

Adam T. Hirsh, Ph.D.

Curriculum Vitae

October 2023

Indiana University, Indianapolis

Department of Psychology

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ACADEMIC APPOINTMENTS

Professor (with tenure), 2023-present

Associate Professor (with tenure), 2016-2023

Assistant Professor (tenure-track), 2010-2016

Department of Psychology

School of Science

Indiana University, Indianapolis

Indianapolis, IN

LICENSURE

Licensed Psychologist (#20042477A), 2010-present

State of Indiana

EDUCATION

Postdoctoral Fellowship, 2010

Rehabilitation Sciences Training Program

Department of Rehabilitation Medicine

University of Washington, Seattle, WA

Doctor of Philosophy, 2008

Clinical and Health Psychology (APA Accredited)

Area of Concentration: Clinical Health Psychology

University of Florida, Gainesville, FL

Internship, 2008

Clinical Psychology (APA Accredited)

VA Puget Sound Health Care System, Seattle, WA

Master of Science, 2004

Clinical and Health Psychology (APA Accredited)

University of Florida, Gainesville, FL

Bachelor of Arts, 2001

Psychology (Summa Cum Laude)

University of Central Florida, Orlando, FL

HONORS/AWARDS

Fellow, Academy of Behavioral Medicine Research, 2023

Tenured Faculty Research Excellence Award, School of Science, IUPUI, 2021

Outstanding Young Alumnus Award, University of Florida College of Public Health and Health Professions, 2018

John C. Liebeskind Early Career Scholar Award, American Pain Society, 2015

GRANT ACTIVITY

Title: **Music mechanisms and technologies network: Integrative models to address pain through music**

Role: Co-Investigator

Agency: National Center for Complementary and Integrative Health, National Institutes of Health (U24AT012602)

Amount: \$2,421,333

Period: 2023 – 2028

Title: **Music Therapy for Opioid or Stimulant Use Disorder (OSUD) Phase 2**

Role: Principal Investigator (Co-PI: Burns)

Agency: Indiana Family and Social Services Administration, Division of Mental Health and Addictions

Amount: \$346,157

Period: 2023 – 2024

Title: **Music Therapy for Opioid or Stimulant Use Disorder (OSUD) Phase 1**

Role: Principal Investigator (Co-PI: Burns)

Agency: Indiana Family and Social Services Administration, Division of Mental Health and Addictions

Amount: \$103,284

Period: 2023 – 2024

Title: **Assessing real-world evidence of the effects of opioid analgesic tapering on substance-related problems**

Role: Co-Investigator

Agency: National Institute of Drug Abuse, National Institutes of Health (R01DA059026)

Amount: \$1,072,077

Period: 2023 – 2026

Title: **Assessments of opioid-related risk in diverse patients with chronic pain: Race and gender disparities**

Role: Primary Mentor (mentee: Alexis Grant)

Agency: American Psychological Association, Division 38 (Graduate Student Research Grant)

Amount: \$2,000

Period: 2023 – 2024

Title: **Equity using interventions for pain and depression (EQUIPD)**

Role: Co-Investigator

Agency: National Institute of Nursing Research, National Institutes of Health (R61NR020845)

Amount: \$3,843,972

Period: 2022 – 2027

Title: **Options for pain management using nonpharmacological strategies (OPTIONS)**

Role: Co-Investigator

Agency: VA Health Services Research and Development (SDR 21-012)

Amount: \$1,199,971

Period: 2022 – 2026

Title: **Race and gender disparities in provider judgements of opioid-related risk in chronic pain**

Role: Primary Mentor (mentee: Alexis Grant)

Agency: Society for Addiction Psychology, American Psychological Association

Amount: \$1,000

Period: 2022 – 2023

Title: **Predictive modeling for social needs in emergency department settings**

Role: Co-Investigator

Agency: Agency for Healthcare Research and Quality (R01HS028008)

Amount: \$1,967,217

Period: 2021 – 2026

Title: **Erosive Tooth Wear perception among network dentists and patients, and experience among network patients**

Role: Co-Investigator
Agency: National Institute of Dental & Craniofacial Research, National Institutes of Health (UG3DE030087)
Amount: \$282,510
Period: 2021 – 2022

Title: **Reducing disparities in nonpharmacological pain treatments**
Role: Co-Investigator
Agency: Regenstrief Institute
Amount: \$20,000
Period: 2021 – 2022

Title: **Investigating how institutional and provider racism contribute to pain treatment disparities in adults with sickle cell disease**
Role: Mentor / Co-Investigator
Agency: American Psychological Foundation (Visionary Fund Grant)
Amount: 19,250
Period: 2021 – 2022

Title: **Developing an intervention to improve the delivery of targeted health messages about HIV prevention to Black Americans**
Role: Primary Mentor (mentee: Veronica Derricks)
Agency: Indiana Clinical and Translational Sciences Institute (KL2 Program, UL1TR002529)
Amount: \$174,029
Period: 2021 – 2024

Title: **Empowering Black patients with chronic pain to effectively engage in treatment decision-making**
Role: Principal Investigator
Agency: OVCR Research Support Grant Funds (RSFG)
Amount: \$34,850
Period: 2021 – 2022

Title: **Enhanced Mentoring Program with Opportunities for Ways to Excel in Research (EMPOWER)**
Role: Principal Investigator / Mentor (mentee: Veronica Derricks)
Agency: IUPUI Office of the Vice Chancellor for Research
Amount: \$2,000
Period: 2021 – 2022

Title: **"Their pain is not our pain": Unravelling how caregiver attention to pain and perspective taking contribute to racial disparities in child pain care**
Role: Co-Investigator
Agency: Research Foundation – Flanders (FWO)
Amount: €533,786
Period: 2021 – 2024

Title: **GET PrEPD: Goal Elicitation, Treatment Prioritization, & Electronically-Practiced Discussion**
Role: Principal Investigator
Agency: Racial Justice Research Fund of Indiana (AID2396)
Amount: \$15,776
Period: 2020 – 2021

Title: **Impact of Race-Related Injustice Appraisals on Morbidity in Youth with Sickle Cell Disease**
Role: Co-Investigator
Agency: Racial Justice Research Fund of Indiana
Amount: \$14,943

Period: 2020 – 2021

Title: **Examination of mechanisms contributing to impact of insomnia on chronic pain risk and outcomes in pediatric patients**

Role: Co-Investigator

Agency: Indiana Clinical and Translational Sciences Institute (UL1TR002529)

Amount: \$11,366

Period: 2020 – 2022

Title: **Exploring pain management decision making among anesthesia providers**

Role: Co-Investigator / Mentor

Agency: The University of Alabama at Birmingham (UAB)

Amount: \$8,100

Period: 2020 – 2021

Title: **Unravelling how perspective-taking and associated verbal and non-verbal caregiver behaviours contribute to racial disparities in child pain care**

Role: Co-Investigator

Agency: Bijzonder Onderzoeksfonds (BOF) – Special Research Fund of the Flemish Government

Amount: €200,000

Period: 2019 – 2023

Title: **Acceptance and Commitment Therapy for fatigue interference in metastatic breast cancer**

Role: Co-Investigator

Agency: National Cancer Institute, National Institutes of Health (R01CA230542)

Amount: \$1,661,702

Period: 2019 – 2023

Title: **Examining the effects of contextually-imposed cognitive load on providers' chronic pain treatment decisions for racially and socioeconomically diverse patients**

Role: Primary Sponsor (student PI: Anastas)

Agency: National Institute on Minority Health and Health Disparities, National Institutes of Health (F31MD014058)

Amount: \$86,866

Period: 2019 – 2021

Title: **GET PrEPD for Psychiatry: Goal elicitation, treatment prioritization, & electronically-practiced discussion for psychiatric care**

Role: Principal Investigator (Co-PI: Salyers)

Agency: National Institute of Mental Health, National Institutes of Health (R34MH118314)

Amount: \$696,275

Period: 2018 – 2023

Title: **Communication and activation in pain to enhance relationships and treat pain with equity (COOPERATE)**

Role: Co-Investigator

Agency: VA Health Services Research and Development (IIR17-032)

Amount: \$1,100,000

Period: 2018 – 2022

Title: **Virtual perspective-taking to reduce race and SES disparities in pain care**

Role: Principal Investigator

Agency: National Institute on Minority Health and Health Disparities, National Institutes of Health (3R01MD008931-05S1; administrative supplement to parent project R01MD008931)

Amount: \$100,000
Period: 2018 – 2020

Title: **Virtual perspective-taking to reduce race and SES disparities in pain care**
Role: Principal Investigator
Agency: National Institute on Minority Health and Health Disparities, National Institutes of Health (R01MD008931)

Amount: \$1,839,221
Period: 2014 – 2020

Title: **Acceptance and Commitment Therapy for symptom interference in metastatic breast cancer patients**

Role: Co-Investigator
Agency: Walther Cancer Foundation

Amount: \$150,000
Period: 2016 – 2019

Title: **Bringing pediatric pain management into the 21st century: Using learning health systems to engage patients and families in individualized pain assessment and treatment**

Role: Principal Investigator
Agency: Purdue Research Foundation (International Travel Grant)

Amount: \$830
Period: 2019

Title: **Development of a website tool for the evaluation of Erosive Tooth Wear perception among dentists and patients**

Role: Co-Investigator
Agency: GlaxoSmithKline (GSK Investigator-Sponsored Studies Programme)

Amount: \$250,834
Period: 2017 – 2019

Title: **On the pains of social standing: Understanding the role of patient social status on nurses' pain assessment and management practices**

Role: Consultant
Agency: Fundação para a Ciência e Tecnologia (FCT-Portugal) (PTDC/MHC-PSC/2041/2014)

Amount: €145,704
Period: 2016 – 2019

Title: **Race differences in the land of Lake Wobegon**

Role: Principal Investigator
Agency: Purdue Research Foundation (International Travel Grant)

