

## **Beth D. Darnall, PhD**

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### **CURRENT APPOINTMENTS**

**Clinical Professor** of Anesthesiology, Perioperative and Pain Medicine. Stanford University School of Medicine, 10/17 - present

### **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  
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. Journalism, 8/94  
Texas Woman's University, Denton, TX

### **PREVIOUS APPOINTMENTS**

**Clinical Associate Professor** of Anesthesiology, Perioperative and Pain Medicine. Stanford University, 10/12 – 09/17

**Associate Professor**, Oregon Health & Science University, Department of Anesthesiology and Perioperative Medicine. June 2012

**Assistant Professor**, Oregon Health & Science University, Department of Anesthesiology and Perioperative Medicine. October 2005- May 2012

**Assistant Professor**, Oregon Health & Science University, Department of Psychiatry. October 2009- May 2012 (secondary appointment)

**Peer-Reviewed Publications** (\*based on original data)

1. Taub CJ, Sturgeon JA, Mackey SC, **Darnall BD**. Self-reported trauma and psychological function in tertiary care pain clinic patients: A collaborative health outcomes information registry (CHOIR) study. (in review)\*
2. Vargovich AM, Pelle D, Davin S, Murphy J, Benzel EC, **Darnall B**, Scheman J. Back Pain: Why and When to Refer to a Pain Psychologist. (in review)
3. **Darnall BD**, Ziadni MS, Roy A, Kao MC, Sturgeon JA, Cook KF, Lorig K, Burns JW, Mackey SC. Comparative Efficacy and Mechanisms of a Single-Session Pain Psychology: Protocol for a Randomized Controlled Trial in Chronic Low Back Pain. (in review)
4. Ziadni MS, You DS, Wilson AC, **Darnall BD**. CARE Scale - 7: Development and preliminary validation of a measure assessing factors that impact self-care in chronic pain. (in review)
5. **Darnall BD**, Ziadni MS, Stieg RL, Mackey IG, Kao MC, Flood P. Voluntary Patient-Centered Prescription Opioid Tapering in Community Outpatients with Chronic Pain. (in press, *JAMA Int Med*)\*
6. Ziadni MA, Sturgeon JA, **Darnall BD**. The relationship between negative metacognitive thoughts, pain catastrophizing, and adjustment to chronic pain. *Eur J Pain*. 2017 Dec 7. doi: 10.1002/ejp.1160. PMID: 29214679.\*
7. Sturgeon JA, Ziadni MS, Trost Z, **Darnall BD**, Mackey SC. Pain catastrophizing, perceived injustice, and pain intensity impair life satisfaction through differential patterns of physical and psychological disruption. *Scand J Pain*. 2017 Oct 23. pii: S1877-8860(17)30212-4. doi: 10.1016/j.sjpain.2017.09.020. PMID: 29074199.\*
8. Sharifzadeh Y, Kao MC, Sturgeon JA, Mackey SC, **Darnall BD**. Pain catastrophizing moderates the relationship between pain intensity and opioid prescription: Non-linear gender differences revealed using a learning health system. *Anesthesiology*. 2017 Jun 14. doi: 10.1097/ALN.0000000000001656. PMID: 28614083 (selected by *Anesthesiology* for press release)\*
9. **Darnall BD**, Sturgeon JA, Cook KF, Taub CJ, Burns JW, Sullivan MJ, Mackey SC. Development and Validation of a Daily Pain Catastrophizing Scale. *J Pain*. 2017 Sep;18(9):1139-1149. doi: 10.1016/j.jpain.2017.05.003. PMID: 28528981.\*
10. Sun EC, Dixit A, Humphreys KN, **Darnall BD**, Baker LC, Mackey SC. Association between concurrent use of prescription opioids and benzodiazepines and overdose: retrospective analysis. *Br Med J* 2017 Mar 14;356;j760. doi: 10.1136/bmj.j760. PMID:28292769
11. Carriere JS, Martel MO, Sturgeon JA, Sullivan MC, **Darnall BD**. Pain behavior mediates the relationship between perceived injustice and opioid prescription for chronic pain: A Collaborative Health Outcomes Information Registry (CHOIR) study. *J Pain Res*. 2017 Mar 7;10:557-566. doi: 10.2147/JPR.S128184 \*
12. Taub CJ, Sturgeon JA, Johnson KA, Mackey SC, **Darnall BD**. Effects of a Pain Catastrophizing Induction on Sensory Testing in Women with Chronic Low Back Pain: A Pilot Study. *J Pain Res Manage*, 2017. Article ID 7892494. doi: 10.1155/2017/7892494.\*

13. **Darnall BD**, Cohen R. Behavioral Risk Factors and Interventions, Including Hypnosis for Acute and Chronic Pain After Surgery. IASP Fact Sheet (2017 Global Year Against Pain After Surgery). IASP Press, JAN 2017. <http://www.europeanpainfederation.eu/wp-content/uploads/2017/01/6.-Behavioral-risk-factors-and-management.Darnall-Cohen.pdf>
14. Feinstein AB, Sturgeon JA, Dunn A, Rico T, **Darnall BD**, Kao MC, Bhandari RP. The Impact of Pain Catastrophizing on Outcomes: A Developmental Perspective across Children, Adolescents and Young Adults with Chronic Pain. *J Pain*. 2016 Nov 4. pii: S1526-5900(16)30279-6. doi: 10.1016/j.jpain.2016.10.009.\*
15. 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.
16. Sun EC, Jena AB, Kao MC, **Darnall BD**, Baker LC, Mackey SC. Incidence of and Risk Factors for Chronic Opioid Use Among Opioid Naïve Patients in the Perioperative Period. *JAMA Internal Medicine*. 2016; Sep 1; 176(9):1286-93. doi: 10.1001/jamainternmed.2016.3298 PMID: 27400458\*
17. Jiang Y, Oathes DJ, Hush J, **Darnall BD**, Charvat M, Mackey S, Etkin A. Perturbed Amygdalar Connectivity with the Central Executive and Default Mode Networks in Chronic Pain. *PAIN* ®. 2016 Sep; 157(9):1970-8. PMID: 27168362.\*
18. Bhandari RP, Feinstein AB, Huestis S, Krane EJ, Dunn AL, Cohen LL, Kao MC, **Darnall BD**, Mackey SC. Pediatric-Collaborative Health Outcomes Information Registry (Peds-CHOIR): A Learning Health System to Guide Pediatric Pain Research and Treatment at the Group and Individual Levels. *PAIN* ®. 2016; Sep 157(9):2033-44. PMID: b7280328\*
19. **Darnall BD**, Carr DB, Schatman ME. Pain Psychology and the Biopsychosocial Model of Pain Treatment: Ethical Imperatives and Social Responsibility. *Pain Medicine*. July 2016. PMID: 27425187. <http://dx.doi.org/10.1093/pm/pnw166>
20. Sturgeon JA, Carriere JS, Kao MC, Rico T, **Darnall BD**, Mackey SC. Social disruption mediates the relationship between perceived injustice and anger in chronic pain: A Collaborative Health Outcomes Information Registry Study. *Annals of Behavioral Medicine*. June 2016; DOI: 10.1007/s12160-016-9808-6.\*
21. **Darnall BD**, Scheman J, Davins S, Burns JW, Murphy JL, Wilson AC, Kerns R, Mackey SC. Pain Psychology: A global needs assessment and national call to action. *Pain Medicine*. 2016; 17(2): 250-263. Open Access available: <http://www.ncbi.nlm.nih.gov/pubmed/26803844>\*
22. **Darnall BD**. Pain Psychology & Pain Catastrophizing in the Perioperative Setting: A review of impacts and unmet needs. *Hand Clin*. 2016; Feb 32(1):33-9. doi: 10.1016/j.hcl.2015.08.005.
23. Schatman ME, **Darnall BD**. Ethics Forum: Conflict of Interest, Part II: Pain Society Leadership and Industry. *Pain Medicine*. 2016; Jan 10.1093/pm/pnv041.
24. **Darnall BD**. Compassion Cultivation in Chronic Pain May Reduce Anger, Pain, and Increase Acceptance: Review and Commentary. *Health Care: Current Reviews*. 2015; 3:1 <http://dx.doi.org/10.4172/2375-4273.1000142>

25. Sturgeon JA, Dixon E, **Darnall BD**, Mackey SC. Contributions of Physical Function and Satisfaction with Social Roles to Emotional Distress in Chronic Pain: A Collaborative Health Outcomes Information Registry (CHOIR) Study. *PAIN* ®. 2015; Dec 156(12):2627-33.. PMID: 26230739.\*
26. **Darnall BD**, Schatman ME. The relationship between industry and pain societies, Part 1: Demystification and legitimization in continuing medical education. *Pain Medicine*. 1 JUL 2015; DOI: 10.1111/pme.12828
27. **Darnall BD**, Schatman ME. Opioid Use and Lactation: Protecting the Child in the Context of Maternal Pain Care. *Pain Medicine*. 2015; 16(4): 631-2.
28. Halawa O, Al-Diri I, McLean SA, **Darnall BD**. When I'm in Pain, I feel God is Testing Me: Differences in Middle Eastern and US Cancer Pain Experiences. *BAOJ Palliative Medicine*. Feb 2015.\*
29. Sturgeon JA, **Darnall BD**, Kao MC, Mackey SC. Physical and Psychological Correlates of Fatigue and Physical Function: A Collaborative Health Outcomes Information Registry (CHOIR) study. *Journal of Pain*. Dec 2014; doi:10.1016/j.jpain.2014.12.004.\*
30. Sturgeon JA, **Darnall BD**, Zwickey H, Wood LJ, Hanes D, Zava D, Mackey SC. Pro-Inflammatory Cytokines and DHEA-S in Women with FMS: Impact of Psychological Distress and Menopausal Status. *J Pain Research*. 2014; (7): 707-716. <http://dx.doi.org/10.2147/JPR.S71344>. PMC4259557\*
31. **Darnall BD** & Schatman ME. Urine Drug Screening: The Risks of Opioids Preclude Complete Patient Autonomy. *Pain Medicine*. 2014; Nov 6 [epub ahead of print] doi: 10.1111/pme.12604\_4.
32. **Darnall BD** & Schatman ME. Urine Drug Screening: Necessary or Alienating? *Pain Medicine*. 2014; [epub ahead of print] doi: 10.1111/pme.12604.
33. Chapin, HL, **Darnall BD**, Seppala E, Hah JM, Doty J, Mackey SC. Compassion meditation training for people living with chronic pain and their significant others: A pilot study and mixed-methods analysis. *J Compassionate Healthcare*. 2014; 1:4. doi:10.1186/s40639-014-0004-x.\*
34. Schatman ME, **Darnall BD**. Intrathecal Opioids: Hardly a Panacea. *Pain Medicine*. 2014 Aug 4. doi: 10.1111/pme.12494\_4. PMID: 25092110.
35. Schatman ME, **Darnall BD**. Intrathecal Opioids for Chronic Nonmalignant Pain: A Case Study and the Search for Balance. *Pain Medicine*. 2014; 10.1111/pme.12494. PMID: 25091712.
36. **Darnall BD**, Sturgeon JA, Hah JM, Kao MC, Mackey SC. 'From Catastrophizing to Recovery': A pilot study of a single-session treatment for pain catastrophizing. *J Pain Research*. 2014; (7):219-226. PMID: 24851056.\*
37. Schatman ME & **Darnall BD**. The needle and the damage done? *Pain Medicine*. 2014; 15(4):546-7. PMID: 24635998.
38. Schatman ME & **Darnall BD**. A practical and ethical solution to the opioid scheduling conundrum. *J Pain Research*. 2014; (7):1-3. DOI: <http://dx.doi.org/10.2147/JPR.S58148>.
39. Schatman ME & **Darnall BD**. "Just Saying No" to Mandatory Pain CME: How Important Is Physician Autonomy? *Pain Medicine*. Nov 2013; DOI: 10.1111/pme.12285\_4.

