.html">http://nationalpainreport.com/back-pain-seminar-at-stanford-wants-you-8827323.html</a>
- 09/15 Dr. Darnall's research and book are featured in the following opioid taper story: <a href="http://nationalpainreport.com/leading-pain-physician-starts-mandatory-opioid-tapering-program-8827407.html">http://nationalpainreport.com/leading-pain-physician-starts-mandatory-opioid-tapering-program-8827407.html</a> National Pain Report.
- 09/15 Stanford's *ScopeBlog* publishes a follow up report on the Stanford Back Pain Education Day featuring Drs. Mackey and Darnall, and a deeper discussion about chronic pain with Dr. Mackey. <a href="http://scopeblog.stanford.edu/2015/09/22/people-are-looking-for-better-answers-a-conversation-about-chronic-pain/">http://scopeblog.stanford.edu/2015/09/22/people-are-looking-for-better-answers-a-conversation-about-chronic-pain/</a> (author Rina Shaikh-Lesko).
- 09/15 The Ashville, NC Citizen Times quotes Dr. Darnall's perspective about pain in the article: Pain in all in your head (author David Nygaard, DC) <a href="https://www.citizentimes.com/story/life/2015/09/21/health-column-pain-head-treat/72556120/">http://www.citizentimes.com/story/life/2015/09/21/health-column-pain-head-treat/72556120/</a>
- 10/15 the *Pain News Network* includes Dr. Darnall in an article on long term opioid use in women: <a href="http://www.painnewsnetwork.org/stories/2015/10/12/study-long-term-opioid-use-often-ineffective">http://www.painnewsnetwork.org/stories/2015/10/12/study-long-term-opioid-use-often-ineffective</a> (author: Pat Anson)
- 10/15 Pain News Network includes Dr. Darnall's commentary in a story on resilience in chronic pain (author: Pat Anson).
   <a href="http://www.painnewsnetwork.org/stories/2015/10/22/chronic-pain-changes-pain-chemistry">http://www.painnewsnetwork.org/stories/2015/10/22/chronic-pain-changes-pain-chemistry</a>
- 11/15 Stanford Health Library discusses Dr. Darnall's recent presentation "Opening the Medicine Box in Your Mind: The Psychology of Pain" in this article (author: SLH Librarian) (video lecture appended) <a href="http://www.shlnews.org/?p=1105">http://www.shlnews.org/?p=1105</a>
- 11/15 PainWeek's One Minute Clinician features Dr. Darnall. She discusses the
  psychological factors that should be considered prior to prescribing opioids.
  <a href="http://bit.ly/10qEoFz">http://bit.ly/10qEoFz</a>

- 01/16 National Pain Report features the work of the AAPM Pain Psychology Task Force and Dr. Darnall is featured as Task Force Co-Chair: <a href="http://nationalpainreport.com/aapm-national-need-for-chronic-pain-psychology-services-8829379.html">http://nationalpainreport.com/aapm-national-need-for-chronic-pain-psychology-services-8829379.html</a>
- 02/16 Psychiatry Advisor publishes "AAPM Task Force: Enhanced Pain Psychology
  Training Needed for Psychologists" and interviews Dr. Darnall for the story (assistant
  editor: Laura Stiles). <a href="http://www.psychiatryadvisor.com/practice-management/american-association-pain-management-psychology-psychologist/article/478083/">http://www.psychiatryadvisor.com/practice-management/american-association-pain-management-psychology-psychologist/article/478083/</a>
- 02/16 Clinical Pain Advisor reports on the AAPM Pain Psychology Task Force presentation at the annual meeting and interviews Dr Darnall (assistant editor: Laura Stiles). <a href="http://www.clinicalpainadvisor.com/aapm-2016-annual-meeting/aapm-task-force-enhanced-pain-psychology-training-needed-for-psychologists/article/477829">http://www.clinicalpainadvisor.com/aapm-2016-annual-meeting/aapm-task-force-enhanced-pain-psychology-training-needed-for-psychologists/article/477829</a>
- 02/16 MDLinx covers catastrophizing research by Chloe Taub, MA, Beth Darnall, PhD and colleagues. Read the published abstract here: <a href="http://www.mdlinx.com/pain-management/conference-abstract.cfm/ZZ0FFA8875490F442AA9D6EA4E6AAB215A/56458/?utm\_source=confcoveragenl&utm\_medium=newsletter&utm\_content=abstract-list&utm\_campaign=abstract-AAPM2016&nonus=0</a>
- 02/16 MPR Pain Management posts video of Dr. Darnall explaining about pain
  psychology and a scientific abstract of the research she and colleagues presented at the
  AAPM lecture for a community opioid tapering study. <a href="http://pain-management-resource-center.com/?video\_id=399">http://pain-management-resource-center.com/?video\_id=399</a>
- 02/16 MDLinx covers patient satisfaction research conducted by Ian Mackey; Ming-Chih Kao PhD, MD; and Beth Darnall, PhD. <a href="http://www.mdlinx.com/pain-management/conference-abstract.cfm/56466/?conf">http://www.mdlinx.com/pain-management/conference-abstract.cfm/56466/?conf</a> id=230803&searchstring=&coverage day=0&nonus=0&page=3
- 03/16 *Pain News Network* covers new research linking increased risk for migraine in adulthood to childhood abuse, interviews Dr. Darnall for comment and opinion (author: Pat Anson). http://bit.ly/1p9WJPX
- 03/16 *Practical Pain Management PPM* reports of pain and fatigue in pediatric lupus, interviews Dr. Darnall on catastrophizing and when treat it. (authors: Forest Tennant, MD, DrPH and Thomas G. Ciccone). <a href="http://bit.ly/1WjrkF7">http://bit.ly/1WjrkF7</a>
- 03/16 *Drugfree.Org* features a front-page article on Dr. Darnall's study of a voluntary community opioid taper program that shows reducing opioids is often associated with less pain. (author: Celia Vickers) <a href="http://www.drugfree.org/join-together/opioid-taper-program-helps-patients-take-less-medication-without-pain/">http://www.drugfree.org/join-together/opioid-taper-program-helps-patients-take-less-medication-without-pain/</a>
- 03/16 National Pain Report discusses the first pain psychology twitter chat #PainPsychChat hosted by @StanfordPain and @BethDarnall. <a href="http://nationalpainreport.com/pain-discussion-brought-to-twitter-8829895.html">http://nationalpainreport.com/pain-discussion-brought-to-twitter-8829895.html</a>

- 04/16 *Cooking Light* publishes "Meditate Your Way to Better Health" and quotes Dr. Darnall as an expert (author: Karen Asp) p 71-72.
- 04/16 *Pain Pathways Magazine* publishes a feature interview with Beth Darnall, PhD about *Less Pain, Fewer Pills: Avoid the dangers of prescription opioids and gain control over chronic pain.* http://www.painpathways.org/opioids-for-chronic-pain-gain-insider-advice/
- 04/16 National Pain Report features an interview with Beth Darnall, PhD for the article entitled "Catastrophizing Is Real By Any Name"
   http://nationalpainreport.com/counterpoint-catastrophizing-is-real-by-any-name-8830176.html
- 04/16 Care2HealthyLiving features Dr. Darnall's tips on tapering off prescription opioids. <a href="http://www.care2.com/greenliving/tapering-off-prescription-opioids-7-tips-for-success.html">http://www.care2.com/greenliving/tapering-off-prescription-opioids-7-tips-for-success.html</a>
- 04/16 The San Francisco Chronicle publishes Dr. Darnall's OpEd piece "Treating Pain Requires More Than a Pill".
   <a href="http://www.sfchronicle.com/opinion/openforum/article/Treating-pain-requires-more-than-a-pill-7223395.php?t=4cf03f7ee2&cmpid=twitter-premium">http://www.sfchronicle.com/opinion/openforum/article/Treating-pain-requires-more-than-a-pill-7223395.php?t=4cf03f7ee2&cmpid=twitter-premium</a>
- 05/16 Money For Lunch radio show (Host: Bert Martinez, Producer: Amy Tripp).
   Topic: CDC Opioid Guidelines and how to manage pain without opioids.
   <a href="http://www.blogtalkradio.com/moneyforlunch">http://www.blogtalkradio.com/moneyforlunch</a>
- 05/16 Pittsburgh Better Times publishes Dr. Darnall's bylined article "Pain Psychology: Hitting the Snooze Button on Your 'Harm Alarm."
   <a href="http://www.pittsburghbettertimes.com/pain-psychology-hitting-the-snooze-button-on-your-harm-alarm/">http://www.pittsburghbettertimes.com/pain-psychology-hitting-the-snooze-button-on-your-harm-alarm/</a>
- 05/16 Health Greatness publishes Dr. Darnall's bylined article "Tapering Off Prescription Opioids: 7 Tips for Success." <a href="http://healthgreatness.com/tapering-off-prescription-opioids-7-tips-success/">http://healthgreatness.com/tapering-off-prescription-opioids-7-tips-success/</a>
- 05/16 *Truthradio.tv* features Dr. Darnall as a guest to discuss the role of pain psychology in reducing opioids. Show is available on iTunes podcast under Alternative Health and the show title (Freedom From Addiction). Show Host: Dr. Winn Henderson.
- 05/16 *Blogcritics* features interview with Beth Darnall. **Author: Patricia Gale**. http://blogcritics.org/interview-dr-beth-darnall-author-of-less-pain-fewer-pills-avoid-the-dangers-of-prescription-opioids-and-gain-control-over-chronic-pain/
- 05/16 Dr. Darnall is the featured guest on NPR Station 88.1 WDIY Radio Show Take
   Charge of Your Life (Host: Eleanor Bobrow). Topic: Minimizing opioids in chronic
   pain care.
- 05/16 Malibu Chronicle features Beth Darnall's bylined story: "7 Tips for Tapering Off Prescription Opioids". <a href="http://www.malibuchronicle.com/2016/05/10/?v=7516fd43adaa">http://www.malibuchronicle.com/2016/05/10/?v=7516fd43adaa</a>