Amount: \$1,115
Period: 2016

Title: **Symptom priorities of African-American chronic pain patients in primary care settings**

Role: Co-Investigator
Agency: IUPUI Department of Psychology

Amount: \$10,000
Period: 2015 – 2016

Title: **Examining the influence of Hispanic ethnicity and ethnic bias on providers' pain decisions**

Role: Primary Sponsor (student PI: Hollingshead)
Agency: American Psychological Association, Division 38 (Graduate Student Research Grant)

Amount: \$1,500
Period: 2015 – 2016

- Title:* **Perceptions of symptom importance and interference in metastatic breast cancer patients: Preparation for intervention development**
- Role:* Co-Investigator
- Agency:* Walther Cancer Foundation
- Amount:* \$50,000
- Period:* 2015 – 2016
- Title:* **The influence of patient race, provider bias, and contextual ambiguity on opioid treatment decisions**
- Role:* Principal Investigator
- Agency:* American Pain Society (Future Leaders in Pain Research Grant)
- Amount:* \$20,000
- Period:* 2013 – 2014
- Title:* **The influence of patient race, provider racial bias, and clinical ambiguity on opioid treatment decisions**
- Role:* Principal Investigator
- Agency:* Purdue Research Foundation
- Amount:* \$10,000
- Period:* 2013
- Title:* **Pain treatment decisions: Influence of sex, race, and age**
- Role:* Co-Investigator
- Agency:* National Institute of Dental and Craniofacial Research, National Institutes of Health (R01DE013208)
- Amount:* \$1,046,327
- Period:* 2009 – 2012
- Title:* **Provider decision-making for the management of comorbid chronic pain and depression: A novel Virtual Human technology investigation**
- Role:* Principal Investigator
- Agency:* Indiana University (Collaborative Research Grant)
- Amount:* \$51,675
- Period:* 2011 – 2012
- Title:* **Influence of patient sex, race, and disability diagnosis on provider decision-making for pain**
- Role:* Principal Investigator
- Agency:* Indiana University – Purdue University Indianapolis
- Amount:* \$10,000
- Period:* 2011 – 2012
- Title:* **Enhancement of clinical health psychology professions via training in non self-report methods of data collection**
- Role:* Co-Investigator
- Agency:* U.S. Department of Health and Human Services, Health Resources and Services Administration (D76HP20905)
- Amount:* \$56,003
- Period:* 2010 – 2011
- Title:* **Research training in medical rehabilitation**
- Role:* Postdoctoral Fellow
- Agency:* National Center for Medical Rehabilitation Research, National Institutes of Health (T32HD007424)
- Amount:* Annual stipend, travel and support expenses
- Period:* 2008 – 2010
- Title:* **Pain treatment decisions: Influence of sex, race, and age**
- Role:* Consultant

Agency: National Institute of Dental and Craniofacial Research, National Institutes of Health (R56DE013208)
Amount: \$323,454
Period: 2008 – 2009

Title: **Pain assessment and clinical decision making**

Role: Principal Investigator

Agency: National Institute of Neurological Disorders and Stroke, National Institutes of Health (F31NS049675)

Amount: \$85,992

Period: 2004 – 2007

PEER-REVIEWED PUBLICATIONS (* indicates student/mentee)

- Matthias, M.S., Bolla, A.L., Bair, S.M., Adams, J., Eliacin, J., Burgess, D.J., & **Hirsh, A.T.** (in press). Communication and activation in pain to enhance relationships and treat pain with equity (COOPERATE): A qualitative analysis of a tailored coaching program for Black patients with chronic pain. *Journal of General Internal Medicine*.
- Matthias, M.S., Daggy, J.K., Perkins, A.J., Adams, J., Bair, M.J., Burgess, D.J., Eliacin, J., Flores, P., Myers, L.J., Menen, T., *Procento, P., Rand, K.L., Salyers, M.P., Shanahan, M.L., & **Hirsh, A.T.** (in press). Communication and activation in pain to enhance relationships and treat pain with equity (COOPERATE): A randomized clinical trial. *Pain*.
- Rogers, S.K., Galloway, A., **Hirsh, A.T.**, Zapolski, T., Chen, C.X., & Rand, K.L. (in press). Efficacy of psychological interventions for dysmenorrhea: A meta-analysis. *Pain Medicine*.
- *Lynch Milder, M.K., Bazier, A., Ward, S., Rand, K.L., & **Hirsh, A.T.** (in press). Resilience, social support, and health in emerging adults with and without chronic health conditions. *Emerging Adulthood*.
- *Anastas, T.M., Stewart, J.C., Rand, K.L., & **Hirsh, A.T.** (in press). Pain in people experiencing homelessness: A scoping review. *Annals of Behavioral Medicine*.
- *Mehok, L.E., Meints, S.M., Miller, M.M., Ashburn-Nardo, L., & **Hirsh, A.T.** (2023). Beliefs about race differences in pain vs. actual race differences in pain: An experimental investigation. *Journal of Health Disparities Research and Practice*, 16, Article 1.
- Polanka, B.M., Gupta, S.K., So-Armah, K.A., Freiberg, M.S., Zapolski, T.C.B., **Hirsh, A.T.**, & Stewart, J.C. (2023). Examining depression as a risk factor for cardiovascular disease in people with HIV: A systematic review. *Annals of Behavioral Medicine*, 57, 1-25.
- Ashton-James, C.E., Anderson, S.R., & **Hirsh, A.T.** (2023). Understanding the contribution of racially and ethnically discordant interactions to pain disparities: Proximal mechanisms and potential solutions. *Pain*, 164, 223-229.
- *Lynch Milder, M.K., McQuillan, M.E., Honaker, S.M., Miller, M.M., Tolley, J., Michel, M.A., **Hirsh, A.T.**, & Williams, A.E. (2022). Concurrent and longitudinal associations among insomnia symptoms, internalizing problems, and chronic pain in youth. *Health Psychology*, 42, 15-23.
- *Mulchan, S.S., Miller, M.M., Theriault, C.B., Zempsky, W.T., & **Hirsh, A.T.** (2022). A systematic approach to developing virtual patient vignettes for pediatric health equity research. *Health Equity*, 6, 862-872.
- Matthias, M.S., Adams, J., Burgess, D., Daggy, J., Eliacin, J., Flores, P., **Hirsh, A.T.**, Myers, L.J., Perkins, A.J., Menen, T., *Procento, P., Rand, K., Salyers, M.P., Shanahan, M., & Bair, M.J. (2022). Communication and activation in pain to enhance relationships and treat pain with equity (COOPERATE): Rationale, study design, methods, and sample characteristics. *Contemporary Clinical Trials*, 118, 106790.
- Matthias, M.S., **Hirsh, A.T.**, Ofner, S., & Daggy, J. (2022). Exploring the relationships among social support, patient activation, and pain-related outcomes. *Pain Medicine*, 23, 676-685.
- Baert, F., Van Ryckeghem, D.M.L., Sanchez-Lopez, A., *Miller, M.M., **Hirsh, A.T.**, Trost, Z., & Vervoort, T. (2022). The impact of maternal child- and self-oriented pain-related injustice appraisals upon maternal attention to child pain, attention to anger, and pain-attending behavior. *British Journal of Pain*, 16, 303-316.
- Harvie, D.S., Smith, R.T., Martin, D., **Hirsh, A.T.**, & Trost, Z. (2022). Novel applications of virtual and mixed reality in pain research and treatment. *Frontiers in Virtual Reality*, 3, 1-3.
- *Milder, M.K., *Miller, M.M., Williams, A.E., Michel, M.A., Tolley, J., Scott, E.L., & **Hirsh, A.T.** (2022). Cross-sectional associations among components of injustice appraisals and functioning in adolescents with chronic pain. *Journal of Pediatric Psychology*, 47, 99-110.
- *Miller, M.M., Williams, A.E., Scott, E.L., Trost, Z. & **Hirsh, A.T.** (2022). Battle of the appraisals: Pain-related injustice versus catastrophizing as mediators in the relationship between pain intensity and 3-month outcomes in adolescents with chronic pain. *The Journal of Pain*, 23, 223-235.