40. Schatman ME & **Darnall BD**. Upscheduling of Hydrocodone: Convenience and Access vs. Patient Safety Measures. *Pain Medicine*. 2013; 14(11):1627. Doi: 10.1111/pme.12257.
41. Schatman ME & **Darnall BD**. Among disparate views, scales tipped by the ethics of system integrity. *Pain Medicine*. Nov 2013; 14(11):1629-30. Doi: 10.1111/pme.12257\_4.
42. **Darnall BD**, Schatman ME. Autonomy vs paternalism in the emergency department: the potential deleterious impact of patient satisfaction surveys. *Pain Medicine*. 2013; Jul;14(7):968. doi: 10.1111/pme.12170.
43. **Darnall BD** & Schatman ME. A Call to Action and Evolution. *Pain Medicine*. 2013; Jul;14(7):969-70. doi: 10.1111/pme.12170\_4.
44. 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.
45. Schatman ME, **Darnall BD**. Ethical Pain Care in a Complex Case. *Pain Medicine*. 2013; Jun;14(6):800-1. doi: 10.1111/pme.12137\_3.
46. Schatman ME & **Darnall BD**. A Pendulum Swings Awry: Reconciling Divergent Views on Restrictions on Opioid Prescribing for Chronic Non-Cancer Pain. *Pain Medicine* 2013. May;14(5):617. Doi: 10.1111/pme.12120.
47. **Darnall BD**, Stacey BR, Chou R. Medical and psychological risks and consequences of long-term opioid use in women (comprehensive review) *Pain Medicine* 2012; 13(9); [DOI: 10.1111/j.1526-4637.2012.01467.x].\*
48. Schatman ME & **Darnall B**. The resurrection of the Ethics Forum in Pain Medicine: An introduction. *Pain Medicine*. 2013 Apr;14(4):453-4. doi: 10.1111/j.1526-4637.2012.01378.x.
49. **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.\*
50. **Darnall BD** & Stacey BR. Sex differences in long-term opioid use: Cautionary notes for prescribing in women. *JAMA Internal Medicine*. 2012; 172(5):431-432.
51. **Darnall BD** & Li H. Home-based self-delivered mirror therapy for phantom pain: A pilot study. *J Rehabilitation Medicine*. 2012; 44:254-260. [DOI: 10.2340/16501977-0933].\*
52. **Darnall B** & Li H. Hysterectomy and predictors for opioid prescription in a chronic pain clinic sample. *Pain Medicine*. 2011; 12(2): 196-203. [DOI: 10.1111/j.1526-4637.2010.01038.x].\*
53. **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.\*
54. **Darnall BD** & Suarez EC. Sex and gender in psychoneuroimmunology research: Past, present and future (Review). *Brain, Behavior & Immunity*. 2009; 23(5): 595-604.
55. **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. (Editor's choice for the cover of this issue)\*

56. **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.\*
57. **Darnall BD**, Craighead, LW, Coleman L, Greenburg L, Carey G. (2002) *The relationship between athletic identity, elite athlete self-esteem, coping, and pathology in elite athletes*. Boulder, CO; University of Colorado Press.
58. **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.\*

### ***Invited Editorials***

1. **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). <http://pcssmat.org/wp-content/uploads/2015/04/July-2015-PCSS-Monthly-Update.pdf>
2. **Darnall BD**. Targeting a saboteur of surgical outcomes: Pain catastrophizing. *Practical Pain Management*. April, 2015. <http://www.practicalpainmanagement.com/treatments/psychological/cognitive-behavioral-therapy/targeting-saboteur-surgical-outcomes-pain>
3. **Darnall BD**. Minimize Opioids by Optimizing Pain Psychology. *Pain Management*. 2014; Jul 4(4):251-3. doi: 10.2217/pmt.14.18. PMID: 25300380
4. **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.

### ***National Clinical Practice Guidelines***

1. **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: [www.MDGuidelines.com](http://www.MDGuidelines.com).  
*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
2. **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.

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

1. **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](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](http://www.theacpa.org/uploads/documents/ACPA_Resource_Guide_2015_Final_edited_(3).pdf)

### ***Non-peer-reviewed Articles***

1. **Darnall BD**. The Tao of Pain. *Spirituality & Health*. (Jan/Feb 2018 issue)
2. **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-catastrophizing/article/663448/>
3. **Darnall BD**. Treating Chronic Pain Requires More Than a Pill. *San Francisco Chronicle*, Op-Ed. April 4, 2016.
4. **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>
5. **Darnall BD**. Empowering people with chronic pain to have less pain and need fewer pills. Empathic Therapy Newsletter. December, 2014 (Vol. 5, Issue 4).  
<http://secure.campaigner.com/Campaigner/Public/t.show?7qkkr--3upqn-34674s9& v=2>
6. **Darnall BD**. Transcending opioid injustice. July 20, 2014. <http://paindr.com/transcending-opioid-injustice/>
7. **Darnall BD**. Surge in opioid prescriptions for pregnant women indicates a need for safer pain management strategies. April 16, 2014.  
<https://www.bullpub.com/blog/Surge-in-Opioid-Prescriptions-for-Pregnant-Women-Indicate-a-Need-for-Safer-Pain-Management-Strategies>
8. **Darnall BD**. Your psychology affects your response to medical treatments and to pain medications. National Register for Health Service Psychologists. January 10, 2014.  
<http://www.findapsychologist.org/your-psychology-affects-your-response-to-medical-treatments-and-to-pain-medications-by-dr-beth-darnall/>
9. **Darnall BD**. Surviving a pain flare. *Fibromyalgia & Chronic Pain LIFE* magazine 2012; Jan/Feb print edition; [Epub ahead of print] <http://fibropainlife.org/2012/01/17/surviving-a-pain-flare/>
10. **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.

11. **Darnall BD**. Mirror therapy: Expanding global access to phantom pain care. *InMotion* 2010; 20 (6): 42-44.

### ***Peer-Reviewed Published Abstracts***

1. Kao MC, Leong M, Ottestad E, **Darnall BD**, Mackey SC. Use and Misuse of Minimal Clinically Important Difference (MCID) in Pain: A Critical Meta-Analysis. (accepted, *Pain Med*).
2. Wilson AC, Ziadni MS, **Darnall BD**. Impact of fibromyalgia and comorbid chronic pain conditions on parenting and function. (accepted, *Pain Med*).
3. Ziadni MS, **Darnall BD**, Wilson AC. Characterizing chronic pain in late adolescence and early adulthood: opioid prescription, marijuana use, and predictors of pain interference. (accepted, *Pain Med*).
4. Ziadni MS, Stieg RL, Mackey IG, Kao MC, **Darnall BD**. Patient-Centered Prescription Opioid Tapering in Community Outpatients with Chronic Pain. (accepted, *Pain Med*). **This abstract was selected for oral presentation at the Plenary Research Highlights session at the annual conference of the American Academy of Pain Medicine, Vancouver, Canada, April 27, 2018.**
5. **Darnall B**. My Surgical Success: A perioperative psychological intervention. PAIN® Reports. July/Aug 2017; 2(4): e604. (special publication for the proceedings of the IASP Acute Pain SIG satellite symposium; Yokohama, Japan).
6. Jarrahi B, **Darnall B**, Mackey S. Opioid Status Impacts Brain Morphology in Chronic Low Back Pain: A Sex Differences Pilot Study. PAIN®. Oct 2016.
7. **Darnall BD**, Sturgeon JA, Cook KC, Taub CJ, Kao MC, Rico T, Mackey SC. Development and Validation of a Daily Pain Catastrophizing Scale (Daily PCS) Measure. *J Pain*. 2016; 17(4): S20-21.
8. Taub C, **Darnall B**, Johnson K, Mackey S. Enhanced Secondary Hyperalgesia Following a Pain Catastrophizing Induction in Women with Chronic Low Back Pain. *J Pain*. April 2016; 17(4): S56.
9. **B. Darnall**, A. Wheeler, C. Taub, I. Mackey, I. Wapnir, C. Schultz, T. Rico, P. Flood. An internet-based perioperative pain psychology treatment program: results of a randomized controlled trial in breast oncology surgery patients. *J Pain*. April 2016; 17(4): S106.
10. K. Noon, J. Sturgeon, M. Kao, **B. Darnall**, S. Mackey. A novel glial cell inhibitor, low dose naltrexone, reduces pain and depression, and improves function in chronic pain: A CHOIR study. *J Pain*. April 2016; 17(4): S79.
11. J. Carriere, **B. Darnall**, M. Kao, S. Mackey. An examination of the roles of perceived injustice and pain acceptance on pain interference and pain intensity in patients with chronic pain: A Collaborative Health Outcomes Information Registry (CHOIR) Study. *J Pain*. April 2016; 17(4): S97.