- 05/16 Featured guest on *The Kathryn Zox Show* on VoiceAmerica/World Talk Radio.
   Host: Kathryn Zox; Producer: Hillary Dolinsky. Opioid Limits Creates Crisis for Those in Chronic Pain: Expert Offers Solutions. <a href="mailto:KZvoice@aol.com">KZvoice@aol.com</a>
- 05/16 Beth Darnall is featured guest on *KAYT On Point Talk* radio show with **host** Carlette Christmas. Melissa Bell, Producer. Alexandria, LA. <a href="https://www.onpointcxmas.com">www.onpointcxmas.com</a>
- 05/16 Roy Richards radio show "Middle Age Can Be Your Best Age" interviews Beth Darnall, PhD. Host: Roy Richards. Topic: Opioids and Pain Psychology.
   <a href="http://webtalkradio.net/internet-talk-radio/2016/05/30/middle-age-can-be-your-best-age-reduce-the-painkillers-lower-the-pain/">http://webtalkradio.net/internet-talk-radio/2016/05/30/middle-age-can-be-your-best-age-reduce-the-painkillers-lower-the-pain/</a>
- 05/16 Beth Darnall, PhD is featured guest on WSVA Late Afternoons with Host: Mike Schikman. Public radio Madison Univ. Station / airs DC (#8 USA radio market) airs 4 states. Podcast on wsvaonoline.com
- 05/16 The National Pain Report interviews Beth Darnall, PhD (author: Ed Coghlan) in a Q&A article "Reduce Opioids- Then What?". Secondary Twitter promotion by Stanford Health Policy and Stanford Medicine.
   <a href="http://nationalpainreport.com/reduce-opioids-then-what-8830538.html">http://nationalpainreport.com/reduce-opioids-then-what-8830538.html</a>
- 06/16 The Philippe Matthews Show features Beth Darnall, PhD on the hour-long videocast interview broadcast live and hosted on YouTube. Over 1 million audience reach. https://www.youtube.com/watch?v=Vq\_EPAq17iI
- 06/16 *Medscape* covers the research of Beth Darnall and colleagues in the development and validation of a daily pain catastrophizing scale. http://www.medscape.com/viewarticle/863935
- 06/16 KKNW Healthy YOU interviews Beth Darnall, PhD for an hour-long show about tapering opioids and using pain psychology and self-management strategies to manage pain. Host: Keesha Ewers.
- 06/16 *Full Power Living Radio / Emotional Pro* radio hosts Beth Darnall, PhD in an hour long live national radio show on chronic pain, self-empowering psychological approaches, and opioid risks. (**Host: Ilene Dillon, MSW**).
- 07/16 Florida's NPR News Stations WLRN / WKWM Topical Currents Public Radio interviews Beth Darnall, PhD along with Dr. Joseph Alshon for a live show on chronic pain and reducing opioids. (Host: Joseph Cooper; Producer: Richard Ives).
- 07/16 *Radio Amerika* interviews Beth Darnall, PhD about chronic pain, reducing opioids, and optimizing behavioral pain management. Live interviewed aired in 400 stations in the country (Host: Barb Adams). www.radioamerikanow.com, www.gcnlive.com
- 07/16 *The Donna Seebow Show* hosts Beth Darnall, PhD for a live radio interview about chronic pain and how to treat it with fewer pills.

- 07/16 *InnerSelf* publishes Beth's bylined article on tips for success with opioid tapering. <a href="http://innerself.com/content/living/health/diseases-and-conditions/13063-tapering-off-prescription-opioids-7-tips-for-success.html">http://innerself.com/content/living/health/diseases-and-conditions/13063-tapering-off-prescription-opioids-7-tips-for-success.html</a>
- 07/16 **Dr. Karen Litzy** interviews Beth Darnall, PhD for her popular show *Healthy*, *Weathy and Smart*. Beth talks about the mission to help people with chronic pain have less pain and need fewer pills. Podcast here: <a href="mailto:apple.co/1pF8kGi#chronicpain">apple.co/1pF8kGi#chronicpain</a>
- 07/16 **Dr. Joe Tatta** hosts Beth Darnall, PhD on *The Healing Pain Postcast*, an hour-long video interview about pain, psychology, how to need less pain medicine, and what's needed to expand access to comprehensive pain care. View it here: <a href="http://www.drjoetatta.com/dr-beth-darnall-less-pain-fewer-pills">http://www.drjoetatta.com/dr-beth-darnall-less-pain-fewer-pills</a>
- 07/16 Stanford Medicine News Center covers Dr. Eric Sun's research on surgeries and increased risk for chronic opioid use that published in JAMA Internal Medicine on July 11. Beth Darnall, PhD, a co-author of the study is interviewed here:
   <a href="https://med.stanford.edu/news/all-news/2016/07/surgery-found-to-increase-risk-of-chronic-opioid-use.html">https://med.stanford.edu/news/all-news/2016/07/surgery-found-to-increase-risk-of-chronic-opioid-use.html</a> (author: Tracie White)
- 08/16 Clinical Psychiatry Advisor features Beth Darnall and the work of the entire Pain Psychology Task Force at the American Academy of Pain Medicine in the article "The Importance of Pain Psychology Curricula in Training and Education."
   <a href="http://www.psychiatryadvisor.com/interventional-pain-management/pain-psychology-curricula-in-training-and-education/article/514837/">http://www.psychiatryadvisor.com/interventional-pain-management/pain-psychology-curricula-in-training-and-education/article/514837/</a> (Author: Tori Rodriguez, MA, LPC)
- 08/16 *BlogCritics* reviews Beth Darnall's book *The Opioid-Free Pain Relief Kit* (c) 2016. http://blogcritics.org/book-review-the-opioid-free-pain-relief-kit-10-simple-steps-to-ease-your-pain-by-beth-darnall-phd/ (Author: Patricia Gale).
- 08/16 *Pain Medicine News* features Dr. Eric Sun's (co-author Beth Darnall) *JAMA Internal Medicine* publication showing link between common surgeries and risk for prolonged opioid use one year later. <a href="http://www.painmedicinenews.com/Primary-Care/Article/08-16/Common-Surgeries-Associated-With-Increased-Risk-for-Chronic-Opioid-Use/37129">http://www.painmedicinenews.com/Primary-Care/Article/08-16/Common-Surgeries-Associated-With-Increased-Risk-for-Chronic-Opioid-Use/37129</a> (Author: Mia Garchitorena).
- 08/16 *Care2* publishes Beth Darnall's bylined article *5 Pain Relief Tips*. http://www.care2.com/greenliving/5-pain-relief-tips-no-drugs-involved.html
- 08/16 Daily Kos publishes Beth Darnall's opinion in "The Opioid Epidemic: How bad is it and who does it hurt?" The article discusses the dearth of long term opioid research and the politics of opioid policy (Author: Susan Grigsby). <a href="http://www.dailykos.com/story/2016/8/21/1561313/-The-opioid-epidemic-How-bad-is-it-and-who-does-it-hurt">http://www.dailykos.com/story/2016/8/21/1561313/-The-opioid-epidemic-How-bad-is-it-and-who-does-it-hurt</a>
- 08/16 *BlogCritics'* Patricia Gale interviews Beth Darnall, PhD about her latest book, "The Opioid-Free Pain Relief Kit". <a href="http://blogcritics.org/interview-beth-darnall-phd-author-of-the-opioid-free-pain-relief-kit-10-simple-steps-to-ease-your-pain/">http://blogcritics.org/interview-beth-darnall-phd-author-of-the-opioid-free-pain-relief-kit-10-simple-steps-to-ease-your-pain/</a>

- 08/16 Jane Anderson gives a professional review of "Less Pain, Fewer Pills" in *Bizbooks and Beyond*. <a href="http://bizcatalyst360.com/less-pain-fewer-pills-avoid-the-dangers-of-prescription-opioids-and-gain-control-over-chronic-pain/">http://bizcatalyst360.com/less-pain-fewer-pills-avoid-the-dangers-of-prescription-opioids-and-gain-control-over-chronic-pain/</a>
- 08/16 Bloomberg Technology quotes Beth Darnall, PhD as a pain expert in a story on virtual reality as a pain relief tool: "Hospitals Try Giving Patients a Dose of VR" (Authors: Ian King and Caroline Chen). Reposted in The Washington Post.
   <a href="http://www.bloomberg.com/news/articles/2016-08-29/hospitals-try-giving-patients-a-dose-of-vr">http://www.bloomberg.com/news/articles/2016-08-29/hospitals-try-giving-patients-a-dose-of-vr</a>
- 08/16 *Five To Thrive Radio* features Beth Darnall, PhD in a live discussion about her books, reducing opioids and treating pain differently. (Hosts: Lise Alschuler and Karolyn Gazella) http://www.iheart.com/show/53-Five-To-Thrive-Live/
- 08/16 *Philly.com* quotes Beth Darnall, PhD in the story "Helpful alone, deadly together:
   Overdoses on combined prescriptions plague white women." (Authors: Kimberly Kindy
   and Dan Keating) <a href="http://www.philly.com/philly/health/Helpful-alone-deadly-together-Overdoses-on-combined-prescriptions-plague-white-women.html">http://www.philly.com/philly/health/Helpful-alone-deadly-together-Overdoses-on-combined-prescriptions-plague-white-women.html</a>
- 08/16 New York Magazine features Beth Darnall, PhD's scientific opinion in the story "Is Menopause Partly to Blame for Record Painkiller Addiction Among White Women?" (author Susan Rinkunas). <a href="http://nymag.com/thecut/2016/08/is-menopause-behind-white-womens-painkiller-addiction.html">http://nymag.com/thecut/2016/08/is-menopause-behind-white-womens-painkiller-addiction.html</a>
- 08/16 *Techvibes* features Beth Darnall's clinical opinion in the story "Can virtual reality distract hospital patients from pain in a way drugs can't?" (author: Knowlton Thomas). <a href="https://techvibes.com/2016/08/31/virtual-reality-distract-hospital-patients-from-pain">https://techvibes.com/2016/08/31/virtual-reality-distract-hospital-patients-from-pain</a>
- 09/16 The Orlando Sentinel quotes Beth Darnall, PhD in the story "Overdoses on combined prescriptions plague white women." (Authors: Kimberly Kindy and Dan Keating) <a href="http://www.orlandosentinel.com/health/addiction-recovery/os-addiction-recovery-overdose-prescriptions-white-women-20160901-story.html">http://www.orlandosentinel.com/health/addiction-recovery/os-addiction-recovery-overdose-prescriptions-white-women-20160901-story.html</a>
- 09/16 National Pain Report publishes a story on Stanford Free Back Pain Education
  Day, co-chaired by Beth Darnall, PhD and Sean Mackey, MD, PhD (Author: Ed
  Coghlan). <a href="http://nationalpainreport.com/tune-in-to-stanfords-back-pain-day-sunday-8831385.html">http://nationalpainreport.com/tune-in-to-stanfords-back-pain-day-sunday-8831385.html</a>
- 09/16 *The Times of India* quotes Beth Darnall, PhD as a pain expert for a feature on virtual reality" (Authors Ian King & Caroline Chen *Bloomberg News* reprint) <a href="http://timesofindia.indiatimes.com/life-style/health-fitness/health-news/Canvirtual-reality-relieve-pain/articleshow/54002725.cms">http://timesofindia.indiatimes.com/life-style/health-fitness/health-news/Canvirtual-reality-relieve-pain/articleshow/54002725.cms</a>
  - 09/16 *Health IT Outcomes* quotes Beth Darnall, PhD as a pain expert in a story on virtual reality "Dropping Virtual Reality Prices Yields Better Opportunities For Healthcare." (**Author: Christine Kern**). <a href="http://www.healthitoutcomes.com/doc/dropping-virtual-reality-prices-yields-better-opportunities-for-healthcare-0001">http://www.healthitoutcomes.com/doc/dropping-virtual-reality-prices-yields-better-opportunities-for-healthcare-0001</a>