- *Miller, M.M., Williams, A.E., Scott, E.L., Trost, Z. & **Hirsh, A.T.** (2022). Anger as a mechanism of injustice appraisals in pediatric chronic pain. *The Journal of Pain*, 3, 212-222.
- *Grant, A.D., *Miller, M.M., *Anastas, T.M., Quinn, P., Lok, B., & **Hirsh, A.T.** (2022). Opioid-related risk perceptions in chronic pain: influence of patient gender and prior misuse behaviors. *Pain*, 163, 711-718.
- *Hollingshead, N.A., Vransy, E., Hsueh, L., Stewart, J.C., & **Hirsh, A.T.** (2022). Language use and generation status are associated with chronic pain differences in Mexican Americans. *Journal of Immigrant and Minority Health*, 24, 342-350.
- Kissi, A., Van Ryckeghem, D.M.L., Mende-Siedlecki, P., **Hirsh, A.T.**, & Vervoort, T. (2022). Racial disparities in observers' attention to and estimations of others' pain. *Pain*, 163, 745-752.
- Secinti, E., Wu, W., Krueger, E.F., **Hirsh, A.T.**, Torke, A.M., Hanna, N.H., Adra, N., Durm, G.A., Einhorn, L., Pili, R., Jalal, S.I., & Mosher, C.E. (2022). Relations of perceived injustice to psycho-spiritual outcomes in advanced lung and prostate cancer: Examining the role of acceptance and meaning making. *Psychooncology*, 31, 2177-2184.
- *Procento, P.M., Rand, K.L., Stewart, J.C., & **Hirsh, A.T.** (2021). Pain catastrophizing mediates and moderates the link between acute pain and working memory. *The Journal of Pain*, 22, 981-995.
- Hsueh, L., **Hirsh, A.T.**, Zapolski, T., de Groot, M., Mather, K.J., & Stewart, J.C. (2021). Influence of patient immigrant status on physician trainee diabetes treatment decisions: A virtual patient experimental study. *Journal of Behavioral Medicine*, 44, 662-672.
- Polanka, B.M., Kundu, S., So-Armah, K.A., Freiberg, M.S., Gupta, S.K., Zapolski, T.C.B., **Hirsh, A.T.**, Bedimo, R.J., Budoff, M.J., Butt, A.A., Chang, C.H., Gottlieb, S.S., Marconi, V.C., Womack, J.A., & Stewart, J.C. (2021). Insomnia symptoms and biomarkers of monocyte activation, systemic inflammation, and coagulation in HIV: Veterans Aging Cohort Study. *PLOS ONE*, 16, e0246073.
- *Miller, M.M., Rumble, D.D., **Hirsh, A.T.**, Vervoort, T., Crosby, L.E., Madan-Swain, A., Lebensburger, J., Hood, A.M., & Trost, Z. (2021). Pain-related injustice appraisals in youth with sickle cell disease: A preliminary investigation. *Pain Medicine*, 22, 2207-2217.
- Daenen, F., McParland, J., Baert, F., *Miller, M.M., **Hirsh, A.T.**, & Vervoort, T. (2021). Child pain-related injustice appraisals mediate the relationship between just-world beliefs and pain-related functioning. *European Journal of Pain*, 25, 757-773.
- Hsueh, L., **Hirsh, A.**, Maupome, G., & Stewart, J.C. (2021). Patient-provider language concordance and health outcomes: A systematic review, evidence map, and research agenda. *Medical Care Research and Review*, 78, 3-23.
- Shell, A.L., Jackson, R.A., Patel, J.S., **Hirsh, A.T.**, Cyders, M.A., & Stewart, J.C. (2021). Associations of somatic depressive symptoms with food attentional bias and eating behaviors. *Appetite*, 167(105593).
- Baert, F., McParland, J., *Miller, M.M., **Hirsh, A.T.**, Wallace, E., Dickson, A., Trost, Z., & Vervoort, T. (2020). Mothers' appraisals of injustice in the context of their child's chronic pain: An Interpretative Phenomenological Analysis. *European Journal of Pain*, 24, 1932-1945.
- Mosher, C.E., Krueger, E., **Hirsh, A.T.**, Miller, K.D., Ballinger, T.J., Storniolo, A.M., Schneider, B.P., Newton, E.V., Champion, V.L., & Johns, S.A. (2020). Protocol of a randomized trial of Acceptance and Commitment Therapy for fatigue interference in metastatic breast cancer. *Contemporary Clinical Trials*, 98, 106168.
- Chinh, K., Secinti, E., Johns, S., **Hirsh, A.T.**, Miller, K., Schneider, B., Storniolo, A., Mina, L., Newton, E.V., Champion, V., & Mosher, C.E. (2020). Relations of mindfulness and illness acceptance to psychosocial functioning in metastatic breast cancer patients and their family caregivers. *Oncology Nursing Forum*, 47, 739-752.
- Hirsh, A.T.**, *Anastas, T.M., *Miller, M.M., Quinn, P.D., & Kroenke, K. (2020). Patient race and opioid misuse history influence provider risk perceptions for future opioid-related problems. *American Psychologist*, 75, 784-795.
- *Anastas, T.M., *Miller, M.M., *Hollingshead, N.A., Stewart, J.C., Rand, K.L., & **Hirsh, A.T.** (2020). The unique and interactive effects of patient race, patient socioeconomic status, and provider attitudes on chronic pain care decisions. *Annals of Behavioral Medicine*, 54, 771-782.
- *Miller, M.M., *Lynch, M.K., **Hirsh, A.T.**, & Williams, A.E. (2020). "It all seems so unfair": Pain-related injustice appraisals in youth with chronic pain and their caregivers. *Pediatric Pain Letter*, 22, 28-32.
- Karos, K., McParland, J.L., Bunzil, S., Devan, H., **Hirsh, A.T.**, Kapos, F.P., Keogh, E., Moore, D., Tracy, L.M., & Ashton-James, C.E. (2020). The social threats of COVID-19 for people with chronic pain. *Pain*, 161, 2229-2235.
- *Grant, A.D., *Miller, M.M., *Hollingshead, N.H., *Anastas, T.M., & **Hirsh, A.T.** (2020). Intergroup anxiety in pain care: Impact on treatment recommendations made by White providers for Black patients. *Pain*, 161, 1264-1269.
- *Miller, M.M., Williams, A.E., Zapolski, T.C.B., Rand, K.L., & **Hirsh, A.T.** (2020). Assessment and treatment recommendations for pediatric pain: The influence of patient race, patient gender, and provider pain-related attitudes. *The Journal of Pain*, 21, 225-237.

- Baert, F., *Miller, M.M., Trost, Z., **Hirsh, A.T.**, McParland, J., De Schryver, M., & Vervoort, T. (2020). Parental injustice appraisals in the context of child pain: Examining the construct and criterion validity of the IEQ-Pc and IEQ-Ps. *The Journal of Pain, 21*, 195-211.
- Fischer, I.C., Shanahan, M.L., **Hirsh, A.T.**, Stewart, J.C., & Rand, K.L. (2020). The relationship between meaning in life and post-traumatic stress symptoms in US military personnel: A meta-analysis. *Journal of Affective Disorders, 277*, 658-670.
- Fischer, I.C., Feldman, D.B., **Hirsh, A.T.**, Stewart, J.C., & Rand, K.L. (2020). Psychological well-being and search for meaning: The moderating roles of hope, optimism, and the presence of meaning. *International Journal of Existential Positive Psychology, 8*, 1-12.
- *Goldfarb, M.B., Maupomé, G. **Hirsh, A.T.**, Carvalho, J.C., Eckert, G.J., & Hara, A.T. (2020). Dentists clinical decision-making for erosive tooth wear: An online pilot study. *Journal of Dentistry, 100*, 103424.
- Hsueh, L., Wu, W., **Hirsh, A.T.**, de Groot, M., Mather, K.J., & Stewart, J.C. (2020). Undiagnosed diabetes among immigrant and racial/ethnic minority adults in the U.S.: National Health and Nutrition Examination Survey 2011-2018. *Annals of Epidemiology, 15*, 14-19.
- *Goldfarb, M.B., Hara, A.T., **Hirsh, A.T.**, Carvalho, J.C., & Maupomé, G. (2020). Are dental patients able to perceive erosive tooth wear on anterior teeth? An internet-based survey assessing awareness and related action. *Journal of the American Dental Association, 151*, 10-15.
- Shanahan, M.L., Fischer, I.C., **Hirsh, A.T.**, Stewart, J.C., & Rand, K.L. (2019). Hope, optimism, and clinical pain: A meta-analysis. *Annals of Behavioral Medicine, 55*, 815-832.
- Hirsh, A.T.**, *Miller, M.M., *Hollingshead, N.A., *Anastas, T., Carnell, S.T., Lok, B.C., Chu, C., Zhang, Y., Robinson, M.E., Kroenke, K., & Ashburn-Nardo, L. (2019). A randomized controlled trial testing a virtual perspective-taking intervention to reduce race and SES disparities in pain care. *Pain, 160*, 2229-2240.
- *Mehok, L.E., *Miller, M.M., Trost, Z., Goubert, L., De Ruddere, L., & **Hirsh, A.T.** (2019). Pain intensity and attribution mediate the impact of patient weight and gender on activity recommendations for chronic pain. *Journal of Pain Research, 12*, 2743-2753.
- Mosher, C.E., Secinti, E., **Hirsh, A.T.**, Hanna, N., Einhorn, L.H., Jalal, S.I., Durm, G., Champion, V.L., & Johns, S.A. (2019). Acceptance and Commitment Therapy for symptom interference in advanced lung cancer and caregiver distress: A pilot randomized trial. *Journal of Pain and Symptom Management, 58*, 632-644.
- *Anastas, T.M., *Meints, S.M., Gleckman, A.D., & **Hirsh, A.T.** (2019). Social influences on peer judgements about chronic pain and disability. *The Journal of Pain, 20*, 698-705.
- Hsueh, L., Peña, J.M., **Hirsh, A.T.**, de Groot, M., & Stewart, J.C. (2019). Diabetes risk perception among immigrant and racial/ethnic minority groups in the U.S. *The Diabetes Educator, 45*, 642-651.
- Tometich, D.B., Mosher, C.E., **Hirsh, A.T.**, Rand, K.L., Johns, S.A., Matthias, M.S., Outcalt, S.D., Schneider, B.P., Mina, L., Storniolo, A.V., Newton, E.V., & Miller, K.D. (2018). Metastatic breast cancer patients' expectations and priorities for symptom improvement. *Supportive Care in Cancer, 26*, 3781-3788.
- *Miller, M.M., *Meints, S.M., & **Hirsh, A.T.** (2018). Catastrophizing, pain, and functional outcomes for children with chronic pain: a meta-analytic review. *Pain, 159*, 2442-2460.
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- *Miller, M.M., *Wuest, D., Williams, A.E., Scott, E.L., Trost, Z., & **Hirsh, A.T.** (2018). Injustice perceptions about pain: parent-child discordance is associated with worse functional outcomes. *Pain, 159*, 1083-1089.
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BOOK CHAPTERS

- Price, D.D., **Hirsh, A.T.**, & Robinson, M.E. (2008). Psychological modulation of pain. In M.C. Bushnell, & A.I. Basbaum (Eds.), *The Senses: A Comprehensive Reference* (pp. 975-1002). The Netherlands: Elsevier.