12. J. Sturgeon, J. Carriere, **B. Darnall**, S. Mackey. Social disruption, but not pain interference, mediates the relationship between perceived injustice and anger in chronic pain: A Collaborative Health Outcomes Information Registry (CHOIR) study. *J Pain*. April 2016; 17(4): S16.
13. J. Sturgeon, E. Dixon, **B. Darnall**, S. Mackey. Pain catastrophizing, perceived injustice, and pain intensity impair life satisfaction through differential patterns of physical and psychological disruption. *J Pain*. April 2016; 17(4): S16.
14. J. Carriere, **B. Darnall**, M. Sullivan, M. Kao, S. Mackey. Perceived injustice, pain behavior and opioid prescriptions: a vicious circle? A Collaborative Health Outcomes Information Registry (CHOIR) Study. *J Pain*. April 2016; 17(4): S86.
15. **Darnall BD**, Wheeler A, Taub CJ, Mackey IG, Wapnir I, Schultz C, Rico T, Flood P. An internet-based perioperative pain psychology treatment program: Results of a randomized controlled trial in breast oncology surgery patients. *J Pain*. April 2016; 17(4).
16. **Darnall BD** & Steig RL. Boots on the Ground in Opioid Tapering: A Low-Cost, Medically Supervised Prescription Opioid Taper Program for Community-Dwelling Patients. (FEB 2016, *Pain Med*)
17. **Darnall BD**, Wheeler AJ, Taub CJ, Mackey IG, Rico T, Flood P. My Surgical Success: A randomized controlled trial of an internet-based perioperative pain psychology treatment program tested in women undergoing mastectomy. (FEB 2016, *Pain Med*)
18. Sun EC, **Darnall BD**, Baker LC, Mackey SC. Do Epidural Steroid Injections Reduce Health Care Spending for Patients with Low Back Pain? Evidence from the Marketscan® Database (FEB 2016, *Pain Med*)
19. Mackey IG, Kao MC, Darnall B. Increasing patient satisfaction in the pain clinic: The impact of an orientation video and its integration with the Collaborative Health Outcomes Registry (CHOIR). (FEB 2016, *Pain Med*).
20. Taub CJ, Chahal M, **Darnall BD**, Kao MC, Mackey SC. Effects of a Pain Catastrophizing Induction on Quantitatively Measured Pain Perception in Women with Chronic Low Back Pain. (FEB 2016 *Pain Med*)
21. Kao MC, **Darnall BD**, Prasad R, Leong M, Mackey SC. System to Enhance Patient Experience (STEPx): Machine-mediated classification of patient experience feedback using natural language processing. (FEB 2016, *Pain Med*)
22. Kao MC, **Darnall BD**, Leong M, Valenzuela E, Sugarman K, Meyers S, Walter M, Mackey IG, Mackey SC. Network of Coordinated Care: Collaborative Relationship of Pain Medicine with Primary Care for Complex Patients with Pain: A Large-Scale Network Study Using a Learning Health System Platform. (FEB 2016 *Pain Med*) (**Won the AAPM Research Highlight Award; selected for podium presentation**)
23. Mackey S, Kao MC, Cook K, Olson G, Pacht T, **Darnall B**, Weber S Collaborative Health Outcomes Information Registry (CHOIR): Open Source Platform for Learning Health Systems. (in press)

24. Sturgeon JA, Dixon E, **Darnall BD**, Mackey SC. Contributions of Physical Function and Satisfaction with Social Roles in Chronic Pain: A Stanford-NIH CHOIR Study. *J Pain*. 2015; 16(4): S17.
25. Sturgeon J, **Darnall B**, Kao, M, Mackey S. Physical and psychological correlates of fatigue and physical function: A Stanford-NIH CHOIR Study. *J Pain*. 2015; 16(4): S18.
26. Kao M, Leon M, Prasad R, Cullen A, Pacht T, Wellisch O, Olson G, **Darnall B**, Weber S, Mackey S. Stanford Patient Experience Questionnaire (SPEQ): Network of patient experience touch points revealed by Bayesian network reconstruction suggests targets for intervention. *J Pain*. 2015; 16(4): S36.
27. Kao M, Leon M, Prasad R, Cullen A, Pacht T, Wellisch O, Olson G, **Darnall B**, Weber S, Mackey S. Stanford Patient Experience Questionnaire (SPEQ): Machine mediated classification of patient experience feedback using natural language processing. *J Pain*. 2015; 16(4): S37.
28. Taub C, Chahal M, **Darnall BD**, Kao MC, Mackey SC. Anger Mediates Relationship Between Trauma and Pain Catastrophizing in Chronic Pain. *J Pain*. 2015; 16(4): S99.
29. Sharifzadeh Y, **Darnall B**, Kao M, Mackey S. Sub-clinical range of pain catastrophizing moderates the effect of pain intensity on opioid prescription. *J Pain*. 2015; 16(4): S16.
30. Chahal M, Taub C, **Darnall BD**, Kao MC, Mackey SC. Assessment of Anxiety as Mediator of the Relationship Between Sleep Disturbance and Pain Catastrophizing in Chronic Pain. *J Pain*. 2015; 16(4): S5.
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34. Ruchelli G, Chapin H, **Darnall BD**, Seppala E, Doty J, Mackey S. Compassion meditation training for people living with chronic pain and their significant others: A pilot study and mixed methods analysis. *J Pain*. 2014; 15 (4): S117.
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36. Kao M, Weber S, Cook K, Olson G, Pacht T, **Darnall BD**, Weber S, Mackey S. Stanford-NIH Pain Registry: Open source platform for large-scale longitudinal assessment and tracking of modern patient-reported outcomes. *J Pain*. 2014; 15 (4): S40.
37. Kao M, Cook K, Olson G, Pacht T, **Darnall BD**, Weber S, Mackey S. Stanford-NIH Pain Registry: Catalyzing the rate limited step of big-data psychometrics with item-response theory and advanced computerized adaptive testing. *Pain Medicine*. 2014; 15 (3): 533.

38. Kao M, Cook K, Olson G, Pacht T, **Darnall BD**, Weber S, Mackey S. Stanford-NIH Pain Registry: Open source platform for large-scale longitudinal assessment of clinical data and patient-reported outcomes. *Pain Medicine*. 2014; 15 (3): 533.
39. Ching AC, Marshall L, Hart RA, Zusman NL, **Darnall B**, Ragel BT, Nemecek A, Lanning KK, Watson KM, Yoo JU. Early prevalence of post-traumatic stress disorder in spinal trauma patients. *The Spine Journal*. 2012 12(9):S51.
40. **Darnall BD**, Wilson AC, Pierce DA. CARE Scale: Development and validation of a measure assessing the impact of relationships on self-care in chronic pain. *J Pain*. 2012; 13 (4), S1: S19.
41. **Darnall BD**, Wilson AC, Pierce DA. Medication taking attitude/behavior is influenced by relationships: Results from the CARE Scale online survey. *Pain Medicine*. 2012; 13(2): 316.
42. Volpe K, Li H, Caughey A, **Darnall BD**. Relationship of childbirth self-efficacy to prolonged second stage of labor. *J Women's Health*. 2011; 20(3):P124.
43. **Darnall BD**. A pilot study of self-delivered home-based mirror therapy for phantom pain. *J Pain*. 2010; 11(4) S1: S54.
44. **Darnall BD**. Chronic pain and pain catastrophizing in incarcerated women. *J Pain*. 2010; 11(4), S1: S19.
45. **Darnall BD**. Hysterectomy is associated with opioid use in women with chronic pain. *J Women's Health*. 2009; 18(10): 1496.
46. **Darnall BD**, Zwickey H, Aickin M. Interleukin-6 response to in-vivo pain catastrophizing: Comparison by gender. *J Women's Health*. 2008; Nov; 17: 1248.

### **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**. "Pain and Psychological Factors in Older Adults." *Practical Strategies in Geriatric Mental Health: Cases and Approaches*. Cassidy E and Dunn L, Eds. American Psychiatric Press (in review)
2. **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 (2017); online supplement.
3. Sturgeon JA, Zautra A, **Darnall BD**. "Physical and social pain: Twin challenges in well-being in adult life." *The Wiley Encyclopedia of Health Psychology*. Sweeny K and Robbins M, Eds. Wiley Press (in press).

4. **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.

### **Books**

1. **Darnall BD**. *The Opioid-Free Pain Relief Kit: 10 Simple Steps to Ease Your Pain* © 2016. Bull Publishing, Boulder, CO. (130 pages)
2. **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)
3. **Darnall BD**. *Psychobehavioral Treatment for Chronic Pain: The Evidence-Based Basics* (in press, available 2018; American Psychological Association Press). (180 pages)

### **CURRENT GRANT SUPPORT / RESEARCH AWARDS**

1. **PCORI** (Patient Centered Outcomes Research Institute) 02/01/18 – 1/30/2023  
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 a total of 1300 patient from 5 pain and primary care clinics in 4 Western states. The goal is to help primary care, pain physicians and patients with chronic pain safely and effectively reduce opioid use. We will compare 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.  
Total: **\$8.8M**  
**PI: Darnall**
2. **NIH / NCCIH** 09/01/2015 – 08/31/2020  
R01AT008561  
Title: Single Session Pain Catastrophizing Treatment: Comparative Efficacy & Mechanisms  
This project will test the efficacy of a novel treatment for pain catastrophizing I developed and pilot tested at the Stanford Pain Management Center.  
Total: **\$4M**  
**Multi-PI: Darnall & Mackey**
3. **NIH / NICHD** 09/01/2015 – 08/31/2020  
R01  
Title: Maternal Chronic Pain: Risk for Pain and Poor Outcomes in Children  
(PI: Anna Wilson, PhD)  
This longitudinal, multi-site study is examining the intergenerational transmission of chronic pain in high risk children of mothers with current chronic pain.  
Site award: **\$1.1M** **Darnall, Site PI for Stanford University**

4. **NIH / NCCIH** 9/1/11 – 3/30/18  
P01 AT006651  
Title: Stanford CAM Center for Chronic Back Pain  
PD: Sean Mackey, MD, PhD  
**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).
  
5. **NIH/ NCCIH** 9/01/13-1/30/18  
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.  
\$100,000 (supplement to the P01)  
PI: Sean Mackey, MD, PhD; **Darnall, Co-I.**

#### **COMPLETED GRANTS**

1. **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.  
\$230,000 (supplement to the P01)
  
2. **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”  
\$50,000 PI: Sean Mackey, MD, PhD; **Darnall, Co-I**
  
3. **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  
\$50,000  
**Multi-PI:** Kao MC and **Darnall**
  
4. **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).  
\$230,000 (supplement to the P01)  
PI: Sean Mackey, MD, PhD; **Darnall, Scholar PI.**
  
5. **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  
\$10,000  
**Darnall, Co-PI.** Co-PI: Dr. Do Than Huy, MD

6. **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  
Annual Budget: \$180,000 yearly; 0.75 FTE  
PI: Leslie Hallick. **Darnall, Scholar PI.**
7. **Medical Research Foundation of Oregon** 3/01/10 – 6/30/12  
Title: Pain Catastrophizing as a Cause of Systemic Inflammation in Pre- and Post-Menopausal Women  
\$40,000  
**Darnall, PI**
8. **ZRT Laboratories** 7/01/08-7/01/12  
Title: Pain Catastrophizing as a Cause of Systemic Inflammation in Women with Chronic Pain  
\$86,000  
**Darnall, PI**
9. **N.L. Tartar Research Fellowship** 6/01/10 – 6/01/11  
Title: Home-Based Self-Delivered Mirror Therapy for Phantom Pain  
\$1,000  
**Darnall, PI**
10. **OHSU Humanitarian Award** 6/01/09-6/01/10  
Title: Single-Session Pain Psychology for Underinsured Family Medicine Patients with Chronic Pain  
\$7,500  
PI: Thayer White, MD; **Darnall, Co-I.**
11. **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"  
\$20,000  
**Darnall, PI**
12. **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.  
\$400,000 (Year 1) 0.25 FTE  
**Darnall, Post-Doctoral Fellow**
13. **NIH T-32 Research Fellowship Grant** 11/01/02-3/30/04  
The Johns Hopkins University, School of Medicine, Department of Neurology.  
0.75 FTE  
**Darnall, Post-Doctoral Fellow**

## **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

## 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

## CERTIFICATION

Examination for Professional Practice in Psychology (EPPP) 2000  
National Register for Health Service Psychologists (ID: 51183) 2005 – 2017

## VISITING PROFESSORSHIPS

### 1. 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. 6/26-27/2017

### 2. 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.

### 3. 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 CME WORKSHOPS

1. Institute for Brain Potential. Sole developer and instructor of the **6-hour** CME workshop

“Psychological Approaches to Managing Pain.” Delivered to a live audience and also archived and available for purchase online. June 17, 2017. Los Altos, CA.  
<http://www.ibpceu.com/content/pdf/PMPCAS17.pdf>

2. American Academy of Pain Medicine (AAPM) Workshop Chair and Speaker. “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 conference (with Judith Scheman, Sara Davins, Jennifer Murphy and Sean Mackey). March 17, 2017. Orlando, FL. **This workshop was the highest rated session of the 2017 AAPM conference**, and has been accepted for repeat presentation at the 2018 AAPM conference in Vancouver, Canada.