- 09/16 *Pain News Network* interviews Beth Darnall, PhD for a feature on her book and binaural audio to treat pain: "Can 3-D Sound Technology Silence Pain?" (**Author: Pat Anson**). <a href="http://www.painnewsnetwork.org/stories/2016/9/9/can-3-d-sound-technology-silence-pain">http://www.painnewsnetwork.org/stories/2016/9/9/can-3-d-sound-technology-silence-pain</a>
- 09/16 *MPR* features Beth Darnall, PhD for the article "Applying CBT and Mindfulness in Pain Management" (**Author: Florence Chaverneff, PhD**). http://www.empr.com/painweek-2016/applying-cbt-and-mindfulness-effectively-in-painmanagement/article/521841/
- 09/16 Clinical Pain Advisor interviews Beth Darnall, PhD about her PAINWeek presentation in the article "Biopsychosocial Treatment Effective for Pain" (Author Florence Chaverneff, PhD). <a href="http://www.clinicalpainadvisor.com/painweek-2016/biopsychosocial-treatment-in-pain-reduction/article/521708/">http://www.clinicalpainadvisor.com/painweek-2016/biopsychosocial-treatment-in-pain-reduction/article/521708/</a>
- 09/16 Stanford Medicine publishes "Shifting the focus from opioids to life beyond pain: A Q&A with pain expert Beth Darnall" (author: Jana Chow).
   <a href="http://scopeblog.stanford.edu/2016/09/27/shifting-the-focus-from-opioids-to-life-beyond-pain-a-qa-with-pain-expert-beth-darnall/">http://scopeblog.stanford.edu/2016/09/27/shifting-the-focus-from-opioids-to-life-beyond-pain-a-qa-with-pain-expert-beth-darnall/</a>
- 10/16 **Roy Richards** interviews Beth Darnall, PhD for "Middle Age Can Be Your Best Age" and they discuss the importance of you—the patient—in best managing pain. http://webtalkradio.net/internet-talk-radio/2016/09/26/middle-age-can-be-your-best-age-make-money-from-your-passion-and-conquer-pain/
- 10/16 *The Guardian* publishes **Liza Aufrichtig's** story "Period pain: why do so many women suffer from menstrual cramps in silence?" and includes Beth Darnall as a pain expert. <a href="https://www.theguardian.com/lifeandstyle/2016/oct/24/period-pain-menstruation-cramps-dysmenorrhea">https://www.theguardian.com/lifeandstyle/2016/oct/24/period-pain-menstruation-cramps-dysmenorrhea</a>
- 10/16 "Is Pain in the Brain? A psychologist discusses alternative to opioids" Podcast interview with Stanford University's **Paul Costello**. <a href="http://scopeblog.stanford.edu/2016/10/24/is-pain-in-the-brain-a-pain-psychologist-discusses-alternative-to-opioids/">http://scopeblog.stanford.edu/2016/10/24/is-pain-in-the-brain-a-pain-psychologist-discusses-alternative-to-opioids/</a>
- 10/16 Stanford University's **Paul Costello** interviews Beth Darnall, PhD for *Stanford Medicine Scope Blog* and for his acclaimed "1:2:1" Podcast entitled "Beth Darnall on opioid-free pain relief". <a href="https://med.stanford.edu/news/all-news/one-to-one/2016/beth-darnall-on-opioid-free-pain-relief.html">https://med.stanford.edu/news/all-news/one-to-one/2016/beth-darnall-on-opioid-free-pain-relief.html</a>
- 10/16 **KJCE** *Let's Get Healthy* LIVE radio show in Austin, TX, interviews Beth Darnall about pain and non-opioid mind-body treatment.
- 10/16 **KOSS Broad Perspective Radio** interviews Beth Darnall about the role of pain psychology in pain management.
- 10/16 *Stanford Medicine* publishes "5 questions: Beth Darnall on opioids and pain management" (author: Jana Chow). <a href="https://med.stanford.edu/news/all-news/2016/09/5-questions-beth-darnall-on-opioids-and-pain-management.html">https://med.stanford.edu/news/all-news/2016/09/5-questions-beth-darnall-on-opioids-and-pain-management.html</a>

- 11/16 KOMO News Radio in Seattle featured Beth Darnall in an interview on chronic pain, the importance of psychology, and how to minimize opioids. (Host: Herb Weisbaum. <a href="https://www.bullpub.com/blog/Beth-Darnall-interviewed-KOMO">https://www.bullpub.com/blog/Beth-Darnall-interviewed-KOMO</a>
- 11/16 **The Los Altos Town Crier** features Beth Darnall's books and work in "Relieving pain without opioids." (author: Donna Alvarado)
- 12/16 ABCNews TV Chicago interviews Beth Darnall in this feature on pain psychology and non-pharmacological pain treatments offered in interdisciplinary pain clinics.
   <a href="http://abc7chicago.com/health/pain-management-clinics-an-alternative-to-opioid-prescriptions/1639320/">http://abc7chicago.com/health/pain-management-clinics-an-alternative-to-opioid-prescriptions/1639320/</a>
- 12/16 *Pain Medicine News* features **Beth Darnall's** research that is helping women scheduled for breast cancer learn techniques to reduce pre-surgical distress and post-surgical pain. "Beyond Opioids: Surgeons Explore New Approaches To Pain Control" <a href="http://www.painmedicinenews.com/Web-Only/Article/12-16/Beyond-Opioids-Surgeons-Explore-New-Approaches-To-Pain-Control/38917">http://www.painmedicinenews.com/Web-Only/Article/12-16/Beyond-Opioids-Surgeons-Explore-New-Approaches-To-Pain-Control/38917</a> (author: Christina Frangou)
- 01/17 **Women Total Health & Wellness** features Beth Darnall in the story "A Mismatch Between Pill and Problem" (author: Sharon Reynolds). Winter issue, pages 80-84.
- 02/17 Healthy Life interviews Beth Darnall about her book The Opioid Free Pain Relief Kit. HealthyLife.net (host: Linda MacKenzie)
- 02/17 *BBS Radio Network* interviews Beth Darnall about pain psychology as a pathway to reduce opioid use for chronic pain. (host: Dr. Susan Kolb).
- 04/17 *DrugFree.Org* features Beth Darnall's presurgical research: "Presurgical Program Aims to Reduce Pain and Opioid Use After Surgery." (author: Celia Vimont).
   <a href="http://drugfree.org/learn/drug-and-alcohol-news/presurgical-program-aims-reduce-pain-opioid-use-surgery/">http://drugfree.org/learn/drug-and-alcohol-news/presurgical-program-aims-reduce-pain-opioid-use-surgery/</a>
- 05/17 *Scientific American* Mind features Beth Darnall's patient care in "Treating Pain Without Pills" May 2017 issue. (author: Stephani Sutherland, PhD) <a href="https://www.scientificamerican.com/article/treating-pain-without-pills/">https://www.scientificamerican.com/article/treating-pain-without-pills/</a>
- 05/17 APNews.com includes Beth Darnall's opinion in the story "Overcoming Opioids: When pills are a hospital's last resort" (author: Lauran Neergaard). <a href="https://apnews.com/0fd8950a4218412c9c12f18505bc3d96">https://apnews.com/0fd8950a4218412c9c12f18505bc3d96</a>
- 06/17 Stanford *ScopeBlog* features Beth's explanation of her team's research on sexdifferences revealed in the association between opioid prescription, pain catastrophizing and pain intensity. (author: Jennifer Huber) <a href="http://scopeblog.stanford.edu/2017/06/15/pain-catastrophizing-linked-to-opioid-use-particularly-for-women-stanford-study-shows/">http://scopeblog.stanford-study-shows/</a>
- 06/17 Science Daily features Beth Darnall and colleagues' new research on opioids, pain catastrophizing, pain intensity and sex differences. "Women who focus negatively, magnify chronic pain, more likely to be taking prescribed opioids"
   <a href="https://www.sciencedaily.com/releases/2017/06/170615110938.htm">https://www.sciencedaily.com/releases/2017/06/170615110938.htm</a>