PRESENTATIONS (POSTER AND PAPER) AT PROFESSIONAL MEETINGS

- Tracy, C., Milder, M., Vater, L., Lagges, A., Lemanek, K., Wrona, S., Gilbert, E., **Hirsh, A.**, Miller, M., & Williams, A. (2023, October). *Psychosocial experience of pediatric chronic pain in transgender and gender diverse youth*. Poster presented at the International Symposium on Pediatric Pain, Halifax, Nova Scotia.
- Shell, A., Crawford, C., Cyders, M., **Hirsh, A.**, & Stewart, J. (2023, August). *Depressive disorder subtypes, depressive symptom clusters, and risk of obesity and diabetes: a systematic review and research agenda*. Poster presented at the 9th annual Indiana University School of Medicine Center for Diabetes and Metabolic Diseases Symposium, Indianapolis, IN.
- *Grant, A., Miller, M., Anastas, T., & **Hirsh, A.** (2023, May). *Healthcare provider beliefs about race differences in pain*. Poster presented at the annual meeting of the Canadian Pain Society, Banff, AB, Canada.
- *Bogdan, K., Miller, M., Anastas, T., Williams, A., & **Hirsh, A.** (2023, May). *Pain is in the eye of the beholder: Race and gender disparities in observer gaze patterns and pain judgments for pediatric abdominal pain*. Poster presented at the annual meeting of the Canadian Pain Society, Banff, AB, Canada.

- *Rose-McCandlish, M., Anastas, T., Miller, M., & **Hirsh, A.** (2023, May). *Bias in pain care: What factors do providers report as influencing their treatment decisions?* Poster presented at the annual meeting of the Canadian Pain Society, Banff, AB, Canada.
- Matthias, M., Daggy, J., Bair, M., Burgess, D., Eliacin, J., Rand, K., Myers, L., Salyers, M., & **Hirsh, A.** (2023, May). *Communication and activation in pain to enhance relationships and treat pain with equity (COOPERATE): A randomized clinical trial.* Oral presentation at the annual meeting of the Society of General Internal Medicine, Aurora, Colorado.
- *Anastas, T., Wu, W., Burgess, D., Salyers, M., Stewart, J., Kroenke, K., & **Hirsh, A.** (2023, April). *Patient race and socioeconomic status interact with provider cognitive load to affect chronic pain treatment decisions.* Poster presented at the annual conference of the US Association for the Study of Pain, Durham, NC.
- *Mulchan, S., Theriault, C., DiVietro, S., Zempsky, W., Sukhera, J., & **Hirsh, A.** (2023, March). *Developing a provider-focused intervention to address implicit bias in pediatric sickle cell pain care.* Poster presented at the Annual Meeting of the Society of Pediatric Psychology, Chicago, IL.
- *Milder, M., *Bazier, A., *Ward, S., Rand, K., & **Hirsh, A.** (2023, March) *Resilience, social support, and health in emerging adults with and without chronic health conditions.* Poster presented at the Annual Meeting of the Society of Pediatric Psychology, Chicago, IL.
- *Ward, S., **Hirsh, A.**, & *Milder, M. (2023, March). *Illness intrusiveness, illness cognitions, and psychological health in emerging adults with chronic health conditions.* Poster presented at the Annual Meeting of the Society of Pediatric Psychology, Chicago, IL.
- Williams, M., Crawford, C., Zapolski, T., **Hirsh, A.**, & Stewart, J.C. (2023, March). *Longer-term mental health consequences of COVID-19 infection: Moderation by race and socioeconomic status.* Oral presentation at the Annual Meeting of the American Psychosomatic Society, San Juan, Puerto Rico.
- Matthias, M., Burgess, D., Daggy, J., Perkins, A., Eliacin, J., **Hirsh, A.**, Rand, K., Salyers, M., Myers, L., & Bair, M. (2023, February). *Communication and activation in pain to enhance relationships and treat pain with equity: Results from the COOPERATE trial.* Oral presentation at the VA HSR&D/QUERI National Meeting, Baltimore, MD.
- *Derrick, V., Matthias, M., & **Hirsh, A.** (2022, September). *Developing an intervention to improve clinicians' delivery of targeted HIV prevention communication to Black adults.* Poster presented at the Indiana Clinical and Translational Sciences Institute (CTSI) Annual Meeting, Indianapolis, IN.
- *Grant, A., Stewart, J., Rand, K., & **Hirsh, A.** (2022, September). *Chronic pain self-management in rural populations: A scoping review.* Poster presented at the World Congress on Pain, Toronto, Canada.
- *Bogdan, K., *Carson, I., *Miller, M., & **Hirsh, A.** (2022, September). *"It's not that bad": Qualitative results from a mixed-methods study on pain-related invalidation.* Poster presented at the World Congress on Pain, Toronto, Canada.
- *Mulchan, S., Theriault, C., DiVietro, S., Zempsky, W., & **Hirsh, A.** (2022, June). *Using virtual patients to assess provider implicit bias in pediatric sickle cell disease.* Poster presented at the 45th Annual Sickle Cell Disease Scientific Meeting, Fort Lauderdale, FL.
- *Anastas, T., *Miller, M., Quinn, P., Wu, W., Kroenke, L., Lok, B., & **Hirsh, A.** (2022, May). *The impact of patient race and prior misuse behaviors on opioid tapering decisions.* Poster and oral presentation at the annual conference of the US Association for the Study of Pain, Cincinnati, OH.
- *Miller, M., *Bogdan, K., & **Hirsh, A.** (2022, May). *(In)validation by healthcare providers: How the past informs the present.* Poster and oral presentation at the annual conference of the US Association for the Study of Pain, Cincinnati, OH.
- *Lynch Milder, M., McQuillan, M., **Hirsh, A.**, Honaker, S., & Williams, A. (2021, April). *Longitudinal study of adolescent sleep problems and chronic pain during treatment in a multidisciplinary pediatric pain clinic.* Poster presentation at the Annual Meeting of the Society of Pediatric Psychology. Conference converted to online format due to COVID-19. [poster award winner]
- *Miller, M., Rumble, D, **Hirsh, A.**, Vervoort, T., Crosby, L., Madan-Swain, A., Lebensburger, J., Hood, A., Kissi, A., & Trost, Z. (2021, April). *Pain-related injustice appraisals and perceptions of health-related stigma and racial bias in youth with sickle cell disease.* Poster presentation at the Annual Meeting of the Society of Pediatric Psychology. Conference converted to online format due to COVID-19. [poster award winner]
- *Miller, M., & **Hirsh, A.** (2020, May). *Pediatric Pain: A new frontier for using virtual patient technology to assess provider decision making.* Accepted as an oral and poster presentation at Annual Meeting of the Canadian Pain Society, Calgary, AB. Conference cancelled due to COVID-19.

- *Mehok, L., *Walsh, K., *Miller, M., & **Hirsh, A.** (2020, April). *Exercise and dietary recommendations for women with chronic pain: What's weight and race got to do with it?* Accepted as an oral and poster presentation at the Annual Meeting of the Society of Behavioral Medicine. Conference cancelled due to COVID-19. [meritorious abstract winner]
- *Lynch, M., *Miller, M., Scott, E., Honaker, S., **Hirsh, A.**, Tolley, J., & Williams, A. (2020, March). *Relations between severity of pain and poor sleep in youth presenting to a pediatric chronic pain clinic.* Accepted as a poster presentation at the Annual Meeting of the Society of Pediatric Psychology. Conference converted to online format due to COVID-19.
- *Procento, P., & **Hirsh, A.** (2020, March). *Pain and working memory deficits: the mediating and moderating role of pain catastrophizing.* Accepted as a poster presentation at the Annual Meeting of the American Psychosomatic Society, Long Beach, CA. Conference cancelled due to COVID-19.
- *Anastas, T., *Miller, M., Quinn, P., Kroenke, K., Carnell, S., Lok, B., & **Hirsh, A.** (2020, March). *Patient race and opioid misuse behaviors influence provider risk perceptions in chronic pain care.* Accepted as a poster presentation at the Annual Meeting of the American Psychosomatic Society, Long Beach, CA. Conference cancelled due to COVID-19.
- *Miller, M.M., Carnell, S., Lok, B., Williams, A.E., & **Hirsh, A.T.** (2020, March). *REM strategies for pediatric opioid use: Providers are more likely to require urine drug screening for boys than girls with chronic pain.* Accepted as a poster presentation at the Annual Meeting of the American Psychosomatic Society, Long Beach, CA. Conference cancelled due to COVID-19.
- *Grant, A., *Anastas, T., *Miller, M., Quinn, P., Kroenke, K., & **Hirsh, A.** (2020, March). *Opioid-related risk perceptions in chronic pain: influence of patient gender and misuse behaviors.* Accepted as a poster presentation at the Annual Meeting of the American Psychosomatic Society, Long Beach, CA. Conference cancelled due to COVID-19.
- Hsueh, L., **Hirsh, A.T.**, Zapolski, T.C.B., de Groot, M., Mather, K.J., & Stewart, J.C. (2020, March). *Influence of patient immigrant status on provider diabetes treatment decisions.* Accepted as an oral presentation at the Annual Meeting of the American Psychosomatic Society, Long Beach, CA. Conference cancelled due to COVID-19.
- Shell, A., Jackson, R., Patel, J., **Hirsh, A.T.**, Cyders, M., & Stewart, J. (2020, March). *Associations of somatic depressive symptoms with food attentional bias and eating behaviors.* Accepted as a poster presentation at the Annual Meeting of the American Psychosomatic Society, Long Beach, CA. Conference cancelled due to COVID-19.
- *Miller, M.M., Williams, A.E., Scott, E.L., Trost, Z., & **Hirsh, A.T.** (2019, June). *The mediating role of anger in the relationship between pain-related injustice appraisals and pain outcomes in pediatric chronic pain.* Poster presentation at the International Symposium on Pediatric Pain, Basel, Switzerland.
- *Goldfarb, M.B., Maupomé, G., **Hirsh, A.T.**, Carvalho, J.C., Eckert, G., & Hara A.T. (2019, June). *Erosive tooth wear (ETW) perception among U.S. dentists: A pilot study.* Poster presentation at the Annual Meeting of the International Association of Dental Research, Vancouver, BC, Canada.
- *Goldfarb, M.B., Hara A.T., **Hirsh, A.T.**, Carvalho, J.C., Eckert, G., & Maupomé, G. (2019, June). *Patient perceptions of erosive tooth wear (ETW).* Poster presentation at the Oral Epidemiology Forum, Satellite Symposium of the Annual Meeting of the International Association of Dental Research, Vancouver, BC, Canada.
- *Grant, A., *Anastas, T., *Miller, M., *Hollingshead, N., & **Hirsh, A.** (2019, April). *Effects of patient and provider race and socioeconomic status on pain treatment decisions and decision-making awareness.* Poster presentation at the Annual Meeting of the American Pain Society, Milwaukee, WI.
- *Mehok, L., *Meints, S., *Miller, M., *Kimberly, E., *Walsh, K., & **Hirsh, A.** (2019, April). *The role of self-other comparisons in race differences in pain tolerance.* Poster presentation at the Annual Meeting of the American Pain Society, Milwaukee, WI.
- *Procento, P., *Miller, M., *Anastas, T., *Hollingshead, N., & **Hirsh, A.** (2019, April). *Sex differences in providers' pain treatment recommendations: The role of perceived exaggeration.* Poster presentation at the Annual Meeting of the American Pain Society, Milwaukee, WI.
- *Anastas, T., *Walsh, K., *Miller, M., Trost, Z., Goubert, L., de Ruddere, L., & **Hirsh, A.** (2019, April). *The unique and interactive effects of patient race, patient weight, and provider implicit attitudes on chronic pain treatment decisions.* Poster presentation at the Annual Meeting of the American Pain Society, Milwaukee, WI.
- Hsueh, L., Wu, W., **Hirsh, A.**, de Groot, M., Mather, K., & Stewart, J. (2019, March). *Undiagnosed diabetes among immigrant and racial/ethnic minority adults in the U.S.: NHANES 2011-2016.* Oral presentation at the Annual Meeting of the American Psychosomatic Society, Vancouver, BC.