## OPIOID REDUCTION WORKSHOP

Developed and delivered 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.

## CME LECTURES

### *International and National CME Lectures (\*accepted)*

1. Invited to represent Stanford Neurosciences at the 2018 World Economic Forum. “Optimizing Mindset in Health.” Davos, Switzerland. January 22, 2018.\*
2. Invited Speaker. “The Science of Pain Psychology.” North American Neuromodulation Society Annual Meeting. Las Vegas, NV. January 11, 2018.\*
3. Plenary Speaker. “Transforming Negative Mindset to Enhance Pain Treatment Effectiveness and Reduce Opioid Use.” Pain Society of Israel. November 12, 2017. Eilat, Israel.
4. Invited Panelist. “Treating Pain Better” (with AAPM President Dr. Steven Stanos and Dr. James Achinson). CompLaude Awards and Gala; WorkCompCentral. San Diego, CA. Nov 1, 2017.
5. Keynote Speaker. “Changing Mindsets to Enhance Pain Treatment Effectiveness” Academy of Integrative Pain Management. National annual meeting. October 21, 2017. San Diego, CA.
5. Invited Webinar Speaker (with AAPM President Dr. Steven Stanos). Minimizing Opioids. OutFront Ideas for Worker’s Compensation. May 9, 2017.
6. Invited Podium Speaker. “Pain Psychology & Sex/Gender.” Society for Acupuncture Research International Conference. April 29, 2017. San Francisco, CA.
7. Plenary Speaker and Session Chair. “Behavioral and Self-Management Resources for Immediate



- Implementation: Align Your Practice with the Changes in Public Healthcare”. American Academy of Pain Medicine, 2017 Conference, March 18, 2017. Orlando, FL. (Co-presenters Penney Cowan and Pete Moore)
8. Invited Podium Speaker. “Perioperative Pain Psychology.” IASP Acute Pain SIG Workshop. September 25, 2016. Yokohama, Japan.
  9. 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.
  10. Speaker. “Perioperative Pain Psychology Interventions and Learning Health Systems.” mHealth Conference. National University of Ireland, Galway, Ireland. June 16, 2016.
  11. 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 conference. Palm Springs, CA. Feb 19, 2016.
  12. 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 conference. Palm Springs, CA. Feb 20, 2016.
  13. 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; 6/7/16  
 “Hormones or psyche: What’s more important for women in pain?” Siena, Italy; 6/8/16
  14. Speaker. Darnall BD. “Opening the Medicine Box in Your Mind.” Trigeminal Neuralgia Association of Australia. Annual Conference. Gold Coast, Australia. August 16, 2015.
  15. Speaker. Darnall BD. “Minimizing Opioids by Optimizing Pain Psychology.” Pain Management Research Institute. Royal North Shore Hospital. Sydney, Australia. August 13, 2015.
  16. 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 34<sup>th</sup> annual scientific meeting. Palm Springs: 05/15/15.
  17. 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: 03/20/15.  
**Highest rated symposium of the 2015 AAPM conference.**
  18. Session Chair and Speaker. “Stop Catastrophizing from Undermining Your Treatment Outcomes.” Darnall BD & Edwards RR. American Academy of Pain Medicine annual conference. Washington, DC: 03/21/15.
  19. Session Chair and Speaker. “The Psychology of Opioids.” Darnall BD, Sullivan M, Mackey SC. PAINWeek 2014, Las Vegas, NV: 09/04/14.

20. Lecturer, “Mind Over Pill: Minimizing Opioids & Optimizing Psychology.” Stanford University, the Western Pain Society, and the American Academy of Pain Medicine conference, Stanford, CA: 9/19/14.
21. Session Chair and Speaker. “Mind Over Pill.” Darnall BD, Sullivan M, and Prasad R. American Academy of Pain Medicine Annual Conference, Phoenix, AZ: 03/08/14.
22. Invited Podium Speaker, “Pain, Psychology & Opioids.” Fundamentals of Pain Management: 2013 Primer Course, sponsored by the American Pain Society. New Orleans, LA: 5/07/13.
23. Co-Presenter, “Hot Topics in Pain Psychology.” Prasad R and Darnall BD. American Academy of Pain Medicine annual conference. Ft. Lauderdale, FL: 4/14/13.
24. Invited Podium Speaker, “Relationships and chronic pain.” Women in Pain 5<sup>th</sup> annual conference. Los Angeles, CA: 9/14/12.
25. Invited Co-presenter. “The rational use of opioid analgesics 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: 9/07/12.
26. 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: 5/17/12.
27. Speaker. “Change your brain, change your pain.” American Academy of Pain Management, 22<sup>nd</sup> annual conference. Las Vegas, NV: 9/21/11.
28. Invited Keynote Speaker. “Pain in Women: Finding the gift and flourishing.” Women in Pain 4<sup>th</sup> annual conference. Los Angeles, CA: 9/16/11.
29. Session Chair and Moderator. “Empowering Women in Pain,” Women in Pain 4<sup>th</sup> annual conference, Los Angeles, CA: 9/16/11.
30. Invited oral presentation: “Gender Dimorphic Immunologic Response to Pain Catastrophizing.” Office for Women’s Health Research annual conference, NIH, Bethesda, MD: 11/19/08.
31. 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: 8/20/08.
32. Invited podium speaker: “Immunologic Response to Pain Catastrophizing.” American Pain Society Annual Scientific Meeting, Tampa, FL: 5/10/08.

### ***State and Regional CME Lectures***

1. Grand Rounds, Department of Anesthesiology, Perioperative and Pain Medicine. Stanford University. “Pain and Opioid Reduction: Clinical Trials.” 09/18/17 (also webcast)

2. Grand Rounds, Internal Medicine, San Francisco VA. San Francisco, CA. "Pain Psychology and Opioid Reduction." 05/09/17
3. "Pain Psychology and Opioids." Invited Podium Speaker. Santa Clara Opioid Overdose Prevention Project. Santa Clara, CA. 3/29/17.
4. "Pain Psychology and Opioids." Kauai Pain Conference. Lihue, HI. February 25, 2017.
5. "The Science of Pain: Psychology". Kauai Pain Conference. Lihue, HI. February 24, 2017.
6. "Pain Psychology." Invited Panel Speaker. The San Diego Pain Summit. San Diego, CA. February 10, 2017.
7. "The Tennessee Pain, Opioids, Problems and Solutions Forum." Invited Panel Speaker. Nashville, TN. April 5, 2016.
8. Invited Panel Moderator. "The Tennessee Pain, Opioids, Problems and Solutions Forum." Nashville, TN. April 5, 2016.
9. "Primer on Pain Psychology and Interventions." Invited Podium Speaker. 2016 Third Annual Addiction Medicine Conference. Santa Clara, CA. April 4, 2016.
10. "Are Pre- and Post-Operative Pain Catastrophizing Undermining Your Surgical Outcomes? San Francisco Surgical Society. San Francisco, CA. March 30, 2016.
11. "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.
12. "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.
13. "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.
14. "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.
15. "The Interface Between Psychology and Opioids." Pain Society of Oregon. Eugene Chapter; Eugene, OR, October 19, 2011.
16. "The Interface Between Psychology and Opioids." Pain Society of Oregon. Portland Chapter; Portland, OR, October 18, 2011.
17. Session Chair and Speaker. Darnall BD, Pengally S, Schatman M. "Complex Psychological Issues." Western Pain Society annual conference, 10/01/11.
18. "Chronic Pain in Women," Western Pain Society annual conference, 10/02/11.
19. "Change Your Brain, Change Your Pain." Veterans Administration Health Care System, VISN 20 Region (telecast across Oregon, Southern Washington, Alaska, Idaho), 8/25/11.

20. Co-Lecturer. Darnall BD & Wagner J. "Barriers to Care: New Models for Accessing Pain Treatment." Pain Society of Oregon annual conference, 5/22/10.
21. "Mirror Therapy for Phantom Pain." Pain Society of Oregon annual conference, 5/22/10.
22. "Gender-Specific Treatment for Women with Chronic Pain," Pain Society of Oregon, 10/20/09.
23. "Immunologic Response to Pain Catastrophizing," Western Pain Society, Annual Conference, 4/24/08.
24. "Treating Chronic Pain in Corrections Settings," Oregon Department of Corrections, 11/09/08.
25. Poster selected for oral presentation. "The Immunologic Impact of In-Vivo Pain Catastrophizing." Darnall BD, Zwickey H, Byung P. American Pain Society Annual Meeting, 5/09/08.
26. "Treating Patients with Chronic Pain," Seminar, Oregon Psychological Association annual meeting, 05/07.
27. Co-Presenter. Darnall BD & Abel JM. "Multidisciplinary Treatment of a Chronic Groin Pain Patient" Co-Presenter, Pain Society of Oregon Annual Clinical Meeting, 4/15/06.

### ***Local CME Presentations***

1. "Pain Psychology and Opioid Reduction." Palliative Medicine, faculty presentation, Stanford University. Palo Alto, CA 8/23/17.
2. "Pain Psychology and Opioid Reduction." Department of Primary Care, faculty presentation; Stanford University. Palo Alto, CA 8/10/17.
3. Sex Differences in Psychosocial Factors and Pain. Division of Pain Medicine, Stanford University. Redwood City, CA 7/14/17.
4. 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.
5. "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 1/13/17.
6. Psychological Treatment Modalities and Resources. Division of Pain Medicine, Stanford University, 4/10/15.
7. "Pain Catastrophizing." Division of Pain Medicine, Stanford University, 11/21/14.
8. "The interface between psychology and opioids." Division of Pain Medicine, Stanford University, 12/07/12.