- 07/17 *Natural Medicine Journal* features Beth Darnall in a podcast interview on opioids, psychology, and pain: "Addressing the Opioid Epidemic" (host: Karolyn Gazella). http://www.naturalmedicinejournal.com/journal/2017-07/addressing-opioid-epidemic
- 08/17 The Pain Practitioner (journal of the American Academy of Integrative Medicine) features Beth Darnall in the article "Behavioral Interventions for Pain Embrace Technology, Broader Integration into Health Care Systems." July/August 2017; 26-28 (author: Debra Nelson-Hogan). <a href="http://pain-practitioner.aapainmanage.org/doc/american-academy-of-pain-management/the-pain-practitioner---aug17/2017080801/">http://pain-practitioner---aug17/2017080801/</a>
- 08/17 TIME Magazine publishes "3 Science-backed ways to relieve pain and stress" (authors: Seppala & Darnall) <a href="http://time.com/4884052/how-to-relieve-pain-stress/">http://time.com/4884052/how-to-relieve-pain-stress/</a>
- 09/17 The Washington Post publishes "Stanford Researchers: The secret to overcoming the opioid crisis may lie partly in the mind." (authors: Darnall & Seppala)
   <a href="https://www.washingtonpost.com/news/inspired-life/wp/2017/09/12/stanford-researchers-the-secret-to-overcoming-the-opioid-crisis-may-be-all-in-the-mind/?utm\_term=.88edee7e81fd">https://www.washingtonpost.com/news/inspired-life/wp/2017/09/12/stanford-researchers-the-secret-to-overcoming-the-opioid-crisis-may-be-all-in-the-mind/?utm\_term=.88edee7e81fd</a>
- 09/17 *Stanford Medicine News Center* publishes story on Beth Darnall's new major patient-centered research award from PCORI.
- 09/17 The Patient-Centered Outcomes Research Institute (PCORI) announces \$8.8 million award to principal investigator Beth Darnall to study pain and opioid reduction in a multi-state patient-centered comparative effective trial. Press release:

   https://www.pcori.org/research-results/2017/comparative-effectiveness-pain-cognitive-behavioral-therapy-and-chronic-pain
- 10/17 The *National Pain Report* publishes a story discussing Beth Darnall's books as clinical tools in his story "Is the Pain Care World Really Set Up to Help Us?" (author: Kerry Smith) <a href="http://nationalpainreport.com/is-the-pain-care-world-set-up-to-really-help-us-8834482.html">http://nationalpainreport.com/is-the-pain-care-world-set-up-to-really-help-us-8834482.html</a>
- 10/17 the National Pain Report publishes an interview with Beth Darnall "Absolutes in Chronic Pain Can Backfire" (author: Ed Coghlan).
   <a href="http://nationalpainreport.com/absolutes-in-chronic-pain-treatment-can-backfire-8834562.html">http://nationalpainreport.com/absolutes-in-chronic-pain-treatment-can-backfire-8834562.html</a>
- 11/17 Workcompcentral.com features Beth Darnall in Centering Patients' Psychological State Key to Treating Pain Without Opioids" (author: Emily Brill). <a href="https://www.workcompcentral.com/news/article/id/5e28b5992d3c8b432008e9896e84d43">https://www.workcompcentral.com/news/article/id/5e28b5992d3c8b432008e9896e84d43</a>
   9702e2a41
- 12/17 *The American Pain Society Member Spotlight* features Beth Darnall and her new research funding. <a href="http://americanpainsociety.org/membership/spotlight-darnall-2">http://americanpainsociety.org/membership/spotlight-darnall-2</a>
- 1/18 *Spirituality & Health* magazine publishes a bylined article by Beth Darnall "The Tao of Chronic Pain & Treatment". Jan/Feb 2018 issue, pages 50-55 (also listed under non-peer reviewed articles because it is bylined). https://store.spiritualityhealth.com/store/items/detail/item/3946

- 1/18 The National Pain Report publishes "Stanford's Darnall to Discuss Pain Relief at the World Economic Forum" (author: Ed Coghlan).
   http://nationalpainreport.com/stanfords-darnall-to-discuss-pain-relief-at-the-world-economic-forum-8835333.html
- 2/18 BBC World Service radio features Beth Darnall in The Why Factor episode "Why We Need to Learn More About Pain." (by Sandra Kanthal). <a href="http://www.bbc.co.uk/programmes/w3csvtc8">http://www.bbc.co.uk/programmes/w3csvtc8</a>
- 2/18 *Pharmacy Today* (American Pharmacists Association) publishes "Patient-centered prescription opioid tapering in community outpatients with chronic pain" a synopsis article on the research led by Beth Darnall. <a href="https://www.pharmacist.com/article/patient-centered-prescription-opioid-tapering-community-outpatients-chronic-pain">https://www.pharmacist.com/article/patient-centered-prescription-opioid-tapering-community-outpatients-chronic-pain</a>
- 2/18 Stanford's *ScopeBlog* features Beth Darnall and her research team's new *JAMA Internal Medicine* research letter on patient-centered opioid tapering. "Slow and steady wins this race": Stanford pain specialist studies opioid tapering (author: Jennifer Huber). <a href="https://scopeblog.stanford.edu/2018/02/20/slow-and-steady-wins-the-race-stanford-pain-expert-studies-opioid-tapering/">https://scopeblog.stanford.edu/2018/02/20/slow-and-steady-wins-the-race-stanford-pain-expert-studies-opioid-tapering/</a>
- 2/18 *MedPage* reports on Beth Darnall and her team's research on patient centered voluntary opioid tapering. "How One Pain Clinic Tapered Opioid Use" (author: Judy George). https://www.medpagetoday.com/neurology/opioids/71240
- 2/18 *U.S News and World Report* feature Beth Darnall and her research team's *JAMA Internal Medicine* opioid tapering research in the article "Some Pain Patients Can Cut Opioid Dose and Still Get Relief". (author: Serena Gordon) <a href="https://health.usnews.com/health-care/articles/2018-02-21/some-pain-patients-can-cut-opioid-dose-and-still-get-relief">https://health.usnews.com/health-care/articles/2018-02-21/some-pain-patients-can-cut-opioid-dose-and-still-get-relief</a>
- 2/18 *Healio* covers Beth Darnall and team's *JAMA Internal Medicine* study: "Opioid tapering does not increase pain intensity" (author: Alaina Tedesco).

  <a href="https://www.healio.com/internal-medicine/pain-management/news/online/%7Bf01a39c0-49a8-4188-8d92-f968db695c2d%7D/opioid-tapering-does-not-increase-pain-intensity">https://www.healio.com/internal-medicine/pain-management/news/online/%7Bf01a39c0-49a8-4188-8d92-f968db695c2d%7D/opioid-tapering-does-not-increase-pain-intensity</a>
- 2/18 New England Journal of Medicine's Journal Watch reviews Beth Darnall and team's JAMA Internal Medicine research in the article "An Approach to Tapering Opioid Dosages in Patients with Chronic Pain" (author: Thomas Schwenk, MD)

  <a href="https://www.jwatch.org/na46164/2018/02/22/approach-tapering-opioid-dosages-patients-with-chronic?query=etoc\_jwneuro&jwd=000012578829&jspc="https://www.jwatch.org/na46164/2018/02/22/approach-tapering-opioid-dosages-patients-with-chronic?query=etoc\_jwneuro&jwd=000012578829&jspc="https://www.jwatch.org/na46164/2018/02/22/approach-tapering-opioid-dosages-patients-with-chronic?query=etoc\_jwneuro&jwd=000012578829&jspc="https://www.jwatch.org/na46164/2018/02/22/approach-tapering-opioid-dosages-patients-with-chronic?query=etoc\_jwneuro&jwd=000012578829&jspc="https://www.jwatch.org/na46164/2018/02/22/approach-tapering-opioid-dosages-patients-with-chronic?query=etoc\_jwneuro&jwd=000012578829&jspc="https://www.jwatch.org/na46164/2018/02/22/approach-tapering-opioid-dosages-patients-with-chronic?query=etoc\_jwneuro&jwd=000012578829&jspc="https://www.jwatch.org/na46164/2018/02/22/approach-tapering-opioid-dosages-patients-with-chronic?query=etoc\_jwneuro&jwd=000012578829&jspc="https://www.jwatch.org/na46164/2018/02/22/approach-tapering-opioid-dosages-patients-with-chronic?query=etoc\_jwneuro&jwd=000012578829&jspc="https://www.jwatch.org/na46164/2018/02/22/approach-tapering-opioid-dosages-patients-with-chronic?query=etoc\_jwneuro&jwd=000012578829&jspc="https://www.jwatch.org/na46164/2018/02/22/approach-tapering-opioid-dosages-patients-with-chronic?query=etoc\_jwneuro&jwd=000012578829&jspc="https://www.jwatch.org/na46164/2018/02/22/approach-tapering-dosages-patients-with-chronic?query=etoc\_jwneuro&jwd=000012578829&jspc="https://www.jwatch.org/na46164/2018/02/22/approach-tapering-dosages-patients-with-chronic?guery=etoc\_jwneuro&jwd=000012578829&jspc="https://www.jwatch.org/na46164/2018/02/22/approach-tapering-dosages-patients-with-dosages-patients-with-dosages-patients-guery=etoc\_jwneuro&jwd=0000
- 3/18 *Connecticut Magazine* features Beth Darnall's work in the article "Experts in Connecticut and Beyond Explore Opioid-Free Pain Treatments (author: Erik Ofgang). <a href="https://www.connecticutmag.com/health-and-science/experts-in-connecticut-and-beyond-explore-opioid-free-pain-treatments/article\_da3bb40a-27d8-11e8-9c81-2f896c2f281d.html">https://www.connecticutmag.com/health-and-science/experts-in-connecticut-and-beyond-explore-opioid-free-pain-treatments/article\_da3bb40a-27d8-11e8-9c81-2f896c2f281d.html</a>
- 3/18 WebMD features Beth Darnall and her team's opioid tapering work in the article "Getting Off Opioids: 6 Tips From a Pain Expert." (author: Peter Abaci).
   https://blogs.webmd.com/pain-management/2018/03/getting-off-opioids-6-tips-from-a-pain-expert.html