- *Procento, P., *Miller, M., *Anastas, T., *Hollingshead, N., & **Hirsh, A.** (2018, September). *Perceived exaggeration mediates the relationships of patient race and socioeconomic status with provider opioid recommendations in chronic pain.* Poster presentation at the 17th World Congress on Pain, Boston, MA.
- *Miller, M., Williams, A., Scott, E., Trost, Z., & **Hirsh, A.** (2018, September). *General, personal, and pain-specific justice beliefs in the pediatric chronic pain experience.* Poster presentation at the 17th World Congress on Pain, Boston, MA.
- *Anastas, T., *Miller, M., *Hollingshead, N., Carnell, S., Lok, B., & **Hirsh, A.** (2018, September). *Providers' implicit and explicit attitudes about race and socioeconomic status influence their pain treatment recommendations.* Poster presentation at the 17th World Congress on Pain, Boston, MA.
- *Mehok, L., *Meints, M., *Miller, M., *Hollingshead, N., *Walsh, K., *Kimberly, E., Ashburn-Nardo, L., & **Hirsh, A.** (2018, September). *Development and preliminary test of a measure assessing implicit beliefs about race differences in pain.* Poster presentation at the 17th World Congress on Pain, Boston, MA.
- Williams, A., *Miller, M., Scott, E., Trost, Z., & **Hirsh, A.** (2018, September). *Elements of pain-related injustice differentially mediate the relationship between pain intensity and outcomes in children with chronic pain.* Poster presentation at the 17th World Congress on Pain, Boston, MA.
- *Clark, E., *Anastas, T., *Miller, M., *Hollingshead, N., Carnell, S., Lok, B., & **Hirsh, A.** (2018, September). *Compassion for patients mediates racial and socioeconomic differences in providers' pain treatment decisions.* Poster presentation at the 17th World Congress on Pain, Boston, MA.
- Hirsh, A.**, *Anastas, T., *Miller, M., & *Hollingshead, N. (2018, April). *Preliminary results of a virtual perspective-taking intervention to reduce race and SES biases in pain treatment decisions.* Poster presentation at the 39th Annual Meeting of the Society for Behavioral Medicine, New Orleans, LA. [citation award winner]
- *Hollingshead, N., Ashburn-Nardo, L., Stewart, J., Maupomé, G., & **Hirsh, A.** (2018, April). *Hispanic ethnicity, ethnic attitudes, and chronic pain care: A virtual patient investigation.* Poster presentation at the 39th Annual Meeting of the Society for Behavioral Medicine, New Orleans, LA.
- *Miller, M., Williams, A., Scott, E., Trost, Z., & **Hirsh, A.** (2018, April). *Injustice perceptions predict future functioning in children with chronic pain: A 12-month follow-up.* Poster presentation at the 39th Annual Meeting of the Society for Behavioral Medicine, New Orleans, LA.
- *Stout, M., *Meints, S., & **Hirsh, A.** (2018, April). *Loneliness mediates the relationship between pain during intercourse and depressive symptoms.* Poster presentation at the 39th Annual Meeting of the Society for Behavioral Medicine, New Orleans, LA.
- Chinh, K., Secinti, E., Johns, S., **Hirsh, A.**, & Mosher, C. (2018, April). *Mindfulness and psychological adjustment in metastatic breast cancer patients and their family caregivers.* Oral presentation at the 39th Annual Meeting of the Society for Behavioral Medicine, New Orleans, LA.
- Hsueh, L., **Hirsh, A.**, Maupomé, G., & Stewart, J. (2018, March). *Patient-provider language concordance and health outcomes: A systematic review, conceptual framework, and research agenda.* Poster presentation at the 76th Annual Meeting of the American Psychosomatic Society, Louisville, KY.
- Vrany, E., Matthews, K., **Hirsh, A.**, Cyders, M., Clark, D., Shikany, J., Schreiner, P., & Stewart, J. (2018, March). *Diet composition factors as candidate mechanisms underlying the depression-to-future obesity association: The Coronary Artery Risk Development in Young Adults (CARDIA) study.* Oral presentation at the 76th Annual Meeting of the American Psychosomatic Society, Louisville, KY.
- *Walsh, K., *Miller, M., & **Hirsh, A.** (2017, October). *Observer empathy and patient weight influence pain attributions and treatment recommendations.* Poster presentation at the 88th Annual Meeting of the Indiana Academy of Social Sciences, Crawfordsville, IN.
- Baert, F., McParland, J., Trost, Z., **Hirsh, A.**, *Miller, M., & Vervoort, T. (2017, July). *Parental appraisals of injustice in the context of pediatric pain: An interpretative phenomenological analysis.* Poster presentation at the 11th International Symposium on Pediatric Pain, Kuala Lumpur, Malaysia.
- *Anastas, T., *Hollingshead, N., *Miller, M., Ashburn-Nardo, L., & **Hirsh, A.** (2017, May). *Patient race and socioeconomic status influence providers' recommendations about opioid therapy and workplace accommodations for chronic pain.* Poster and oral presentation at 36th Annual Meeting of the American Pain Society, Pittsburgh, PA.
- *Hollingshead, N., Vrany, E., Hsueh, L., Stewart, J., & **Hirsh, A.** (2017, May). *Differences in the experience and management of chronic pain across first-, second-, and third-generation Mexican Americans: Results from NHANES 1999-2004.* Poster and oral presentation at 36th Annual Meeting of the American Pain Society, Pittsburgh, PA.