9. "Home-based self-delivered mirror therapy for phantom pain." Quarterly conference, Department of Physical Medicine and Rehabilitation, Portland VA Hospital, 4/25/12.
10. "Goals of pain education: Minimize opioids, empower patients, relieve suffering." Grand Rounds, OHSU Department of Anesthesiology and Perioperative Medicine, 4/09/12.
11. "Utility of bilateral tactile stimulation in chronic pain: Rationale and applications." Portland EMDRIA practitioner group, 03/23/12.
12. 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.
13. "Pain Psychology: Research & Clinical Updates." OHSU Division of Psychology, Spring Colloquium, 03/24/11.
14. "Change Your Brain, Change Your Pain," BRAINet, Portland, OR, 02/28/11.
15. Moderator, Panel Speaker: "Pain in Clinical Practice" OHSU Inaugural P.A.I.N. Day, 02/22/11.
16. "Clinical Pain Updates: Women are Not Men" OHSU Inaugural P.A.I.N. Day, 02/22/11.
17. "The Mystery of Pain." *Bing Pain Lounge: OHSU Medical Breakthroughs*. Co-Presenter with Stacey, BR; Taped and webcast. 2/09/11.
18. "Pain Psychology." Portland VA Mental Health, psychology intern and post-doctoral fellow lecture, 2/02/11.
19. "Mirror Therapy for Phantom Pain." OHSU Department of Anesthesiology & Perioperative Medicine, Departmental Grand Rounds, 1/10/11.
20. "The Interface Between Psychology and Opioid Use." OHSU Department of Anesthesiology & Perioperative Medicine, 09/10.
21. "Improving Access to Mirror Therapy for Phantom Pain." OHSU/Kaiser CHR collaborative pain research interest group meeting, 8/02/10.
22. "Gender-Responsive Chronic Pain Treatment for Incarcerated Women with Substance Abuse." OHSU and Kaiser Permanente collaborative pain research interest group meeting, 4/05/10.
23. "Psychological Stress and Inflammatory Factors." OHSU Central Sensitivity Research Group, 1/07/10.
24. "Pain Psychology." Portland VA Mental Health, psychology intern and post-doctoral fellow lecture, 12/09/09.
25. "Immune Mediators of Pain." OHSU Department of Anesthesiology, Pain Fellows Lecture, 2/09/09.
26. "Treating Patients with Comorbid Chronic Pain." Grand Rounds, OHSU Department of Psychiatry, 6/17/08.

27. "IL-6 Response to In-Vivo Pain Catastrophizing is Gender Dimorphic." OHSU Human Investigator Program, Annual Conference and Awards Ceremony, 5/30/08.
28. "Can Your Thoughts Affect Your Immune System?" Department of Psychology, Portland State University, 5/27/08.
29. "How Your Thoughts Affect Your Immune System," Marquam Hill Lecture Series, OHSU, 5/15/08.
30. "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.
31. "Chronic Pain Patient Services." Department of Psychiatry, OHSU, Psychiatry Resident Lecture; 1/21/08.
32. "Self-Management of Chronic Pain." Lupus Society of Portland, 1/07.
33. "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.
34. "Adult Pain Psychology." Grand Rounds, Department of Anesthesiology and Perioperative Medicine, OHSU. 6/19/06.
35. Department of Bariatrics, OHSU. "Maximizing Post-Operative Success," 04/06.
36. *Pain Fellows Didactic Lecture Series*  
Stanford University, Department of Anesthesiology, Perioperative and Pain Medicine  
Deliver 2 pain psychology lectures each year (2012- present)
37. *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***

1. "Pain Psychology and Opioids." Stanford Faculty and Staff Lecture Series. Stanford, CA. 5/24/17.
2. "Pain in Women and Why Psychology Matters More." Stanford Health Matters (public event). Stanford, CA. 5/20/17
3. "Pain Psychology." Stanford Neurosurgery, Oncology, and Palliative Medicine. Stanford, CA. 3/22/17.
4. "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.
5. "The Role of Psychology in Pain and Pain Treatment." Stanford Medical Students (Continuity of Care course). Stanford, CA. 1/12/17.

6. “Research in the Division of Pain Medicine.” Dept. of Anesthesiology, Perioperative and Pain Medicine. Stanford Hospital. Stanford, CA. 9/01/16
7. “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
8. 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.
9. “Empowering Chronic Pain Patients with Pain Psychology.” Stanford University, Med School 101. Stanford, CA. 4/29/16.
10. “Pain Psychology: Opening the Medicine Box in Your Mind.” Marfan Foundation National Speaker series. Stanford, CA. 1/30/16. (webcast internationally)
11. “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).
12. “Opening the Medicine Box in Your Mind.” Stanford Free Back Pain Education Day. Stanford, CA. 9/13/15.
13. “Changing Pain, Brain and Behavior.” Research and Development presentation, Department of Anesthesiology, Perioperative and Pain Medicine, Stanford University, Stanford, CA: 3/10/15.
14. “Perioperative Pain Psychology.” Stanford University Colorectal Surgery group, Stanford, CA: 1/27/15.
15. “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.
16. 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.
17. “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.
18. 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.

## **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

### ***Certification 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**

#### ***Regional and National Conference Co-Chair***

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***

2015-2018    Annual Conference Committee (invited).

2016-2018    Steering Committee for the AAPM Annual Conference. This invited position is offered to a roughly ¼ of the planning committee members. The steering committee is responsible for planning the content of the annual conference, vetting and prioritizing proposals, etc. The conference co-chairs select the members of the steering committee. 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***



- 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.

## SELECTED SCIENTIFIC POSTER PRESENTATIONS

Listed below are posters that were *not* also published in peer-reviewed scientific journals in abstract form.

1. Kao MC, Cook KF, **Darnall BD**, Olson G, Pacht T, Weber SC, Mackey SC. Collaborative Health Outcomes Information Registry (CHOIR): Open Source Cloud-Based Platform to Generate and Support Learning Healthcare Systems. International Neuromodulation Society 12<sup>th</sup> World Congress. Montreal, Canada: 6/15.
2. Mackey SC, Kao MC, Cook KF, **Darnall BD**, Olson G, Pacht T, Weber SC. Collaborative Health Outcomes Information Registry (CHOIR): Open Source Learning Health Systems Platform. Patient-Reported Outcomes Measurement Information System: From Basics to Applications in Clinical Research, Practice and Population Health. Philadelphia, PA: 5/15.
3. Mackey SC, Kao MC, Cook KF, **Darnall BD**, Olson G, Pacht T, Weber SC. CHOIR CAT: Integrated Multi-Objective Probabilistic Computer Adaptive Testing Platform for NIH PROMIS and Toolbox. Patient-Reported Outcomes Measurement Information System: From Basics to Applications in Clinical Research, Practice and Population Health. Philadelphia, PA: 5/15.
4. Sharifzadeh Y, **Darnall BD**, Kao MC, Mackey SC. “Opioid prescription is predicted by novel sub-clinical range of pain catastrophizing: Discovery from resampling nonparametric modeling.” American Academy of Pain Medicine, Washington, DC: 3/19/15.
5. **Darnall BD**, Curtin C, Kin C, Welton L, Kenney D, Kao MC, Rico T, Mackey SC. My Surgical Success: Remote Perioperative Pain Psychology. UCSF-Stanford Anesthesia Research Day, Millbrae, CA: 3/14/15.
6. Kao MC, Cook K, Olson G, Pacht T, **Darnall BD**, Weber S, Mackey SC. CHOIR CAT: Integrated Multi-Objective Probabilistic Computer Adaptive Testing Platform for NIH PROMIS and Toolbox. UCSF-Stanford Anesthesia Research Day, Millbrae, CA: 3/14/15.
7. Mackey SC, Kao MC, Cook KF, **Darnall BD**, Olson G, Pacht T, Weber SC. Collaborative Health Outcomes Information Registry (CHOIR): Open Source Learning Health Systems Platform. UCSF-Stanford Anesthesia Research Day, Millbrae, CA: 3/14/15.
8. Mackey S, Kao MC, **Darnall B**, Prasad R, Leong M, Cullen A, Wellisch O, Olson G. Stanford Patient Experience Questionnaire (SPEQ): Network of patient experience touch points revealed by Bayesian network reconstruction suggests targets for intervention. UCSF-Stanford Anesthesia Research Day, Millbrae, CA: 3/14/15.

9. **Darnall BD**, Sturgeon JA, Kao MC, Hah JM, Mackey SC. "From Catastrophizing to Recovery: Pilot study of a single-session psychobehavioral class to treat pain catastrophizing." American Pain Society annual scientific conference, Tampa, FL: 05/14.
10. Ruchelli G, Chapin H, **Darnall BD**, Seppala E, Doty J, Mackey S. "Compassion meditation training for people living with chronic pain and their significant others: A pilot study and mixed methods analysis." American Pain Society annual scientific conference, Tampa, FL: 05/14.
11. Kao M, Cook K, Olson G, Pacht T, **Darnall BD**, Weber S, Mackey S. "Stanford-NIH Pain Registry: Catalyzing the rate limited step of psychometrics with modern patient-reported outcomes." American Pain Society annual scientific conference, Tampa, FL: 05/14.
12. Halawa O, **Darnall BD**. "The Effect of Religiosity on Opioid-Taking Behavior for Lung Cancer Pain: An International Study." International Association for the Study of Pain Biennial conference, Milan, Italy: 08/12.
13. **Darnall BD**, Wilson AC, Pierce DA. "CARE Scale: Development and preliminary validation of a measure assessing the impact of relationships on self-care in chronic pain." American Pain Society annual scientific conference, Honolulu, HI: 5/17/12.
14. **Darnall BD**, Wilson AC, Pierce DA. "CARE Scale: Development and validation of a measure assessing the impact of relationships on self-care in chronic pain." American Academy of Pain Medicine annual meeting, Palm Springs, CA: 2/23/12.
15. **Darnall BD** & Li H. "Hysterectomy predicts opioid prescription in women with chronic pain." Invited poster presentation. American Academy of Pain Management, 22<sup>nd</sup> annual conference, Las Vegas, NV: 9/21/11.
16. Volpe K, **Darnall BD**, Li H, Caughey A. "Relationship of childbirth self-efficacy to prolonged second stage of labor." NIH Women's Health Conference, Bethesda, MD: 4/5/11.
17. **Darnall BD** & Li H. "Home-Based Self-Delivered Mirror Therapy for Phantom Pain." Egyptian Society for the Management of Pain, Cairo, Egypt: 10/28/10.
18. Reposar A, Volpe K, **Darnall BD**, Li H. "Pain Catastrophizing and Birth Satisfaction in a Sample of Healthy Nulliparous Women." Annual meeting of the American Society of Anesthesiology, San Francisco, CA: 10/14/10.
19. **Darnall BD**. "Self-Delivered Mirror Therapy for Phantom Pain." Amputee Coalition of America annual conference, Irvine, CA: 8/28/10.
20. **Darnall BD**. "Pain Characteristics and Pain Catastrophizing in Incarcerated Women." American Pain Society annual conference, Baltimore, MD: 5/6/10.
21. **Darnall BD**. "Home-Based Self-Delivered Mirror Therapy for Phantom Pain: Results from a Pilot Study." American Pain Society annual conference, Baltimore, MD: 5/6/10.
22. **Darnall BD**. "Hysterectomy is Associated with Opioid Use in Women with Chronic Pain." Office for Research on Women's Health, NIH, BIRCWH conference, Bethesda, MD: 11/16/09.