- 4/18 *O Magazine* includes Beth Darnall in the feature "Why Prescription Painkillers are so Addictive" (author: Peg Rosen).
- 4/18 *Scientific American* publishes Beth's invited blog describing her science on pain psychology and mindset interventions for pain relief and opioid reduction: "Change your mindset, reduce your chronic pain" (author: Beth Darnall).
- 4/18 MedPage Today publishes Beth Darnall's scientific opinion on a new study in the article "Neuroscience Education Seen Improving Chronic Spinal Pain Changing: pain cognition and confronting movements patients fear bested standard physiotherapy" (author: Judy George)
   https://www.medpagetoday.com/neurology/painmanagement/72374
- 4/18 Clinical Pain Advisor features Maisa Ziadni, Beth Darnall and colleagues' work in this
  article on patient-centered opioid tapering. <a href="https://www.clinicalpainadvisor.com/aapm-2018-annual-meeting/opioids-tapering-chronic-pain-outpatient/article/761320/">https://www.clinicalpainadvisor.com/aapm-2018-annual-meeting/opioids-tapering-chronic-pain-outpatient/article/761320/</a>
- 4/18 Medscape Neurology features Maisa Ziadni, Beth Darnall and colleagues' work in this article on patient-centered opioid tapering (author: Pauline Anderson) https://www.medscape.com/viewarticle/895934
- 4/18 Globe and Mail includes Beth Darnall's work in the article "Patients have more power than they think even when unconscious" (author: Kate Cole-Adams)
   <a href="https://www.theglobeandmail.com/opinion/article-patients-have-more-power-than-they-think-even-when-unconscious/">https://www.theglobeandmail.com/opinion/article-patients-have-more-power-than-they-think-even-when-unconscious/</a>
- 4/18 The Washington Post quotes Beth Darnall in the article "Why doctors don't use alternatives to opioids" (author: Keith Humphreys)
   <a href="https://www.washingtonpost.com/news/wonk/wp/2018/04/12/why-doctors-dont-use-alternatives-to-opioids/?noredirect=on">https://www.washingtonpost.com/news/wonk/wp/2018/04/12/why-doctors-dont-use-alternatives-to-opioids/?noredirect=on</a>
- 5/18 *Vox News* includes Beth Darnall's science and opinion in this article on the role of psychology in the experience and treatment of pain. <a href="https://www.vox.com/science-and-health/2018/5/17/17276452/chronic-pain-treatment-psychology-cbt-mindfulness-evidence">https://www.vox.com/science-and-health/2018/5/17/17276452/chronic-pain-treatment-psychology-cbt-mindfulness-evidence (author: Brian Resnick)</a>
- 5/18 *Mother Nature Network* features an article of Beth Darnall's pain psychology treatment research: "Could a new mindset help patients fight chronic pain? Beth Darnall is helping patients relearn the way they deal with it" (author: Corey Rosenberg). <a href="https://www.mnn.com/health/fitness-well-being/stories/change-mindset-could-help-fight-chronic-pain">https://www.mnn.com/health/fitness-well-being/stories/change-mindset-could-help-fight-chronic-pain</a>
- 6/18 Stanford News features Beth Darnall's research and 2018 World Economic Forum presentation in the article entitled "Four ways the human mind shapes reality". (author: Nathan Collins). <a href="https://news.stanford.edu/2018/06/11/four-ways-human-mind-shapes-reality/">https://news.stanford.edu/2018/06/11/four-ways-human-mind-shapes-reality/</a>
- 6/18 Stanford University School of Medicine *ScopeBlog* features Beth Darnall's science in the article "Mind this: Research reveals the power of the mind."

- https://scopeblog.stanford.edu/2018/06/18/mind-this-research-reveals-the-power-of-themind/ (author: Becky Bach)
- 6/18 Virtual Strategy Magazine features Beth Darnall and colleagues' upcoming patient-centered opioid tapering workshop in the article entitled "The route to successful opioid tapering explored at PainWeek workshop" <a href="https://virtual-strategy.com/2018/06/19/the-route-to-successful-opioid-tapering-explored-at-painweek-workshop/">https://virtual-strategy.com/2018/06/19/the-route-to-successful-opioid-tapering-explored-at-painweek-workshop/</a>
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- 08/18 *Elite Daily* features interview content from Beth Darnall on the psychology of pain and techniques to self-manage pain and distress. <a href="https://www.elitedaily.com/p/what-is-a-vacation-migraine-expert-breaks-down-why-this-happens-how-to-treat-the-pain-9991407">https://www.elitedaily.com/p/what-is-a-vacation-migraine-expert-breaks-down-why-this-happens-how-to-treat-the-pain-9991407">https://www.elitedaily.com/p/what-is-a-vacation-migraine-expert-breaks-down-why-this-happens-how-to-treat-the-pain-9991407</a> (author: Lauren Bissell)
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- 09/18 *Vox News* includes Beth Darnall in the article "Solving America's Painkiller Paradox: Here's how to fix America's painkiller problem without leaving pain patients behind" (author: German Lopez). <a href="https://www.vox.com/science-and-health/2018/9/25/17327976/opioid-epidemic-painkiller-prescriptions">https://www.vox.com/science-and-health/2018/9/25/17327976/opioid-epidemic-painkiller-prescriptions</a>
- 09/18 Medpage Today features Beth Darnall's presentation at PAINWeek in the article "Pain Psychology Called Key in Pain Management" (author: Judy George). https://www.medpagetoday.com/meetingcoverage/painweek/75012
- 09/18 Stanford ScopeBlog features Beth Darnall's upcoming Congressional Briefing on her research on opioid reduction and behavioral medicine. "Looking beyond opioids Stanford pain psychologist briefs Congress" (author: Jennifer Huber). <a href="https://scopeblog.stanford.edu/2018/09/25/looking-beyond-opioids-stanford-pain-psychologist-briefs-congress/">https://scopeblog.stanford.edu/2018/09/25/looking-beyond-opioids-stanford-pain-psychologist-briefs-congress/</a>
- 09/18 *National Pain Report* features letter drafted by Beth Darnall and sent to HHS with the support of 100 national and international signatories. "As Meeting Nears Message to HHS No Forced Tapers" (author: Ed Coghlan). <a href="http://nationalpainreport.com/as-meeting-nears-message-to-hhs-no-forced-tapers-8837288.html">http://nationalpainreport.com/as-meeting-nears-message-to-hhs-no-forced-tapers-8837288.html</a>
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   https://www.scientificamerican.com/article/how-to-help-pain-patients-cut-back-on-opioids/
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- 10/18 The Primary Care Patient-Centered Collaborative republishes Beth Darnall's The Hill OpEd on "Addressing the Dual Crises of Pain and Opioids: A Case for Patient-Centeredness in Pain Research and Treatment."

  <a href="https://www.pcpcc.org/2018/11/01/addressing-dual-crises-pain-and-opioids----case-patient-centeredness">https://www.pcpcc.org/2018/11/01/addressing-dual-crises-pain-and-opioids----case-patient-centeredness</a>
- 11/18 The American Psychological Association's November issue of the *APA Monitor on Psychology* features Beth Darnall, her book and single-session pain psychology class in the article "The Rise of Non-Drug Pain Treatments" (author: Lea Winerman). <a href="http://www.apamonitor-digital.org/apamonitor/201811/MobilePagedReplica.action?pm=2&folio=46#pg49">http://www.apamonitor-digital.org/apamonitor/201811/MobilePagedReplica.action?pm=2&folio=46#pg49</a>
- 11/18 The American Psychological Association features a podcast with Beth Darnall on how psychological treatment for pain can offer patients low-risk treatment, and for some patients it can help reduce need for opioid medication. <a href="https://www.apa.org/research/action/speaking-of-psychology/pain-opioid-reduction.aspx">https://www.apa.org/research/action/speaking-of-psychology/pain-opioid-reduction.aspx</a>
- 11/18 MedPage Today includes Beth Darnall's scientific opinion in the article Intensive Patient Education Flops for Acute Low Back Pain (author: Judy George). https://www.medpagetoday.com/painmanagement/backpain/76166
- 12/18 *Reuter's Health* wire service publishes this article featuring the international stakeholder letter effort led by Beth Darnall, submitted to HHS, and published in *Pain Med*: "Rapidly taking patients off opioids might not be a good idea, experts say." This wire article was picked up by 10 news outlets in Asia, Europe and North America. (author: Tamara Mathias) <a href="https://www.reuters.com/article/us-health-opioid-tapering/rapidly-taking-patients-off-opioids-might-not-be-a-good-idea-experts-say-idUSKCN1OO0SO">https://www.reuters.com/article/us-health-opioid-tapering/rapidly-taking-patients-off-opioids-might-not-be-a-good-idea-experts-say-idUSKCN1OO0SO</a>
- 01/19 *Forbes* publishes a feature on the international stakeholder letter effort led by Beth Darnall, submitted to HHS, and published in *Pain Med.* (author: Joshua Cohen) <a href="https://www.forbes.com/sites/joshuacohen/2019/01/23/the-importance-of-patient-centric-opioid-prescribing-guidelines/#5d106b7f1b7a">https://www.forbes.com/sites/joshuacohen/2019/01/23/the-importance-of-patient-centric-opioid-prescribing-guidelines/#5d106b7f1b7a</a>
- 01/19 Goop publishes a feature Q&A with Beth Darnall in the article "Understanding –and Treating—the Emotional and Physical Roots of Chronic Pain."
   <a href="https://goop.com/wellness/treating-chronic-pain/">https://goop.com/wellness/treating-chronic-pain/</a>
- 02/19 *Practical Pain Management* publishes a feature article of Beth Darnall and her research on self-regulation of pain and extinguishing pain catastrophizing. "Pain Catastrophizing: What Practitioners Need to Know." (author: Kerri Wachter).

- https://www.practicalpainmanagement.com/treatments/psychological/paincatastrophizing-what-practitioners-need-know
- 03/19 *National Pain Report* quotes Beth Darnall and her opinion on what's needed in pain policy in this new round-up article (author: Ed Coghlan)

  <a href="http://nationalpainreport.com/chronic-pain-news-and-notes-8839280.html">http://nationalpainreport.com/chronic-pain-news-and-notes-8839280.html</a>
- 04/19 National Pain Report includes Beth Darnall's comment on the newly issued FDA guidance on opioid tapering. "FDA New Guidance on Opioids Drawing Response."
   (author: Ed Coghlan). <a href="https://www.nationalpainreport.com/fda-new-guidance-on-opioids-drawing-response-8839531.html">https://www.nationalpainreport.com/fda-new-guidance-on-opioids-drawing-response-8839531.html</a>
- 04/19 The Observer features Beth Darnall's research in the article "Harnessing the Power of the Mind for Pain Relief." (author: Kim Armstrong)
   <a href="https://www.psychologicalscience.org/observer/harnessing-the-power-of-the-mind-for-pain-relief">https://www.psychologicalscience.org/observer/harnessing-the-power-of-the-mind-for-pain-relief</a>
- 04/19 Kaiser Health News Morning Briefing features a summary of Beth Darnall's Op-Ed on opioid prescribing that published in The Hill.
   <a href="https://khn.org/morning-breakout/viewpoints-new-cdc-opioid-guidelines-will-improve-pain-treatment-choosing-who-gets-transplants-is-getting-much-more-complicated/">https://khn.org/morning-breakout/viewpoints-new-cdc-opioid-guidelines-will-improve-pain-treatment-choosing-who-gets-transplants-is-getting-much-more-complicated/</a>
- 05/19 *Milwaukee Sentinel* quotes Beth Darnall in the story "What happened to the poster children of Oxycontin?" (author: John Farber).
- 05/19 *Consumer Reports* May 2019 issues includes Beth Darnall's expert opinion on behavioral pain management in the article entitled "Pain Relief, Now." (author: Teresa Carr) https://www.consumerreports.org/chronic-pain/real-pain-relief-now/
- 05/19 *National Public Radio* includes Beth Darnall among pain experts on "Morning Edition" national broadcast (May 20, 2019) entitled "How the Brain Shapes Pain and Links Emotion with Ouch." (host: Jon Hamilton). <a href="https://www.npr.org">www.npr.org</a>
- 06/19 *The Monitor on Psychology* features Beth Darnall's clinical research in the article "Prevention as the First Line of Defense" (author: Zara Greenbaum). https://www.apa.org/monitor/2019/06/cover-opioids-prevention
- 06/19 *The Monitor on Psychology* features Beth Darnall's advocacy on Capitol Hill in the article "Changing Opioid Policies and Practices." (author: Rebecca A. Clay). <a href="https://www.apa.org/monitor/2019/06/cover-opioids-policies">https://www.apa.org/monitor/2019/06/cover-opioids-policies</a>
- 06/19 *Practical Pain Management* includes Beth Darnall's perioperative and chronic pain treatments in the article "Brief Behavioral Interventions for Chronic Pain." (author: Jennifer Murphy). <a href="https://www.practicalpainmanagement.com/resources/practice-management/brief-behavioral-interventions-chronic-pain">https://www.practicalpainmanagement.com/resources/practice-management/brief-behavioral-interventions-chronic-pain</a>
- 06/19 *National Pain Report* quotes Beth Darnall's comments in the article entitled "Post Surgical Pain: Needed More" (author: Ed Coghlan).