- *Miller, M., Williams, A., Scott, E., Trost, Z., & **Hirsh, A.** (2017, May). *Pain-related injustice perception, but not catastrophizing, partially mediates the relationship between pain intensity and pain outcomes in children with chronic pain*. Poster and oral presentation at 36th Annual Meeting of the American Pain Society, Pittsburgh, PA.
- *Meints, S., *Wuest, D., *Stout, M., *Jackson, K., *Abplanalp, S., & **Hirsh, A.** (2017, May). *The effects of active vs. passive prayer on experimental pain tolerance*. Poster presentation at 36th Annual Meeting of the American Pain Society, Pittsburgh, PA.
- *Mehok, L., *Miller, M., Trost, Z., Nowlin, L., Wheelis, T., de Ruddere, L., Goubert, L., & **Hirsh, A.** (2017, May). *Pain assessment and activity-related recommendations for chronic pain are influenced by patient gender and weight*. Poster presentation at 36th Annual Meeting of the American Pain Society, Pittsburgh, PA.
- Tometich, D., Mosher, C., Rand, K., & **Hirsh, A.** (2017, April). *Symptom clusters in metastatic breast cancer patients*. Poster presentation at the 38th Annual Meeting of the Society of Behavioral Medicine, San Diego, CA.
- Hsueh, L., Peña, J., **Hirsh, A.**, de Groot, M., & Stewart, J. (2017, April). *Diabetes risk perception among racial/ethnic minority and immigrant groups: Data from the National Health and Nutrition Survey*. Oral presentation at the 38th Annual Meeting of the Society of Behavioral Medicine, San Diego, CA.
- Vrany, L., Cyders, M., **Hirsh, A.**, & Stewart, J. (2017, April). *Depression and dietary factors implicated in obesity development: A review*. Poster presentation at the 38th Annual Meeting of the Society of Behavioral Medicine, San Diego, CA.
- Hirsh, A.**, *Hollingshead, N., *Meints, S., & *Miller, M. (2016, September). *Race differences in the land of Lake Wobegon*. Poster session presented at the 16th World Congress on Pain, Yokohama, Japan.
- *Miller, M., Scott, E., Trost, Z., & **Hirsh, A.** (2016, September). *Parent perceptions of injustice about their child's chronic pain*. Poster session presented at the 16th World Congress on Pain, Yokohama, Japan.
- Macy, J.T., Moser, B., **Hirsh, A.T.**, Monahan, P., Eckert, G., & Maupomé, G. (2016, September). *Factors contributing to preventive oral health behaviors among Mexican Americans living in Central Indiana*. In Session VIII: Chronic Disease. Paper presented at the 2016 Indiana Public Health Conference, Indianapolis, IN.
- *Stout, M., *Meints, S., *Miller, M., & **Hirsh, A.** (2016, May). *The rumination component of catastrophizing mediates race differences in experimental pain tolerance*. Poster session presented at the 28th Annual Convention of the Association for Psychological Science, Chicago, IL.
- *Hollingshead, N., Ashburn-Nardo, L., Stewart, J., Maupomé, G., & **Hirsh, A.** (2016, May). *Examining the influence of Hispanic ethnicity and ethnic bias on medical students' pain management decisions*. Poster session presented at the 35th Annual Scientific Meeting of the American Pain Society, Austin, TX.
- *Meints, S., Gleckman, A., & **Hirsh, A.** (2016, May). *Social influence of disability judgments for patients with chronic pain*. Poster session presented at the 35th Annual Scientific Meeting of the American Pain Society, Austin, TX.
- *Miller, M., Scott, E., Trost, Z., & **Hirsh, A.** (2016, May). *Injustice perceptions predict future functioning in children with chronic pain*. Poster session presented at the 35th Annual Scientific Meeting of the American Pain Society, Austin, TX.
- Valencia, C., Brzuzy, E., Carson, J., Curry, J., Felker, S., Stewart, J., **Hirsh, A.**, & Gurovich, A. (2016, May). *Relationship between central pain mechanisms and arterial blood pressure in pain free subjects*. Poster session presented at the 35th Annual Scientific Meeting of the American Pain Society, Austin, TX.
- *Tometich, D., Mosher, C., Rand, K., & **Hirsh, A.** (2016, March). *Symptom importance in metastatic breast cancer patients*. Poster session presented at the 37th Annual Meeting and Scientific Sessions of the Society of Behavioral Medicine, Washington, DC.
- Scott, E., Williams, A.E., *Miller, M.M., & **Hirsh, A.T.** (2015, June). *The role of injustice in pediatric chronic pain patients: Mediation by anger and depression*. Poster session presented at the 10th International Symposium on Pediatric Pain, Seattle, WA.
- Allison, A., Wheelis, T., *Miller, M., Nowlin, L., *Hollingshead, N., de Ruddere, L., Goubert, L., **Hirsh, A.**, & Trost, Z. (2015, May). *Evidence of racial differences in perception of others' pain*. Poster session presented at the 27th Annual Convention of the Association for Psychological Science, New York, NY.
- Hirsh, A.**, *Hollingshead, N., Ashburn-Nardo, L., & Kroenke, K. (2015, May). *Evidence of racial disparities in time spent with patients in pain*. Poster session presented at the 34th Annual Scientific Meeting of the American Pain Society, Palm Springs, CA.
- *Miller, M., Scott, E., Franz, M., Trost, Z., & **Hirsh, A.** (2015, May). *The role of injustice in chronic pain in a clinical pediatric sample*. Poster session presented at the 34th Annual Scientific Meeting of the American Pain Society, Palm Springs, CA.

- *Hollingshead, N., *Vrany, E., Stewart, J., & **Hirsh, A.** (2015, May). *Differences in Mexican Americans' prevalence of chronic pain and co-occurring analgesic medication and substance use relative to Non-Hispanic White and Black Americans: Results from NHANES 1999-2004*. Poster session presented at the 34th Annual Scientific Meeting of the American Pain Society, Palm Springs, CA.
- *Wepler, R., *Hollingshead, N., **Hirsh, A.** (2015, May). *The role of diet in the etiology and severity of Rheumatoid Arthritis: A prospective analysis of the NHANES I Epidemiological Follow-up Study (NHEFS) cohort*. Poster session presented at the 34th Annual Scientific Meeting of the American Pain Society, Palm Springs, CA.
- *Meints, S., & **Hirsh, A.** (2015, May). *Examining race differences in pain-related coping: A meta-analysis*. Poster session presented at the 34th Annual Scientific Meeting of the American Pain Society, Palm Springs, CA.
- Wheeler, T., Allison, A., *Miller, M., Nowlin, L., *Hollingshead, N., de Ruddere, L., Goubert, L., **Hirsh, A.**, & Trost, Z. (2015, May). *Disparities in gender and weight bias toward chronic low back pain patients*. Poster session presented at the 34th Annual Scientific Meeting of the American Pain Society, Palm Springs, CA.
- Valencia, C., Wassink, M., **Hirsh, A.**, & Demchak, T. (2014, October). *Effects of light brushing on peripheral and central pain processing in Fibromyalgia patients and health controls*. Poster session presented at the 15th World Congress on Pain, Buenos Aires, Argentina.
- Hirsh, A.**, Hollingshead, N., Miller, M., Ashburn-Nardo, L., & Kroenke, K. (2014, April). *The influence of patient race, provider bias, and clinical ambiguity on pain assessment and treatment decisions*. Poster session presented at the 33rd Annual Scientific Meeting of the American Pain Society, Tampa, FL.
- *Meints, S., *Middleton, M., *Miller, M., *Najera, K., & **Hirsh, A.** (2014, May). *Racial differences in pain sensitivity are associated with the use of praying as a coping strategy*. Poster session presented at the 33rd Annual Scientific Meeting of the American Pain Society, Tampa, FL.
- *Hollingshead, N., *Meints, S., *Middleton, S., *Free, C., & **Hirsh, A.** (2014, May). *Influential factors in providers' chronic pain treatment decisions*. Poster session presented at the 33rd Annual Scientific Meeting of the American Pain Society, Tampa, FL.
- *Miller, M., *Hollingshead, N., *Meints, S., *Middleton, S., **Hirsh, A.** (2014, May). *Further psychometric evaluation of a measure assessing gender, race/ethnicity, and age expectations of pain*. Poster session presented at the 33rd Annual Scientific Meeting of the American Pain Society, Tampa, Florida.
- Valencia, C., Wassink, M., **Hirsh, A.**, & Demchak, T. (2014, May). *Effects of light brushing on peripheral and central pain processing of pain in patients with Fibromyalgia*. Poster session presented at the 33rd Annual Scientific Meeting of the American Pain Society, Tampa, FL.
- Allison, A., *Hollingshead, N., de Ruddere, L., Goubert, L., **Hirsh, A.**, & Trost, Z. (2014, April). *Evidence of gender disparities in weight and beauty bias toward chronic pain patients*. Poster session presented at the 35th Annual Meeting and Scientific Sessions of the Society of Behavioral Medicine, Philadelphia, PA.
- Kupper, A., Jensen, M., Gertz, K., Ehde, D., Dillworth, T., **Hirsh, A.**, Molton, I., Koenig, A., & Skidmore, J. (2014, April). *The beneficial side effects of hypnosis in Multiple Sclerosis and chronic pain patients*. Poster session presented at the 35th Annual Meeting of the Society of Behavioral Medicine, Philadelphia, PA.
- Hirsh, A.**, *Hollingshead, N., Bair, M., Matthias, M., & Kroenke, K. (2013, May). *Does provider sexism contribute to sex/gender disparities in pain treatment decisions?* Poster session presented at the 32nd Annual Scientific Meeting of the American Pain Society, New Orleans, LA.
- *Meints, S., *Hollingshead, N., & **Hirsh, A.** (2013, May). *Factors influencing providers' treatment decisions for chronic low back pain*. Poster session presented at the 32nd Annual Scientific Meeting of the American Pain Society, New Orleans, LA.
- *Hollingshead, N., Matthias, M., Bair, M., Middleton, S., & **Hirsh, A.** (2013, May). *Variability in pain treatment decisions and provider self-insight: A mixed methods investigation*. Poster session and platform presentation at the 32nd Annual Scientific Meeting of the American Pain Society, New Orleans, LA.
- Torres, C., Wandner, L., Alqudah, A., **Hirsh, A.**, Lok, B., & Robinson, M. (2013, May). *Pain assessment and treatment decisions among students in the United States and Jordan*. Poster session presented at the 32nd Annual Scientific Meeting of the American Pain Society, New Orleans, LA.
- Wandner, L.D., Heft, M.W., Lok, B., **Hirsh, A.T.**, George, S.Z., Horgas, A., Atchinson, J.W., Torres, C.A., & Robinson, M.E. (2012, August). *Healthcare professionals' pain assessment and treatment decisions using virtual human technology*. Poster session presented at the 14th World Congress on Pain, Milan, Italy.
- Wandner, L., **Hirsh, A.**, Torres, C., Lok, B., Heft, M., & Robinson, M. (2012, June). *Using virtual human technology to assess pain treatment decision biases*. Poster session presented at the 90th General Session & Exhibition of the International Association for Dental Research, Iguacu Falls, Brazil.