23. **Darnall BD**, Zwickey H, Byung P. “Immunologic Response to a Pain Catastrophizing Induction.” The International Association for the Study of Pain, triennial conference, Glasgow, Scotland: 8/20/08.
24. Larsen G, **Darnall BD**, Zwickey H. “The Effects of Sleep on the Immunologic Response to Negative Cognition in Persons with Chronic Pain.” American Pain Society Annual Meeting, Tampa, FL: 5/08.
25. **Darnall BD**, Zwickey H, Byung P. “Cortisol Mediates Interleukin-6 Response Following In-Vivo Pain Catastrophizing.” American Pain Society Annual Meeting, Tampa, FL: 5/8/08.
26. Larsen G, **Darnall BD**, Zwickey H. “The Effects of Sleep on the Immunologic Response to Negative Cognition in Persons with Chronic Pain.” American Society for Anesthesiology annual meeting, San Francisco, CA: 10/07.
27. **Darnall BD**. “An Investigation of Immunologic Response to Negative Cognition in Persons with Chronic Pain.” American Pain Society Annual Meeting, Washington, D.C.: 5/2/07.
28. **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.” National Institutes of Health, Bethesda, MD: 12/03.
29. **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.” Rehabilitation Psychology Annual Conference, Tucson, AZ: 4/03.
30. **Darnall BD** & Craighead LW. “Investigation the Cognitive Model for Bulimia via Path Analysis on a Brazilian College Sample.” American Association for Behavior Therapy Annual Conference, Miami, FL: 11/97.

## MENTORING

### *Current*

#### **NIDA T-32 postdoctoral fellowship mentor**

PD: Sean Mackey, PhD, MD  
2017- present

#### **Maisa Ziadni, PhD**

T-32 Post-Doctoral Fellow, 2016- present  
NIDA (T-32 PD: Sean Mackey, PhD, MD)  
Stanford Systems Neuroscience and Pain Lab

### *Past Research Trainees*

#### **Gail Larsen, M.D., M.P.H.**

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.”  
*Current Position:* Chief Medical Resident, University of Michigan, Internal Medicine.

**Katie Volpe, M.D.**

Primary research mentor, 2008-2010.  
“Relationship of childbirth self-efficacy to prolonged second stage of labor.”  
*Current Position:* Resident in Obstetrics at the University of New Mexico.

**Aaron Reposar, M.D.**

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 Nulliparous Women.”  
*Current Position:* Resident in General Surgery at Christiana Health Care System, Delaware.

**Omar Halawaa, M.D.**

Primary research mentor, 2011  
Project: “Religiosity and Cancer Pain Experience: An international study.” Collaboration with researchers at OHSU, UNC Chapel Hill, and Saudi Arabia.  
*Current Position:* Pain Fellow, UC San Diego, Department of Anesthesiology, Perioperative and Pain Medicine.

**Chloe Taub**

Primary research mentor, 2014-2015  
Topic: Sensory Perception Changes Following a Pain Catastrophizing Induction in Women with Chronic Pain: A Quantitative Sensory Testing Study.  
*Current Position:* Stanford Graduate with Master’s in Psychology (Hons); Research Coordinator at the Systems Neuroscience and Pain Lab, Stanford University.

**Yasamin Sharifzadeh**

Co-mentor with Drs. Mackey and Kao, 2014-2105  
Topic: Opioid prescription is predicted by novel sub-clinical range of pain catastrophizing: Discovery from resampling nonparametric modeling.  
*Current Position:* Stanford graduate; Research Coordinator in the Systems Neuroscience and Pain Lab.

**Junie Carriere, B.S.**

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 it’s association with perceived injustice and acceptance.  
*Current Position:* Doctoral student at McGill University, Department of Psychology, Montreal, Quebec.

**DISSERTATION EVALUATOR**

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

**EDITORIAL ACTIVITIES**

## ***Editorial Board Memberships***

*Pain Medicine* (Section Editor, Ethics Forum; 2013-present)

## ***Invited Reviewer***

*PCORI scientific reviewer*

*JAMA Internal Medicine*

*Brain, Behavior & Immunity*

*Pain*

*Journal of Substance Abuse Treatment*

*Clinical Journal of Pain*

*Journal of Pain*

*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*

## ***Grant Reviewer***

American Pain Society Future Leaders in Pain Research; 2013, 2014, 2015, 2016, 2017

American Pain Society Sharon S. Keller research awards; 2013, 2014, 2015, 2016, 2017

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.

OHSU 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-present)

Pain Society of Oregon (2009-2012)

American Academy of Pain Medicine (2010-present)

National Register for Health Care Providers in Psychology (2004-2014)

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)

American Psychological Association (present; Division 38 Member)  
California Psychological Association (2013, present)  
North American Neuromodulation Society (2017- present)  
Association for Psychological Science (2017- present)

## LEADERSHIP POSITIONS IN PROFESSIONAL SOCIETIES & COMMITTEE MEMBERSHIP

### *International & National Organizations*

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

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

#### **American Pain Society (APS)**

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 7<sup>th</sup> 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.

2012-2013 **APS Leadership Development Committee (Nominating Committee).** This committee membership of APS with candidates for all elected offices.

## **American Academy of Pain Medicine (AAPM)**

- 2017 - **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- **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.
- 2015- **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. Goals for 2016 include establishing an educational program for the core competencies of Pain Psychology.
- 2015- **Co-Chair, Pain Psychology Shared Interest Group.** Co-Chair with Judith Scheman, PhD, 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.
- 2016-2018 **Annual Conference Steering Committee.** Invited Member selected from overall Planning Committee to steer the overall annual meeting and content emphasis.
- 2015-2017 **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: Dr. Daniel Carr and David Tauben, MD.
- 2015-2017 **AAPM Lead, Collaborative Intermountain Healthcare Working Group.** Invited by President Bill McCarberg. This pilot project seeks to enhance and integrate pain psychology into Intermountain Primary Care chronic pain care. This educational initiative targets IMH primary care physicians and mental health clinicians and seeks to increase knowledge, training, and programmatic cohesion for improved pain psychology for chronic pain.
- 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.

### **American College of Occupational and Environmental Medicine**

2016-2017 **Committee Member and Co-Author** of the *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-present **Legislative Committee.**

2012-present **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**

2009-present **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-present **Advisory Council.** This non-profit organization is dedicated to raising the ethical and scientific standards in psychology and psychiatry. <http://www.empathictherapy.org/>

### **American Chronic Pain Association**

2014-2015 **Committee Member and Co-Author.** The 2015 *ACPA Resource Guide to Chronic Pain Medication and Treatment*. 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 Committees***

#### **Stanford University**

2016 - 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"  
2011-2012 OHSU Center for Integrative Medicine development task force

### ***Departmental Committees***

- 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)

### **RECENT AWARDS AND RECOGNITION**

- 2017      Highest rated symposium of the 2017 annual conference of the American Academy of Pain Medicine.
- 2016      Association of University Anesthesiologists. Elected Member.
- 2015      Presidential Commendation, for the effort to expand AAPM membership to non-physician members, thus broadening the diversity of the organization. American Academy of Pain Medicine (shared with Co-Chair Dr. Perry Fine).
- 2015      Highest rated symposium presentation of the 2015 annual conference of the American Academy of Pain Medicine.

### **TREATMENTS DEVELOPED**

#### ***Commercial Products***

1. *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 8<sup>th</sup> grade reading level.

2. *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.
3. “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](http://www.bethdarnall.com).
4. “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 [www.bethdarnall.com](http://www.bethdarnall.com). Received the 2010 OHSU Innovation in Technology Award.
5. “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 pain psychology treatment package that includes a 90-minute psychoeducational video, a personalized plan, and a binaural audio CD / audiofile (“Enhanced Pain Management: Binaural Relaxation” ©2013 Stanford University). Developed by Beth Darnall, PhD, and based of the chronic pain psychology program *From Catastrophizing to Recovery* (below). Currently being tested in colorectal surgery patients at Stanford and in carpal tunnel surgery patients at the Palo Alto VA.
2. *From Catastrophizing to Recovery* ©2013 is a 2-hour, single-session psychoeducational treatment developed to specifically and focally treat pain catastrophizing. Developed in 2013, pilot findings published 04/14, NIH R01 grant received in 2015 to study this treatment in a 3-arm randomized controlled trial. A video version of the class was developed 12/13 and additional studies are underway to determine durability of effects.
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

### 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 **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.
- Pacira Pharmaceuticals, Inc.**
- 2017 **Pain and Opioid Reduction Products.** Consultancy role involves advising on behavioral tools to facilitate pain and opioid reduction, as well as to advise on the measurement and treatment of pain catastrophizing in the perioperative setting.
- Optimized Psychology Consulting**
- 2016 **Owner** of consulting business that provides solutions to healthcare organizations and vendors seeking to optimize outcomes for patients, clinical care providers and organizations.
- 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-present **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. Target audience: Prescribing providers.
- 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. (May 2016- present)

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)

[On Twitter alone within one week this post received 250 retweets and reached an audience of over 45k].

2. “Ask Dr. Beth, Pain Psychologist”, *National Pain Report*

[americannewsreport.com/nationalpainreport/](http://americannewsreport.com/nationalpainreport/) (June 2013 –present); example columns:

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)

3. “Less Pain, Fewer Pills” blog at *Psychology Today*

The *Psychology Today* website has 4.2 million site views each month.