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  <a href="https://www.physiciansweekly.com/over-the-counter-painkillers-often-suffice/">https://www.physiciansweekly.com/over-the-counter-painkillers-often-suffice/</a>
- 07/19 Everyday Health includes Beth Darnall's opinion about new research showing the impact of menstrual pain on girls' and womens' school performance.
   <a href="https://www.everydayhealth.com/menstruation/menstrual-pain-interferes-with-academic-studies-research-shows/">https://www.everydayhealth.com/menstruation/menstrual-pain-interferes-with-academic-studies-research-shows/</a> (author: Julie Marks)
- 08/19 Healthline includes Beth Darnall's comments on a new virtual reality study conducted on hospitalized patients showing efficacy for severe pain management. "Study Finds Virtual Reality Can Reduce Severe Pain." <a href="https://www.healthline.com/health-news/vr-can-help-treat-severe-pain">https://www.healthline.com/health-news/vr-can-help-treat-severe-pain</a>.
- 09/19 Monitor on Psychology includes Beth Darnall's comments on behavioral pain management in America, discusses her APA press book, and treatments that expand access to pain care ("My Surgical Success" and "Empowered Relief"). September 2019 issue (author: Deborah Bailey) <a href="https://www.apa.org/monitor/2019/09/patient-pain-management">https://www.apa.org/monitor/2019/09/patient-pain-management</a>
- 09/19 MedPage Today features Beth Darnall's research presentation on patient-centered voluntary opioid tapering she delivered at the 2019 PCORI annual conference in Washington D.C. <a href="https://www.medpagetoday.com/meetingcoverage/pcori/82318">https://www.medpagetoday.com/meetingcoverage/pcori/82318</a> (author: Joyce Frieden)
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- 09/19 *PaperGown* interviews Beth Darnall for the article "Chronic pain can make it hard to trust your body." (author: Brittany Risher) <a href="https://thepapergown.zocdoc.com/chronic-illness-can-make-it-hard-to-trust-your-body/">https://thepapergown.zocdoc.com/chronic-illness-can-make-it-hard-to-trust-your-body/</a>
- 11/19 *AP Business News Wire* covers "AppliedVR and the National Cancer Institute Collaborate to Evaluate Virtual Reality as a Solution to Help Address Cancer-Related Anxiety," quotes Beth Darnall and her role with AVR in the project. (author: AP wire service).
- 11/19 Anesthesiology News interviewed Beth Darnall and included her comments in the article Omnibus Chronic Noncancer Opioid Therapy Algorithm Released (author: Michael Vessides). <a href="https://www.anesthesiologynews.com/Pain-Medicine/Article/11-19/Omnibus-Chronic-Noncancer-Opioid-Therapy-Algorithm-Released/56418">https://www.anesthesiologynews.com/Pain-Medicine/Article/11-19/Omnibus-Chronic-Noncancer-Opioid-Therapy-Algorithm-Released/56418</a>
- 11/19 *Pain Medicine* publishes a review of the book *Psychological Treatment for Patients with Chronic Pain* by Darnall BD. Washington, DC: American Psychological Association; 2019 (book review author: Peter R. Wilson, PhD). <a href="https://doi.org/10.1093/pm/pnz266">https://doi.org/10.1093/pm/pnz266</a>
- 11/19 *Pain Medicine* reviews the book <u>Preoperative Optimization of the Chronic Pain Patient:</u>
  Enhanced Recovery Before Surgery by McAnally HB, Freeman LW, Darnall B. Oxford University

- Press; 2019. (book review author: Peter R. Wilson, PhD). https://doi.org/10.1093/pm/pnz272
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- 12/19 The *Santa Cruz Sentinel* publishes a feature article on "My Surgical Success" and the perioperative, opioid-sparing research conducted by Beth Darnall and colleagues. (author: Jonathan Wosen) <a href="https://www.santacruzsentinel.com/2019/12/25/a-mindful-approach-to-pain-relief/">https://www.santacruzsentinel.com/2019/12/25/a-mindful-approach-to-pain-relief/</a>
- 12/19 The Mercury News publishes front-page story on Beth Darnall and colleagues' "My Surgical Success" research in the article "Stanford Offers a Mindful Approach to Pain Relief." (author: Jonathan Wosen) <a href="https://www.mercurynews.com/2019/12/28/stanford-offers-a-mindful-approach-to-pain-relief/">https://www.mercurynews.com/2019/12/28/stanford-offers-a-mindful-approach-to-pain-relief/</a>
- 1/20 National Pain Report publishes an article on Beth Darnall's clarifications on the EMPOWER study methods. "Voluntary Opioid Tapering Study Launching at Stanford." <a href="http://nationalpainreport.com/voluntary-opioid-tapering-study-launching-at-stanford-8842918.html">http://nationalpainreport.com/voluntary-opioid-tapering-study-launching-at-stanford-8842918.html</a> (author: Ed Coghlan).
- 2/20 *The Guardian* features Beth Darnall's thoughts on iatrogenic harms caused from opioid tapering. "Life after opioids: 'We have not served our patients well." <a href="https://www.theguardian.com/australia-news/2020/feb/16/life-after-opioids-we-have-not-served-our-patients-well">https://www.theguardian.com/australia-news/2020/feb/16/life-after-opioids-we-have-not-served-our-patients-well</a> (author: Celina Ribeiro).
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- 3/20 *Health.com* interviews Beth Darnall for the article "Here's what experts want you to know about living with chronic pain." <a href="https://www.health.com/condition/pain/finding-relief-chronic-pain">https://www.health.com/condition/pain/finding-relief-chronic-pain</a> (author: <a href="Maggie Puniewska">Maggie Puniewska</a>)
- 3/20 *MedPage Today* includes Beth Darnall's thoughts in the article "Brief cognitive behavioral therapy shows promise for chronic pain". https://www.medpagetoday.com/meetingcoverage/aapm/85167 (author: Judy George).
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- 4/20 MedPage Today includes Beth Darnall's comments on how to help patients with chronic pain manage healthcare challenges during COVID-19.
   <a href="https://www.medpagetoday.com/clinical-challenges/pain-management/85857">https://www.medpagetoday.com/clinical-challenges/pain-management/85857</a> (author: Judy George).

- 4/20 *Pain News Network* includes cites Beth Darnall in the article <u>CDC Seeking Comment</u> <u>from Pain 'Stakeholders'</u> <u>https://www.painnewsnetwork.org/stories/2020/4/19/cdc-seeking-comment-from-pain-stakeholders</u>. (author: Roger Criss).
- 4/20 Reader's Digest includes Beth Darnall as a pain psychology expert in the article "6
  Fast Back Pain Fixes" (author: Sari Harrar).
- 4/20 *O Magazine* includes comments from Beth Darnall and content describing "Empowered Relief" and the Stanford certification instructor program for healthcare clinicians in the article entitled "The Truth Hurts" (author: Jessica Migala).
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- 5/20 *Today Show* interviews Beth Darnall for the first article in a 3-part COVID-19 coping servies: "Exhausted and unfocused while you're working from home? You're not alone" <a href="https://www.today.com/health/why-am-i-so-tired-unfocused-working-home-during-quarantine-t180638">https://www.today.com/health/why-am-i-so-tired-unfocused-working-home-during-quarantine-t180638</a> (author: Stephanie Thurrott)
- 5/20 Today Show interviews Beth Darnall for the second story in a 3-part COVID-19 coping series: "Quarantine fatigue and stress is real. Virtual therapy can help"
   <a href="https://www.today.com/health/quarantine-stress-fatigue-can-online-therapy-help-t180688">https://www.today.com/health/quarantine-stress-fatigue-can-online-therapy-help-t180688</a>
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- 5/20 Risk & Insurance features Beth Darnall's thoughts on pain care during COVID-19 in the article "How Should Workers' Comp Approach Pain Management During COVID-19?" <a href="https://riskandinsurance.com/how-should-workers-comp-approach-pain-management-during-covid-19/">https://riskandinsurance.com/how-should-workers-comp-approach-pain-management-during-covid-19/</a> (author: Courtney DuChene).
- 5/20 *wbt.radio* includes Beth Darnall's comments in the article "Why Working from Home During Coronavirus Leads to Exhaustion and Non-Productivity." <a href="https://wbt.radio.com/articles/radiocom/why-working-from-home-during-coronavirus-leads-to-exhaustion">https://wbt.radio.com/articles/radiocom/why-working-from-home-during-coronavirus-leads-to-exhaustion</a> (author: Lizzy Buczak).
- 5/20 *Today Show* interviews Beth Darnall for the third story in a 3-part COVID-19 coping series: "How to Cope with Quarantine Fatigue in the New Normal."