- Hirsh, A.**, *Hollingshead, N., Wu, J., Bair, M., Matthias, M., & Kroenke, K. (2012, May). *Provider decision making in chronic pain management: Influence of sex, race, and depression*. Poster session presented at the 31st Annual Scientific Meeting of the American Pain Society, Honolulu, HI.
- *Hollingshead, N., *Neufer, A., & **Hirsh, A.** (2012, May). *An investigation of provider self-insight into their chronic pain management decisions*. Poster session presented at the 31st Annual Scientific Meeting of the American Pain Society, Honolulu, HI.
- Hirsh, A.**, Kratz, A., Molton, I., Ehde, D., & Jensen, M. (2011, May). *Pain acceptance is associated with key psychosocial outcomes in adults with multiple sclerosis and chronic pain*. Poster session presented at the 30th Annual Scientific Meeting of the American Pain Society, Austin, TX.
- *Bockow, T.B., **Hirsh, A.T.**, & Jensen, M.P. (2011, March). *Catastrophizing, pain, and functioning in persons with a disability: Sex and diagnostic group differences*. Poster session presented at the 27th Annual Meeting of the American Academy of Pain Medicine Medicine, National Harbor, MD.
- Wandner, L., Stutts, L., Alqudah, A., Craggs, J., Scipio, C., **Hirsh, A.**, & Robinson, M. (2010, August). *Virtual human technology: Patient demographics and health care training factors in pain observation and treatment recommendations*. Poster session presented at the 13th World Congress on Pain, Montréal, Québec, Canada.
- Hirsh, A.**, Kratz, A., Engel, J., & Jensen, M. (2010, May). *Pain treatment in adults with cerebral palsy: Cross-validation and extension*. Poster session presented at the 29th Annual Scientific Meeting of the American Pain Society, Baltimore, MD.
- Stutts, L., **Hirsh, A.**, George, M., & Robinson, M. (2010, May). *The influence of patient characteristics on pain assessment: An investigation using virtual human technology*. Invited paper and poster session presented at the 29th Annual Scientific Meeting of the American Pain Society, Baltimore, MD.
- Hirsh, A.T.**, *Gallegos, J.C., Gertz, K.J, Engel, J.M., & Jensen, M.P. (2010, April). *Symptom burden in adults with Cerebral Palsy*. Poster session presented at the 31st Annual Meeting and Scientific Sessions of the Society of Behavioral Medicine, Seattle, WA.
- *Braden, A.L., **Hirsh, A.T.**, Craggs, J.G., & Jensen, M.P. (2010, April). *Psychometric properties of the Community Integration Questionnaire in adults with disabilities*. Poster session presented at the 31st Annual Meeting and Scientific Sessions of the Society of Behavioral Medicine, Seattle, WA.
- *Bockow, T.B., **Hirsh, A.T.**, & Jensen, M.P. (2010, April). *Catastrophizing, pain, and functioning in persons with a disability: Sex and diagnostic group differences*. Poster session presented at the 31st Annual Meeting and Scientific Sessions of the Society of Behavioral Medicine, Seattle, WA.
- Ehde, D.M., Jensen, M.P, Gertz, K., Stoelb, B.L., Dillworth, T.M., **Hirsh, A.T.**, Molton, I.R., & Kraft, G.H. (2010, February). *Effects of self-hypnosis training and cognitive restructuring on daily pain intensity and catastrophizing in individuals with multiple sclerosis and chronic pain: A pilot study*. Poster session presented at the Annual Meeting of the American Psychological Association Division of Rehabilitation Psychology, Tucson, AZ.
- Hirsh, A.**, Jensen, M., & Robinson, M. (2009, May). *Nurses' self-awareness of their decision-making process for pain assessment and treatment*. Poster session presented at the 28th Annual Scientific Meeting of the American Pain Society, San Diego, CA.
- Hirsh, A.**, Dillworth, T., Ehde, D., & Jensen, M. (2009, May). *Sex differences in the pain experience of persons with limb loss*. Poster session presented at the 28th Annual Scientific Meeting of the American Pain Society, San Diego, CA.
- Dillworth, T., **Hirsh, A.**, Ehde, D., & Jensen, M. (2009, May). *Differences in pain coping strategies and alcohol use among persons with spinal cord injuries*. Poster session presented at the 28th Annual Scientific Meeting of the American Pain Society, San Diego, CA.
- Hirsh, A.**, George, S., Fillingim, W., Perlstein, W., Manamalkav, S., & Robinson, M. (2008, May). *Investigating pain assessment and treatment disparities: A novel virtual human technology application*. Poster session presented at the 27th Annual Scientific Meeting of the American Pain Society, Tampa, FL.
- Hirsh, A.**, Manamalkav, S., & Robinson, M. (2008, May). *Virtual human technology as a novel approach to investigating pain-related clinical decision making*. Poster session presented at the 27th Annual Scientific Meeting of the American Pain Society, Tampa, FL.
- Bialosky, J., **Hirsh, A.**, Robinson, M., Galmish, R., & George, S. (2008, May). *A randomized study of the effects of catastrophizing on experimental pain*. Poster session presented at the 27th Annual Scientific Meeting of the American Pain Society, Tampa, FL.
- Robinson, M., Alqudah, A., **Hirsh, A.**, & Stutts, L. (2008, May). *Sex and race differences in rating others' pain, pain-related negative mood, pain coping, and need for medical treatment*. Poster session presented at the 27th Annual Scientific Meeting of the American Pain Society, Tampa, FL.

- Hirsh, A.T.,** George, S.Z., Bialosky, J.E., & Robinson, M.E. (2007, May). *Fear of pain, pain catastrophizing, and acute pain perception: Relative prediction and timing of assessment*. Poster session presented at the 26th Annual Scientific Meeting of the American Pain Society, Washington D.C.
- Hirsh, A.T.,** Waxenberg, L.B., Atchison, J.W., Gremillion, H.A., & Robinson, M.E. (2006, May). *Sex differences in the pain-mood-disability nexus*. Invited paper and poster session presented at the 25th Annual Scientific Meeting of the American Pain Society, San Antonio, TX.
- Hirsh, A.T.,** George, S.Z., Riley, J.L., & Robinson, M.E. (2005, April). *Sex differences and construct redundancy of the Coping Strategies Questionnaire-Catastrophizing Subscale*. Poster session presented at the 24th Annual Scientific Meeting of the American Pain Society, Boston, MA.
- Hirsh, A.T.,** Chung, S.K., O'Brien, E.M., George, S.Z., Cianfrini, L., Atchison, J.W., Gremillion, H., Waxenberg, L.B., & Robinson, M.E. (2004, May). *Does the Catastrophizing Subscale of the Coping Strategies Questionnaire provide unique information regarding the pain experience?* Poster session presented at the 2nd Joint Scientific Meeting of the American Pain Society and the Canadian Pain Society, Vancouver, British Columbia, Canada.
- Robinson, M.E., Brown, J.L., George, S.Z., Edwards, P.S., Atchison, J.W., **Hirsh, A.T.,** Waxenberg, L.B., Wittmer, V., & Fillingim, R.B. (2003, October). *A preliminary investigation of patient-centered outcomes in patients with chronic pain*. Paper presented at National Congress of Rehabilitation Medicine – American Society of Neurorehabilitation Joint Conference, Tucson, AZ.

INVITED LECTURES AND SYMPOSIA

- Hirsh, A.T.** (2023, August). *Patient-focused interventions to enhance shared decision-making among minoritized patients with chronic pain*. Presentation given at the Pain Special Interest Group webinar series, American Physical Therapy Association, Indiana Chapter.
- Hirsh, A.T.** (2023, August). *Patient-focused interventions to enhance shared decision-making among Black patients with chronic pain*. Inaugural presentation given at the Diversity, Equity, and Inclusion Speaker Series, Division of Behavioral Medicine and Clinical Psychology, Cincinnati Children's Hospital Medical Center, Cincinnati, OH.
- Hirsh, A.T.** (2023, March). *Patient-focused interventions to enhance shared decision-making for chronic pain care*. In E. Losin (Chair), *The clinician-patient relationship and pain: Clinical, experimental, and neurobiological approaches*. Symposium presented at the annual conference of the US Association for the Study of Pain, Durham, NC.
- Hirsh, A.T.** (2022, December). *Understanding implicit bias and its impact on healthcare leadership*. Panel presentation given to the Indiana Health Executives Network, Indianapolis, Indiana.
- Hirsh, A.T.** (2022, March). *Pilot testing an intervention to empower Black patients with chronic pain*. Presentation given at the Multidisciplinary Pain Case Conference, Indiana University Health, Indianapolis, Indiana.
- Hirsh, A.T.** (2021, November). *Using VR to facilitate clinician treatment decision-making for pain*. Presentation given at the 2nd Virtual Pain Education Summit, European Pain Federation.
- Hirsh, A.T.** (2021, November). *Racial disparities in pain care: Causes, consequences, and correctives*. Presentation given at the Integrated Pain Management meeting of Project ECHO (Extension for Community Healthcare Outcomes), Indianapolis, Indiana.
- Hirsh, A.T.** (2021, July). Moderator/Discussant for the Pain Research Forum (PRF) webinar series. *The cultural neuroscience of pain*. Speaker: E. Losin. International Association for the Study of Pain.
- Hirsh, A.T.** (2021, June). *Racial disparities in pain care: Causes, consequences, and correctives*. In T. Vervoort (Chair), *Towards Understanding and Altering Disparities in Pain Care*. Topical Workshop presented at the IASP 2021 Virtual World Congress on Pain.
- Hirsh, A.T.** (2021, March). Moderator/Discussant for the Pain In Child Health (PICH) webinar series. *It's not fair: Parental appraisals of injustice in response to their child's pain*. Speaker: F. Baert. Centre for Pediatric Pain Research, IWK Health Centre, Halifax, Nova Scotia.
- Hirsh, A.T.** (2019, November). *Racial and ethnic disparities in pain: Contributing factors and innovative solutions*. Presentation given at the PAINTalks Speaker Series, University of Alabama at Birmingham, Birmingham, AL.
- Hirsh, A.T.** (2019, October). *Racial and ethnic disparities in pain: Contributing factors and innovative solutions*. Workshop given at the Centro de Investigação e Intervenção Social (CIS-IUL), University Institute of Lisbon (ISCTE-IUL), Lisbon, Portugal.
- Hirsh, A.T.** (2018, September). *Using interactive Virtual Human technology to improve pain care for racial minority and low-income patients*. In F. Keefe (Chair), *Virtual Reality and Chronic Pain: Discussion and Demonstration of the State of the Art and Future Directions*. Symposium presented at the 17th World Congress on Pain, Boston, MA.