<http://www.psychologytoday.com/blog/less-pain-fewer-pills>

06/23/14 “Chronic Pain: Reduce Opioids and Your Risks” (Darnall BD)

07/14/14 “What is a Pain Psychologist?” (Darnall BD)

08/25/14 “Pain Psychology: Is it really all in your head?” (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 “Looking Beyond Opioids for Chronic Pain” (Darnall BD)

4. Expert Author

03/10/16 “How Psychologists, Physicians Can Coexist in Pain Medicine” (Darnall BD)

<http://bit.ly/1P23KXA> *Clinical Health Advisor*

## 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 4<sup>th</sup> 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 [www.bethdarnall.com](http://www.bethdarnall.com)
- 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: <http://www.ohsu.edu/blogs/news/2012/01/28/heres-what-you-missed/>
- 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](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:

[http://www.everydayhealth.com/fibromyalgia-pictures/fibromyalgia/ways-to-take-back-your-time.aspx?xid=fb\\_EH\\_20120309\\_fibromyalgia#/slide-1](http://www.everydayhealth.com/fibromyalgia-pictures/fibromyalgia/ways-to-take-back-your-time.aspx?xid=fb_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**). [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)
- 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). <http://www.iasp-pain.org/Insight/June2012Insight.pdf>
- 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](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."  
<http://americannewsreport.com/nationalpainreport/older-patients-more-at-risk-of-painkiller-addiction-after-surgery-8813525.html>
- 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:  
<http://americannewsreport.com/nationalpainreport/abused-women-more-susceptible-to-pain-8819453.html>
- 05/13. Dr. Darnall provides expert opinion in a story discussing research on the links between trauma, stress, and chronic pain.  
<http://americannewsreport.com/nationalpainreport/chronic-pain-linked-to-stress-8819812.html>
- 06/13. Dr. Darnall's opinion on medical education for chronic pain care is featured here in the *American News Report* (Editor: **Pat Anson**):  
<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>
- 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**)  
[http://www.naturalmedicinejournal.com/article\\_content.asp?article=439](http://www.naturalmedicinejournal.com/article_content.asp?article=439)



- 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. <http://americannewsreport.com/nationalpainreport/deaths-from-painkillers-rise-sharply-among-women-8820699.html> (Author: Pat Anson)
- 7/23/13. Dr. Darnall was the featured guest on ***Five to Thrive*** live radio show. In this hour-long show she discussed chronic pain, stress, and the immune system. Audio is also available on iTunes. [www.w4cs.com](http://www.w4cs.com)
- 8/14/13. Dr. Darnall's radio program was rebroadcast on ***Five to Thrive*** radio show. Topic: chronic pain, stress and the immune system.
- 8/20/13. Dr. Darnall was the featured guest on ***Five to Thrive*** live radio show. In this hour-long show she discussed the risks and consequences of long-term opioid therapy for chronic pain.
- 9/18/13. Dr. Darnall's radio show on the risks of long-term opioid use in chronic pain was rebroadcast on ***Five to Thrive*** radio show.
- 12/4/13. Dr. Darnall was the featured guest on **103.3 fm WYOJ** radio program (live streamed at [www.valleyfreeradio.com](http://www.valleyfreeradio.com)). Topics of discussion were pain catastrophizing, pain psychology, and her forthcoming book, *Less Pain, Fewer Pills*.
- 03/2014 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: <http://www.hcplive.com/conferences/2014-aapm/Mindfulness-based-Pain-Care-Provides-Opioid-Taper-Support>
- 5/14/14 ***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." <http://www.painandinjurydoctor.com/psychosomatic-pain/how-having-a-fear-avoidance-state-of-mind-promotes-pain/>
- 7/2/14 Dr. Darnall is interviewed on ***The Pain Free Podcast***. <https://itunes.apple.com/us/podcast/the-pain-free-podcast/id895525760?mt=2>
- 7/14 Dr. Darnall is interviewed and *Less Pain, Fewer Pills* is reviewed [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) (author: Holly Caster).
- 7/9/14 Dr. Darnall is the featured guest on the live radio show, The ***Dr. Peter Breggin Hour***. <http://drpeterbregginshow.podbean.com/e/the-dr-peter-breggin-hour-070914/>. She discusses pain psychology, her book *Less Pain, Fewer Pills*, and the power of the mind to influence sensory perception <http://prn.fm/tag/beth-darnall/>
- 7/14/14 ***National Pain Report*** interviews Dr. Darnall about *Less Pain, Fewer Pills* <http://americannewsreport.com/nationalpainreport/less-pain-fewer-pills-8824242.html> (author: Pat Anson)

- 7/25/14 **Falls Radio**, Little Falls, MN (syndicate radio show) features Dr. Darnall and *Less Pain, Fewer Pills* (**Host: Ron Specker**).
- 7/26/14 “Body Talk” features a one-hour live interview with Dr. Darnall on KTIP-AM radio, syndicated throughout California (**host: Mimi Stoneburner**).
- 7/28/14 **Healthline** features Dr. Darnall in the story “For Pain Patients, the Physical and Emotional are Entertwined” <http://www.healthline.com/health-news/chronic-pain-is-physical-and-emotional-072814#3> (**author: Shawn Radcliffe**)
- 8/05/14 **KRWM Radio** features Dr. Darnall and *Less Pain, Fewer Pills* (**host: Kate Daniels**).
- 8/23/14 **The People’s Pharmacy** radio show, Austin, TX, features Dr. Darnall and *Less Pain, Fewer Pills*.
- 9/3/14 **Paul Costello’s Stanford University Podcast “1:2:1”** features Dr. Darnall: “Chronic Pain: Getting your head around it.” <http://med.stanford.edu/news/all-news/one-to-one/2014/beth-darnall-discusses-less-pain-fewer-pills.html>
- 9/4/14 **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**). <http://www.empr.com/calming-patients-nervous-systems-reduces-pain-intensity-and-distress-opioid-use/article/368982/>
- 9/12/14 **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>
- 9/17/14 Dr. Darnall is an invited guest on **Health Revolution Radio** (**host: Peter Abaci, MD**) <http://www.iheart.com/show/Health-Revolution-Radio/>
- 10/14/14 One-hour interview with **R. Gallyot** on **KWMR Radio 89.9 & 90.5 “Airwaves”** live show. Topic: Pain psychology and *Less Pain, Fewer Pills*.
- 11/19/14 Dr. Darnall is interviewed on **Radio MD Naturally Savvy**, a nationally-syndicated <http://click2site.co/ib/click.php?s2s=&cid=0&subd=&cid=70250&cm=> radio show. Topic: Pain psychology (**host: Lisa Davis**).
- 12/1/14 **Women’s Health** magazine includes an interview with Dr. Darnall in a feature on chronic pain for the December 2014 issue.
- 12/5/14 **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: <http://www.practicalpainmanagement.com/resources/news-and-research/preoperative-fears-affect-postoperative-recovery> (**author Thomas G. Ciccone**)
- 12/18/14 **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:

<http://americannewsreport.com/nationalpainreport/my-story-what-doctors-dont-tell-us-8825365.html> (Author: **Kerry Smith**)

- 12/29/14 *PainMaps* interviews Dr. Darnall on pain psychology, the relaxation response, and opioid risks. Hour-long radio broadcast: <http://www.painmaps.com/neuroscience-of-pain/>
- 03/04/15 *National Pain Report* features Dr. Darnall's opinion about the value of patient bloggers in the chronic pain community. <http://bit.ly/1APKHZo>
- 03/16/15 *Men's Health* magazine features Dr. Darnall in a story on sex differences in the experience of pain: <http://www.menshealth.com/best-life/6-pains-worse-than-childbirth>
- 03/20/15 *NewsWire* reports on the Dr. Darnall as a recipient of a 2015 Presidential Commendation from the American Academy of Pain Medicine: <http://www.newswise.com/articles/view/631180/?sc=rsla>
- 04/01/15 *Practical Pain Management* features Dr. Darnall as a pain expert in the article "Pain in Women" (p22-24) (author: **Kristin Della Volpe**).
- 04/01/15 *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**). <http://www.practicalpainmanagement.com/resources/news-and-research/parents-play-role-childs-postop-pain>
- 04/01/15 *MORE Magazine* features Dr. Darnall as an expert on aspects of chronic pain, including sex differences and the psychobiology of pain (author: **Nissa Simon**) <http://www.more.com/health/wellness/when-pain-just-wont-stop>
- 04/07/15 *Pain News Network* features Dr. Darnall's opinion of opioid prescribing in chronic low back pain. <http://www.painnewsnetwork.org/stories/2015/4/7/study-one-in-five-opioid-prescriptions-for-low-back-pain> (author: **Pain Anson**).
- 04/23/15 *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. <http://nationalpainreport.com/a-conversation-about-chronic-pain-8825995.html> (author: **Ed Coughlan**).
- 06/01/15 Dr. Darnall provides expert commentary in the story "Anxiety & Chronic Pain Link Defined". <http://nationalpainreport.com/anxiety-chronic-pain-link-defined-8826402.html>
- 06/12/15 *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**) <http://www.smh.com.au/lifestyle/diet-and-fitness/emotional-back-pain-the-cause-for-our-countrys-biggest-problem-20150612-ghm6n3.html>

- 07/15 Dr. Darnall discusses how her patients are among her greatest mentors in the “Pundit Profile” feature of *PainWeek Journal* (p 58): [http://issuu.com/painweek/docs/pwj\\_15\\_q2\\_6.3/58](http://issuu.com/painweek/docs/pwj_15_q2_6.3/58)
- 07/15 **Kerry Smith** gives a heartfelt testimonial of *Less Pain, Fewer Pills* in “What Doctor’s Don’t Tell Us”: <http://nationalpainreport.com/my-story-what-doctors-dont-tell-us-8825365.html>
- 09/15 Stanford *ScopeBlog* interviews Beth Darnall about back pain and the Stanford Back Pain Free Education Day: <http://scopeblog.stanford.edu/2015/09/03/stanford-expert-on-back-pain-the-important-thing-for-people-to-know-is-that-its-treatable/> (author **Rina Shaikh-Lesko**)
- 09/15 *The National Pain Report* interviews Beth Darnall and promotes the Stanford Back Pain Free Education Day <http://nationalpainreport.com/back-pain-seminar-at-stanford-wants-you-8827323.html>
- 09/15 Dr. Darnall’s research and book are featured in the following opioid taper story: <http://nationalpainreport.com/leading-pain-physician-starts-mandatory-opioid-tapering-program-8827407.html> *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. <http://scopeblog.stanford.edu/2015/09/22/people-are-looking-for-better-answers-a-conversation-about-chronic-pain/> (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**) <http://www.citizen-times.com/story/life/2015/09/21/health-column-pain-head-treat/72556120/>
- 10/15 the *Pain News Network* includes Dr. Darnall in an article on long term opioid use in women: <http://www.painnewsnetwork.org/stories/2015/10/12/study-long-term-opioid-use-often-ineffective> (author: **Pat Anson**)
- 10/15 *Pain News Network* includes Dr. Darnall’s commentary in a story on resilience in chronic pain (author: **Pat Anson**). <http://www.painnewsnetwork.org/stories/2015/10/22/chronic-pain-changes-pain-chemistry>
- 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) <http://www.shlnews.org/?p=1105>
- 11/15 *PainWeek’s One Minute Clinician* features Dr. Darnall. She discusses the psychological factors that should be considered prior to prescribing opioids. <http://bit.ly/1OqEoFz>
- 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: <http://nationalpainreport.com/aapm-national-need-for-chronic-pain-psychology-services-8829379.html>