  <a href="https://www.today.com/health/what-s-quarantine-fatigue-when-you-re-tired-staying-home-t181054">https://www.today.com/health/what-s-quarantine-fatigue-when-you-re-tired-staying-home-t181054</a> (author: Stephanie Thurrott)
- 5/20 NBC News publishes article "It's Not Just Quarantine That's Getting Us Down It's Decision Fatigue Too" and includes Beth Darnall's advice on COVID-19 coping.
   <a href="https://www.nbcnews.com/better/lifestyle/it-s-not-just-quarantine-s-getting-us-down-it-ncna1209221">https://www.nbcnews.com/better/lifestyle/it-s-not-just-quarantine-s-getting-us-down-it-ncna1209221</a> (author: Stephanie Thurrott)
- 7/20 Pain News Network covers Beth Darnall and colleagues' newly published research showing preliminary efficacy for virtual reality for chronic pain.
   <a href="https://www.painnewsnetwork.org/stories/2020/7/9/virtual-reality-therapy-reduces-chronic-pain-at-home">https://www.painnewsnetwork.org/stories/2020/7/9/virtual-reality-therapy-reduces-chronic-pain-at-home</a> (author: Pat Anson).

- 7/20 BioWorld includes article on Beth Darnall and colleagues new virtual reality study in
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  <a href="https://www.bioworld.com/articles/436352-virtual-reality-shows-promise-in-treating-chronic-pain?v=preview">https://www.bioworld.com/articles/436352-virtual-reality-shows-promise-in-treating-chronic-pain?v=preview</a>
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   <a href="https://www.medpagetoday.com/meetingcoverage/asipp/88489">https://www.medpagetoday.com/meetingcoverage/asipp/88489</a>
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   Nursing Standard. 35, 9, 69-71. doi: 10.7748/ns.35.9.69.s21.

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- 1/21 *Practical Pain Management* interviews Beth Darnall for the feature article on the virtual reality treatment she co-developed and investigates. "Breakthrough Virtual Reality Therapy Targets Fibromyalgia and Chronic Low Back Pain" (author: Avery Hurt). <a href="https://www.practicalpainmanagement.com/resources/news-and-research/breakthrough-virtual-reality-therapy-targets-fibromyalgia-chronic-low-ba">https://www.practicalpainmanagement.com/resources/news-and-research/breakthrough-virtual-reality-therapy-targets-fibromyalgia-chronic-low-ba</a>
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- 3/21 Psychwire features Beth Darnall in a Q&A "How can behavioral treatments help to manage pain and reduce opioid use? ASK pain management specialist, Professor Beth Darnall." <a href="https://psychwire.com/ask/topics/1mtdg0j/ask-about-behavioral-medicine-for-pain">https://psychwire.com/ask/topics/1mtdg0j/ask-about-behavioral-medicine-for-pain</a>
- 5/21 *MedPage Today* publishes a feature interview with Beth Darnall on the pandemic and improving patient access to care. "After the Pandemic: Chronic Pain Care May Be Virtually Transformed." (author: Judy George) <a href="https://www.medpagetoday.com/special-reports/after-the-pandemic/92573">https://www.medpagetoday.com/special-reports/after-the-pandemic/92573</a>
- 6/21 MedPage Today quotes Beth Darnall in the story "Pain Expectations Before Surgery May Be a Self-Fulfilling Prophecy." (author: Anna Goshua). <a href="https://www.medscape.com/viewarticle/953242">https://www.medscape.com/viewarticle/953242</a>

- 7/21 Practical Pain Management features Beth Darnall in the article "Meet the Women Changing Pain Medicine" (authors: Alexis Pellek and Angie Drakulich, MA).
   <a href="https://www.practicalpainmanagement.com/resources/practice-management/meet-women-changing-pain-medicine">https://www.practicalpainmanagement.com/resources/practice-management/meet-women-changing-pain-medicine</a>
- 8/21 MedPage Today includes Beth Darnall's commentary on the article entitle "Opioid Tapering Carries Significant Risks" (author: Judy George).
   https://www.medpagetoday.com/neurology/opioids/93869
- 8/21 PainRelief.com publishes an interview with Beth Darnall on her group's newly published study in JAMA Network Open which reports efficacy data for a 3-arm NIH-funded randomized controlled trial of single-session Empowered Relief in adults with chronic low back pain. (author: PainRelief.com). Article title: "Empowered Relief Program Equips Patients With Effective Pain Relief Skills." <a href="https://painrelief.com/pain-relief/empowered-relief-program-equips-patients-with-effective-pain-relief-skills/">https://painrelief.com/pain-relief/empowered-relief-program-equips-patients-with-effective-pain-relief-skills/</a>
- 8/21 The **NIH issues a press release** on the Empowered Relief clinical trial results that published in *JAMA Network Open*. <a href="https://www.nccih.nih.gov/news/press-releases/nih-funded-study-suggests-a-single-skills-based-session-on-pain-management-packs-a-punch">https://www.nccih.nih.gov/news/press-releases/nih-funded-study-suggests-a-single-skills-based-session-on-pain-management-packs-a-punch
- 8/21 Stanford University publishes a *Scopeblog* on the new Empowered Relief clinical trial results that published in *JAMA Network Open*. "New approach effectively relieves chronic pain." (author: Jennifer Huber) <a href="https://scopeblog.stanford.edu/2021/08/16/new-approach-effectively-relieves-chronic-low-back-pain/">https://scopeblog.stanford.edu/2021/08/16/new-approach-effectively-relieves-chronic-low-back-pain/</a>
- 8/21 MedPage Today features the JAMA Network Open study and Dr. Darnall's thoughts on the Empowered Relief clinical trial and its significance.
   <a href="https://www.medpagetoday.com/neurology/painmanagement/94054">https://www.medpagetoday.com/neurology/painmanagement/94054</a>
   (author: Judy George).
- 8/21 Neurology Advisor features the JAMA Network Open Empowered Relief clinical trial results. <a href="https://www.neurologyadvisor.com/topics/pain/pain-management-skills-class-aids-those-with-chronic-low-back-pain/">https://www.neurologyadvisor.com/topics/pain/pain-management-skills-class-aids-those-with-chronic-low-back-pain/</a>
- 8/21 Health Day News features the Empowered Relief® clinical trial results publication in the article "Pain Management Skills Class Aids Those With Chronic Low Back Pain" <a href="https://consumer.healthday.com/pain-management-skills-class-aids-those-with-chronic-low-back-pain-2654700302.html">https://consumer.healthday.com/pain-management-skills-class-aids-those-with-chronic-low-back-pain-2654700302.html</a>
- 8/21 *Physician's Weekly* publishes a story on the *JAMA Network Open* article describing the Empowered Relief clinical trial results. <a href="https://www.physiciansweekly.com/pain-management-skills-class-aids-those-with-chronic-low-back-pain/">https://www.physiciansweekly.com/pain-management-skills-class-aids-those-with-chronic-low-back-pain/</a>
- 9/21 Healio Rheumatology features the Empowered Relief JAMA Network Open
  publication in the story "Single pain management skills class shows meaningful reductions in
  lower back pain." (author: Jason Laday)
  <a href="https://www.healio.com/news/rheumatology/20210907/single-pain-management-skills-class-shows-meaningful-reductions-in-lower-back-pain">https://www.healio.com/news/rheumatology/20210907/single-pain-management-skills-class-shows-meaningful-reductions-in-lower-back-pain</a>

- 9/21 Practical Pain Management publishes a feature interview with Beth Darnall for the story "Tapering Opioids May Drive Overdose, Mental Health Crises" (author: Heidi Splete) <a href="https://www.practicalpainmanagement.com/resources/news-and-research/tapering-opioids-may-drive-overdose-mental-health-crises">https://www.practicalpainmanagement.com/resources/news-and-research/tapering-opioids-may-drive-overdose-mental-health-crises</a>
- 10/21 Pain News Network includes Beth Darnall's comments in the story "More Evidence that Rapid Opioid Tapering is Harmful." (author: Roger Chriss)
   https://www.painnewsnetwork.org/stories/2021/10/8/more-evidence-that-rapid-opioid-tapering-is-harmful
- 10/21 Pain Research Forum features Beth Darnall's perspective in the story Dose
  Tapering in Patients Prescribed Long Term Opioids: More Harm Than Good? (author:
  Lincoln Tracy) <a href="https://www.painresearchforum.org/news/180850-dose-tapering-patients-prescribed-long-term-opioids-more-harm-good">https://www.painresearchforum.org/news/180850-dose-tapering-patients-prescribed-long-term-opioids-more-harm-good</a>
- 10/21 *Pain Medicine News* features Empowered Relief® and interviews Beth Darnall about the newest publication in *JAMA Network Open*. (author: Bob Kronemyer). https://www.painmedicinenews.com/Complementary-and-Alternative/Article/10-21/Patient-Education-Low-Back-Pain/64822
- 10/21 *Spine Universe* features new Empowered Relief® science published in *JAMA Network Open* and includes comments from Beth Darnall in the article "Can just one pain management class help your chronic pain?" (author: Randi Mazzella) <a href="https://www.spineuniverse.com/wellness/stress-management/one-pain-management-class-helps-back-pain">https://www.spineuniverse.com/wellness/stress-management/one-pain-management-class-helps-back-pain</a>
- 11/21 Tulsa World covers Beth Darnall's Nov. 1 testimony to the Oklahoma State
  Legislature on the topic of iatrogenic harms from opioid deprescribing and needed patient
  protections. (author: Randy Krehbiel). <a href="https://tulsaworld.com/news/state-and-regional/govt-and-politics/opioid-crackdown-had-tremendous-fallout-with-more-suicides-drug-overdoses-among-patients-lawmakers-told/article\_ae3ff49e-3b2d-11ec-b2e3-b74d9a33a2b9.html">https://tulsaworld.com/news/state-and-regional/govt-and-politics/opioid-crackdown-had-tremendous-fallout-with-more-suicides-drug-overdoses-among-patients-lawmakers-told/article\_ae3ff49e-3b2d-11ec-b2e3-b74d9a33a2b9.html</a>
- 11/21 *Good Morning Oklahoma* covers the Oklahoma State Legislature session (Reps Burns and Talley) on the topic of iatrogenic harms from opioid deprescribing and quotes Beth Darnall's testimony in the Nov. 2 news report.
- 11/21 *Tulsa's Channel 8 KTUL (ABC)* covers the Oklahoma State Legislature session (Reps Burns and Talley) on the topic of iatrogenic harms from opioid deprescribing and quotes Beth Darnall's testimony in the Nov. 2 news reports at 5 and 6am.
- 11/21 **2News Works for You Midday KNRH (NBC)** covers the Oklahoma State Legislature session (Reps Burns and Talley) on the topic of iatrogenic harms from opioid deprescribing and quotes Beth Darnall's testimony in the Nov. 1 news report.
- 11/21 *The New York Times* includes Beth Darnall's perspective and includes coverage of Empowered Relief® in the story "How Psychologists Can Help Treat Chronic Pain." (author: Sushma Subramanian)