- Hirsh, A.T.** (2018, September). *Examining the effects of gender and weight on pain judgments*. In A. Hirsh (Chair), Sex and Gender Differences in Pain Perception and Experience. Symposium presented at the 17th World Congress on Pain, Boston, MA.
- Hirsh, A.T.** (2018, August). *Using Virtual Humans to reduce pain treatment disparities: Patient- and provider-focused interventions*. In S. Bernardes (Chair), Disparities in Pain Care: Psychosocial Accounts and Implications for Practice and Policy. Symposium presented at the 32nd Annual Conference of the European Health Psychology Society, Galway, Ireland.
- *Baert, F., Trost, Z., **Hirsh, A.**, *Miller, M., Vervoort, T., & De Schryver, M. (2018, August). *Child pain and well-being: The role of parental perceptions of injustice*. In L. Caes (Chair), Don't Forget the Parents: The Role of Parental Experience in Paediatric Chronic Conditions. Symposium presented at the 32nd Annual Conference of the European Health Psychology Society, Galway, Ireland.
- Hirsh, A.T.** (2018, June). *Using interactive virtual humans to improve pain care for racial minority and low-income patients*. Presentation given at the 13th Annual NIH Pain Consortium Symposium, Bethesda, MD.
- Hirsh, A.T.** (2018, May). *Using virtual humans to reduce pain treatment disparities: Patient- and provider-focused interventions*. In P. Mende-Siedlecki (Chair), Emerging Psychobiosocial Perspectives on Racial Disparities in Health Care. Symposium presented at the 30th Annual Convention of the Association for Psychological Science, San Francisco, CA.
- Hirsh, A.T.** (2018, March). *Using virtual humans to reduce pain treatment disparities: Patient- and provider-focused interventions*. In H. van Middendorp (Chair), Bringing Psychological Interventions into the Digital Era. Symposium presented at the 76th Scientific Meeting of the American Psychosomatic Society, Louisville, KY.
- Hirsh, A.T.** (2017, December). *Mechanism-based interventions to reduce race and SES disparities in pain care*. Presentation given at the ADDAPT (Addressing Disparities in the Distribution and Assessment of Pain and Its Treatments) workshop sponsored by ACTION (Analgesic, Anesthetic, and Addiction Clinical Trial Translations, Innovations, Opportunities, and Networks), Potomac, MD.
- Hirsh, A.T.** (2017, June). *Racial/ethnic disparities in pain: Contributing factors and innovative solutions*. Presentation given at the Anesthesiology & Perioperative Medicine Grand Rounds, Mayo Clinic, Rochester, MN.
- Hirsh, A.T.** (2017, May). *Racial & ethnic disparities in pain: Provider & contextual factors and potential solutions*. Presentation given for the Webinar Series: Decision Making and Pain hosted by The Translational Research Institute on Pain in Later Life (TRIPL), Weill Cornell Medical College, New York, NY.
- Hirsh, A.T.** (2016, May). *Provider and contextual factors that contribute to pain-related disparities*. In C.A. Shankar (Chair), A Socioecological Model to Examine Disparities in Pain Care. Symposium presented at the 35th Annual Scientific Meeting of the American Pain Society, Austin, TX.
- Hirsh, A.T.** (2015, January). *A multi-methods research agenda to understand and reduce pain treatment disparities*. Presentation given at the Pain Lecture Series, Stanford School of Medicine, Palo Alto, CA.
- Hirsh, A.T.** (2014, October). *Using Virtual Human technologies to understand and inform pain judgments*. Presentation given at the Blaustein Pain Center Grand Rounds, Johns Hopkins School of Medicine, Baltimore, MD.
- Hirsh, A.T.** (2014, July). *Using Virtual Human technologies to understand and inform pain judgments*. Presentation given at the Interdisciplinary Pain Seminar, Cincinnati Children's Hospital Medical Center, Cincinnati, OH.
- Hirsh, A.T.** (2014, April). *Using Virtual Human technologies to understand and inform clinicians' treatment decisions*. In F.J. Keefe (Chair), Understanding and Treating Persistent Pain Using Virtual Technologies. Symposium presented at the 33rd Annual Scientific Meeting of the American Pain Society, Tampa, FL.
- Hirsh, A.T.** (2012, September). *Patient, provider, and contextual influences on pain decision-making*. Presentation given at the Work-in-Progress Seminar of the HSR&D Center of Excellence, Roudebush VA Medical Center, Indianapolis, IN.
- Hirsh, A.T.** (2012, October). *Patient, provider, and contextual factors that influence pain treatment decisions*. Presentation given at the Marian University Interdisciplinary Seminar Series, Indianapolis, IN.
- Merlo, L.J., Lehmkuhl, H., Faul, L.A., **Hirsh, A.**, & Geffken, G. (2006, March). *Intensive CBT for the treatment of panic disorder with co-morbid major depressive disorder*. In L.J. Merlo (Chair), Intensive CBT for Three Anxiety Disorders across the Life Span using Multiple Therapists. Symposium presented at the Annual Meeting of the Anxiety Disorders Association of America, Miami, FL.
- O'Brien, K.A., **Hirsh, A.**, Adkins, J., Storch, E., & Geffken, G. (2006, March). *Intensive Cognitive Behavioral Therapy (CBT) for an elderly patient with Obsessive Compulsive Disorder (OCD) and comorbid medical conditions*. In L.J. Merlo (Chair), Intensive CBT for Three Anxiety Disorders across the Life Span using Multiple Therapists. Symposium presented at the Annual Meeting of the Anxiety Disorders Association of America, Miami, FL.

TEACHING ACTIVITIES

Instructor

Department: Psychology, Indiana University–Purdue University Indianapolis

Course: Behavioral Medicine

Level: Graduate

Department: Psychology, Indiana University–Purdue University Indianapolis

Course: Intervention I: Counseling Approaches

Level: Graduate

Department: Psychology, Indiana University–Purdue University Indianapolis

Course: Abnormal Psychology

Level: Undergraduate

EDITORIAL ACTIVITIES

Editorial Board

Annals of Behavioral Medicine

The Journal of Pain

Guest Editor

Health Psychology & Journal of Pain, 2023 coordinated special issues on *Pain Disparities*

Frontiers in Virtual Reality: Virtual Reality in Medicine, 2022 special issue on *Novel Applications of Virtual and Mixed Reality in Pain Research and Treatment*

Reviewer

Annals of Behavioral Medicine; Anxiety, Stress, & Coping; Archives of Physical Medicine and Rehabilitation; Arthritis Care & Research; Behavior Research and Therapy; British Journal of Health Psychology; Childhood Obesity; European Journal of Pain; Frontiers in Virtual Reality; Health Psychology; International Journal of Psychophysiology; Journal of Behavioral Medicine; Journal of Clinical Psychology in Medical Settings; Journal of General Internal Medicine; Journal of Racial and Ethnic Health Disparities; Journal of Rehabilitation Research and Development; Journal of Women's Health; Pain; Pain Medicine; Pain Practice; Pain Reports; Rehabilitation Psychology; The Clinical Journal of Pain; The Journal of Pain

OTHER PROFESSIONAL POSITIONS AND MEMBERSHIPS

Chair

Social Aspects of Pain Special Interest Group, International Association for the Study of Pain, 2022-present

Psychosocial Research Special Interest Group, American Pain Society, 2013-2015

Executive Board

Pain and Disparities Special Interest Group, American Pain Society, 2013-2017

Member

Analgesic, Anesthetic, and Addiction Clinical Trial Translations, Innovations, Opportunities, and Networks (ACTION) – Addressing Disparities in the Distribution and Assessment of Pain and its Treatments (ADDAPT) Work Group, U.S. Food and Drug Administration (FDA), 2017-present

Data and Safety Monitoring Boards, National Institutes of Health (NIH)

- *Corticostriatal Plasticity in the Transition to Chronic Pain: Effect of L-dopa* (2014-2017)
- *Effect of COMT Genetic Polymorphisms on Response to Propranolol Therapy in Temporomandibular Disorder (SOPPRANO)* (2014-2019)
- *Investigation and Modulation of the Mu-Opioid Mechanisms in TMD (in vivo)* (2017-2022)

Special Emphasis Panel, Urinary Stone Disease Research Network (U01), National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK), National Institutes of Health (NIH), 2021

Review Panel, Israel Science Foundation (ISF), Personal Research Grants Program, 2021

Scientific Advisor (Advisee: V. Derricks), University of Utah Grant Writing Coaching Program, National Research Mentoring Network, National Institutes of Health (NIH), 2021

Review Panel, UK National Institute for Health Research (NIHR), Intervention for Innovation (i4i) Programme, 2019

Special Emphasis Panel (ZDE1 CF12), National Institute of Dental and Craniofacial Research (NIDCR), National Institutes of Health (NIH), 2019

Interagency Pain Research Coordinating Committee (IPRCC) – Disparities Work Group, National Institutes of Health (NIH), 2016-2018

Special Emphasis Panel (ZRG1 HDM-Z (02) M), Center for Scientific Review, National Institutes of Health (NIH), 2016

Special Emphasis Panel, Urinary Stone Disease Research Network (U01), National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK), National Institutes of Health (NIH), 2016

Peer Review Panel, Pre-applications–Non-Opioid Pain Management (PRE–NOPM), Peer Reviewed Medical Research Program (PRMRP), Department of Defense Congressionally Directed Medical Research Programs (CDMRP), 2016

Review Committee, Collaboration in Translational Research (CTR) Pilot Grant Program, Indiana Clinical and Translational Sciences Institute (CTSI), 2016

Awards Committee, American Pain Society, 2016

Program Committee, Walther Center for Palliative Care Research and Education, Indiana University Cancer Center, 2014

Early Career Reviewer Program, Center for Scientific Review, National Institutes of Health, 2012-2015

International Association for the Study of Pain (IASP)

US Association for the Study of Pain (USASP)

Society of Behavioral Medicine (SBM)

American Psychosomatic Society (APS)

Academy of Behavioral Medicine Research (ABMR)