- 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**). <http://www.psychiatryadvisor.com/practice-management/american-association-pain-management-psychology-psychologist/article/478083/>
- 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**). <http://www.clinicalpainadvisor.com/aapm-2016-annual-meeting/aapm-task-force-enhanced-pain-psychology-training-needed-for-psychologists/article/477829>
- 02/16 *MDLinx* covers catastrophizing research by Chloe Taub, MA, Beth Darnall, PhD and colleagues. Read the published abstract here: [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](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)
- 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. [http://pain-management-resource-center.com/?video\\_id=399](http://pain-management-resource-center.com/?video_id=399)
- 02/16 *MDLinx* covers patient satisfaction research conducted by Ian Mackey; Ming-Chih Kao PhD, MD; and Beth Darnall, PhD. [http://www.mdlinx.com/pain-management/conference-abstract.cfm/56466/?conf\\_id=230803&searchstring=&coverage\\_day=0&nonus=0&page=3](http://www.mdlinx.com/pain-management/conference-abstract.cfm/56466/?conf_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**). <http://bit.ly/1WjrkF7>
- 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**) <http://www.drugfree.org/join-together/opioid-taper-program-helps-patients-take-less-medication-without-pain/>
- 03/16 *National Pain Report* discusses the first pain psychology twitter chat #PainPsychChat hosted by @StanfordPain and @BethDarnall. <http://nationalpainreport.com/pain-discussion-brought-to-twitter-8829895.html>
- 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.  
<http://www.care2.com/greenliving/tapering-off-prescription-opioids-7-tips-for-success.html>
- 04/16 *The San Francisco Chronicle* publishes Dr. Darnall's OpEd piece "Treating Pain Requires More Than a Pill".  
<http://www.sfchronicle.com/opinion/openforum/article/Treating-pain-requires-more-than-a-pill-7223395.php?t=4cf03f7ee2&cmpid=twitter-premium>
- 05/16 *Money For Lunch* radio show (**Host: Bert Martinez, Producer: Amy Tripp**). Topic: CDC Opioid Guidelines and how to manage pain without opioids.  
<http://www.blogtalkradio.com/moneyforlunch>
- 05/16 *Pittsburgh Better Times* publishes Dr. Darnall’s bylined article “Pain Psychology: Hitting the Snooze Button on Your ‘Harm Alarm.’”  
<http://www.pittsburghbettertimes.com/pain-psychology-hitting-the-snooze-button-on-your-harm-alarm/>
- 05/16 *Health Greatness* publishes Dr. Darnall’s bylined article “Tapering Off Prescription Opioids: 7 Tips for Success.” <http://healthgreatness.com/tapering-off-prescription-opioids-7-tips-success/>
- 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". <http://www.malibuchronicle.com/2016/05/10/?v=7516fd43adaa>
- 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. [KZvoice@aol.com](mailto:KZvoice@aol.com)
- 05/16 Beth Darnall is featured guest on *KAYT On Point Talk* radio show with **host Carlette Christmas. Melissa Bell, Producer.** Alexandria, LA. [www.onpointcxmas.com](http://www.onpointcxmas.com)

- 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. <http://webtalkradio.net/internet-talk-radio/2016/05/30/middle-age-can-be-your-best-age-reduce-the-painkillers-lower-the-pain/>
- 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 wsvaonline.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.** <http://nationalpainreport.com/reduce-opioids-then-what-8830538.html>
- 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\\_EPAq17jI](https://www.youtube.com/watch?v=Vq_EPAq17jI)
- 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](http://www.radioamerikanow.com), [www.gcnlive.com](http://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. <http://innerself.com/content/living/health/diseases-and-conditions/13063-tapering-off-prescription-opioids-7-tips-for-success.html>
- 07/16 **Dr. Karen Litzy** interviews Beth Darnall, PhD for her popular show **Healthy, Wealthy and Smart.** Beth talks about the mission to help people with chronic pain have less pain and need fewer pills. Podcast here: [apple.co/1pF8kGi](https://apple.co/1pF8kGi) #chronicpain

- 07/16 **Dr. Joe Tatta** hosts Beth Darnall, PhD on *The Healing Pain Podcast*, 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: <http://www.drjoetatta.com/dr-beth-darnall-less-pain-fewer-pills>
- 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: <https://med.stanford.edu/news/all-news/2016/07/surgery-found-to-increase-risk-of-chronic-opioid-use.html> (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." <http://www.psychiatryadvisor.com/interventional-pain-management/pain-psychology-curricula-in-training-and-education/article/514837/> (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. <http://www.painmedicineneeds.com/Primary-Care/Article/08-16/Common-Surgeries-Associated-With-Increased-Risk-for-Chronic-Opioid-Use/37129> (Author: **Mia Garchitoren**).
- 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**). <http://www.dailykos.com/story/2016/8/21/1561313/-The-opioid-epidemic-How-bad-is-it-and-who-does-it-hurt>
- 08/16 *BlogCritics'* **Patricia Gale** interviews Beth Darnall, PhD about her latest book, "The Opioid-Free Pain Relief Kit". <http://blogcritics.org/interview-beth-darnall-phd-author-of-the-opioid-free-pain-relief-kit-10-simple-steps-to-ease-your-pain/>
- 08/16 **Jane Anderson** gives a professional review of "Less Pain, Fewer Pills" in *Bizbooks and Beyond*. <http://bizcatalyst360.com/less-pain-fewer-pills-avoid-the-dangers-of-prescription-opioids-and-gain-control-over-chronic-pain/>
- 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*. <http://www.bloomberg.com/news/articles/2016-08-29/hospitals-try-giving-patients-a-dose-of-vr>



- 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) <http://www.philly.com/philly/health/Helpful-alone-deadly-together-Overdoses-on-combined-prescriptions-plague-white-women.html>
- 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). <http://nymag.com/thecut/2016/08/is-menopause-behind-white-womens-painkiller-addiction.html>
- 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). <https://techvibes.com/2016/08/31/virtual-reality-distract-hospital-patients-from-pain>
- 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) <http://www.orlandosentinel.com/health/addiction-recovery/os-addiction-recovery-overdose-prescriptions-white-women-20160901-story.html>
- 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). <http://nationalpainreport.com/tune-in-to-stanfords-back-pain-day-sunday-8831385.html>
- 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) <http://timesofindia.indiatimes.com/life-style/health-fitness/health-news/Can-virtual-reality-relieve-pain/articleshow/54002725.cms>
- 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). <http://www.healthitoutcomes.com/doc/dropping-virtual-reality-prices-yields-better-opportunities-for-healthcare-0001>
- 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). <http://www.painnewsnetwork.org/stories/2016/9/9/can-3-d-sound-technology-silence-pain>
- 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-pain-management/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). <http://www.clinicalpainadvisor.com/painweek-2016/biopsychosocial-treatment-in-pain-reduction/article/521708/>

- 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**). <http://scopeblog.stanford.edu/2016/09/27/shifting-the-focus-from-opioids-to-life-beyond-pain-a-qa-with-pain-expert-beth-darnall/>
- 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. <https://www.theguardian.com/lifeandstyle/2016/oct/24/period-pain-menstruation-cramps-dysmenorrhea>
- 10/16 "Is Pain in the Brain? A psychologist discusses alternative to opioids" Podcast interview with Stanford University's **Paul Costello**. <http://scopeblog.stanford.edu/2016/10/24/is-pain-in-the-brain-a-pain-psychologist-discusses-alternative-to-opioids/>
- 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". <https://med.stanford.edu/news/all-news/one-to-one/2016/beth-darnall-on-opioid-free-pain-relief.html>
- 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**). <https://med.stanford.edu/news/all-news/2016/09/5-questions-beth-darnall-on-opioids-and-pain-management.html>
- 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**. <https://www.bullpub.com/blog/Beth-Darnall-interviewed-KOMO>
- 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. <http://abc7chicago.com/health/pain-management-clinics-an-alternative-to-opioid-prescriptions/1639320/>

- 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" <http://www.painmedicinews.com/Web-Only/Article/12-16/Beyond-Opioids-Surgeons-Explore-New-Approaches-To-Pain-Control/38917> (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**). <http://drugfree.org/learn/drug-and-alcohol-news/presurgical-program-aims-reduce-pain-opioid-use-surgery/>
- 05/17 *Scientific American Mind* features Beth Darnall's patient care in "Treating Pain Without Pills" May 2017 issue. (author: **Stephani Sutherland, PhD**) <https://www.scientificamerican.com/article/treating-pain-without-pills/>
- 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**). <https://apnews.com/0fd8950a4218412c9c12f18505bc3d96>
- 06/17 Stanford *ScopeBlog* features Beth's explanation of her team's research on sex-differences revealed in the association between opioid prescription, pain catastrophizing and pain intensity. (author: **Jennifer Huber**) <http://scopeblog.stanford.edu/2017/06/15/pain-catastrophizing-linked-to-opioid-use-particularly-for-women-stanford-study-shows/>
- 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" <https://www.sciencedaily.com/releases/2017/06/170615110938.htm>
- 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**). <http://pain-practitioner.aapainmanage.org/doc/american-academy-of-pain-management/the-pain-practitioner---aug17/2017080801/>
- 08/17 *TIME Magazine* publishes "3 Science-backed ways to relieve pain and stress" (authors: **Seppala & Darnall**) <http://time.com/4884052/how-to-relieve-pain-stress/>

- 09/17 *The Washington Post* publishes “Stanford Researchers: The secret to overcoming the opioid crisis may lie partly in the mind.” (authors: Darnall & Seppala) [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)
- 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) <http://nationalpainreport.com/is-the-pain-care-world-set-up-to-really-help-us-8834482.html>
- 10/17 the *National Pain Report* publishes an interview with Beth Darnall “Absolutes in Chronic Pain Can Backfire” (author: Ed Coghlan). <http://nationalpainreport.com/absolutes-in-chronic-pain-treatment-can-backfire-8834562.html>
- 11/17 *Workcompcentral.com* features Beth Darnall in Centering Patients' Psychological State Key to Treating Pain Without Opioids” (author: Emily Brill). <https://www.workcompcentral.com/news/article/id/5e28b5992d3c8b432008e9896e84d439702e2a41>
- 12/17 *The American Pain Society Member Spotlight* features Beth Darnall and her research funding success. <http://americanpainsociety.org/membership/spotlight-darnall-2>

## PERSONAL

Birthplace: Las Cruces, NM;

Race: Caucasian and Native American (Cherokee and Choctaw)