  <a href="https://www.nytimes.com/2021/11/09/well/mind/psychologists-chronic-pain-therapy.html">https://www.nytimes.com/2021/11/09/well/mind/psychologists-chronic-pain-therapy.html</a>

- 11/21 MedPage Today mentions Beth Darnall's role in the FDA approval of AppliedVR's virtual reality treatment for chronic pain. "Virtual Reality for Chronic Back Pain Wins FDA Nod" (author: Judy George).
   https://www.medpagetoday.com/neurology/painmanagement/95712
- 11/21 Healthline interviews Beth Darnall about the FDA approval of EaseVRx for chronic low back pain. "Virtual Reality Eases Chronic Pain" (author: Elizabeth Pratt)
   <a href="https://www.healthline.com/health-news/fda-approves-a-new-virtual-reality-device-to-help-ease-chronic-pain#Some-alternatives">https://www.healthline.com/health-news/fda-approves-a-new-virtual-reality-device-to-help-ease-chronic-pain#Some-alternatives</a>
- 11/21 Practical Pain Management interviews Beth Darnall for the article "FDA Authorizes Breakthrough Virtual Reality for Back Pain" (author: Heidi Splete).
   <a href="https://www.practicalpainmanagement.com/fda-authorizes-breakthrough-virtual-reality-back-pain">https://www.practicalpainmanagement.com/fda-authorizes-breakthrough-virtual-reality-back-pain</a>
- 11/21 *Public Broadcasting System (PBS)* features Beth Darnall and Empowered Relief in a documentary titled "Pain Secrets: The Science of Everyday Pain". Broadcast in November and December throughout U.S. television markets. <a href="https://www.pbs.org/video/pain-secrets-the-science-of-everyday-pain-x4agig/">https://www.pbs.org/video/pain-secrets-the-science-of-everyday-pain-x4agig/</a>
- 12/21 Harvard Health features Empowered Relief in the story "A single-session class offers chronic low back pain relief" (author: Matthew Solan).
   <a href="https://www.health.harvard.edu/pain/a-single-session-class-offers-chronic-low-back-pain-relief">https://www.health.harvard.edu/pain/a-single-session-class-offers-chronic-low-back-pain-relief</a>
- 12/21 Pain Medicine News quotes Beth Darnall in the story "FDA Allows Marketing of VR Device for Chronic Low Back Pain." <a href="https://www.painmedicinenews.com/Online-First/Article/12-21/FDA-Allows-Marketing-of-Virtual-Reality-Device-for-Chronic-Low-Back-Pain/65468">https://www.painmedicinenews.com/Online-First/Article/12-21/FDA-Allows-Marketing-of-Virtual-Reality-Device-for-Chronic-Low-Back-Pain/65468</a>
- 12/21 Very Well Health quotes Beth Darnall in the story "FDA Approves Virtual Reality Device to Treat Chronic Pain." (author: Rachel Carlton-Dailey).
   <a href="https://www.verywellhealth.com/fda-approval-easevrx-chronic-back-pain-treatment-5211129">https://www.verywellhealth.com/fda-approval-easevrx-chronic-back-pain-treatment-5211129</a>
- 12/21 *JAMA Network* section on 'News from the Food and Drug Administration' publishes "Virtual Reality Device is Authorized to Relieve Back Pain." This news features the clinical virtual reality program for chronic pain co-developed by Beth Darnall. (author: Rita Rubin). https://jamanetwork.com/journals/jama/fullarticle/2787336
- 1/22 Pharmacy Practice News quotes Beth Darnall in the story "FDA Allows Marketing of Virtual Reality Device for Chronic Low Back Pain."
   https://www.pharmacypracticenews.com/Pharmacy-Technology-Report/Article/01-22/FDA-Allows-Marketing-of-Virtual-Reality-Device-for-Chronic-Low-Back-Pain/65663
- 1/22 Healio News features an interview with Beth Darnall in the article "Virtual Reality Program Superior to Sham Device 3 Months After Treatment" (author: Janel Miller). <a href="https://www.healio.com/news/primary-care/20220110/virtual-reality-program-for-back-pain-superior-to-sham-device-3-months-after-treatment">https://www.healio.com/news/primary-care/20220110/virtual-reality-program-for-back-pain-superior-to-sham-device-3-months-after-treatment</a>

- 2/22 MedPage Today quotes Beth Darnall in the article "CDC Proposes New Opioid Prescribing Guidelines" (author: Judy George). <a href="https://www.medpagetoday.com/painmanagement/opioids/97133">https://www.medpagetoday.com/painmanagement/opioids/97133</a>
- 4/22 Men's Health mentions Beth Darnall and Empowered Relief in the article "To Ease Chronic Pain Tape Into the Power of Your Mind". (author: Joe Lindsey).
   <a href="https://www.menshealth.com/health/a39690849/chronic-pain-management-lin-health-mind/">https://www.menshealth.com/health/a39690849/chronic-pain-management-lin-health-mind/</a>
- 4/22 The New York Times Magazine quotes Beth Darnall and describes her role in the development of the AppliedVR virtual reality treatment in the article: "Can Virtual Reality Help Ease Chronic Pain?" (author: Helen Ouyang).
   <a href="https://www.nytimes.com/2022/04/26/magazine/virtual-reality-chronic-pain.html">https://www.nytimes.com/2022/04/26/magazine/virtual-reality-chronic-pain.html</a>
- 6/22 MedPage Today mentions new efficacy research on My Surgical Success (newly published in Analgesia and Anesthesia). (author: Judy George).
   <a href="https://www.medpagetoday.com/neurology/generalneurology/99230">https://www.medpagetoday.com/neurology/generalneurology/99230</a>
- 6/22 MedPage Today publishes a video interview with Beth Darnall about her colleagues' and her research on My Surgical Success and implications for the broader field of digital innovations in pain management. (editor: Emily Hutto). Revolutionizing Digital Pain Management | MedPage Today
- 8/22 Stanford Medicine Magazine include Beth Darnall's work and the science of Empowered Relief in the pain treatment feature article "Reforming Pain" (Author: Gordy Slack). <a href="https://stanmed.stanford.edu/2022Issue1/individualizing-pain-treatments.html">https://stanmed.stanford.edu/2022Issue1/individualizing-pain-treatments.html</a>
- 10/22 *The Wall Street Journal* includes Empowered Relief in the article "The Power of Brief Mental Health Therapies." (**Author: Dr. Jenny Taitz**). https://www.wsj.com/articles/the-power-of-brief-mental-health-therapies-11664596862
- 11/22 *MedPage Today* publishes a print and video interview featuring Beth Darnall and Sean Mackey: "Pain: The Great Motivator" (Editors: Genevieve Friedman and Emily Hutto). Pain: The Great Motivator | MedPage Today
- 11/22 Pain Medicine News includes Beth Darnall's commentary on new pain treatment research that studies artificial intelligence supported text messaging alongside telephone CBT. "Artificial Intelligence, Mobile Health Tools Comparable to Teletherapy for Chronic Back Pain". <a href="https://www.painmedicinenews.com/Science-and-Technology/Article/11-22/Artificial-Intelligence-Mobile-Health-Tools-Comparable-to-Teletherapy-for-Chronic-Back-Pain/68517?utm\_source=Social&utm\_medium=twitter&utm\_campaign=1118cbpai</a>
- 11/22 New Scientist article includes Beth Darnall's thoughts on pain, psychology and placebo effects. (Author: Stephani Sutherland, PhD)
   <a href="https://www.newscientist.com/article/mg25634132-200-what-is-pain-how-does-it-work-and-what-happens-when-it-goes-wrong/">https://www.newscientist.com/article/mg25634132-200-what-is-pain-how-does-it-work-and-what-happens-when-it-goes-wrong/</a>
- 12/22 *JAMA Network* includes Beth Darnall's perspective in an editorial on the 2022 updated CDC guideline for prescribing opioids. (Author: Rachel Rabkin-Peachman)

- 02/23 Pain Medicine News features Beth Darnall's comments on AppliedVRs extended durability results. (Author: Kenneth Bender)
   <a href="https://www.painmedicinenews.com/Online-First/Article/02-23/VR-Based-Training-Conferred-Long-Term-Relief-From-Back-Pain/69424?sub=&enl=true&dgid=U080012760&pos=1">https://www.painmedicinenews.com/Online-First/Article/02-23/VR-Based-Training-Conferred-Long-Term-Relief-From-Back-Pain/69424?sub=&enl=true&dgid=U080012760&pos=1</a>
- 05/23 The NYTimes includes Beth Darnall's perspective on a new JAMA Network Open study showing rising incidence of chronic pain in the U.S. (Author: Dani Blum) https://www.nytimes.com/2023/05/17/well/live/chronic-pain-treatment.html
- 09/23 HealthCentral includes Beth Darnall's perspective and advice in the article "What You Told Us About Medical Gaslighting." (Author: Lauren Paige Kennedy).
   <a href="https://www.healthcentral.com/chronic-health/a-to-z-guide-to-gaslighting-comebacks">https://www.healthcentral.com/chronic-health/a-to-z-guide-to-gaslighting-comebacks</a>
- 12/23 **WebMD** includes commentary from Beth Darnall and features Empowered Relief® in the article "Our Fundamental Misunderstanding of Pain". (**Author: Paul Frysh**) <u>Our 'Fundamental Misunderstanding' of Pain (webmd.com)</u>
- 03/24 MedCentral features Empowered Relief® research presented at the annual meeting of
  the American Academy of Pain Medicine in Scottsdale Arizona in March, 2024, in the article
  entitled "Behavioral Intervention Finds Success for Chronic Pain." (Author: Heidi Splete).
  <a href="https://www.medcentral.com/pain/behavioral-intervention-finds-success-for-chronic-pain">https://www.medcentral.com/pain/behavioral-intervention-finds-success-for-chronic-pain</a>