

## Adam T. Hirsh, Ph.D.

Curriculum Vitae

March 2026

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

**Visiting Professor**, March 2026-June 2026

Department of Experimental Clinical and Health Psychology

Ghent University

Ghent, Belgium

**Visiting Professor**, September 2025-March 2026

School of Medicine

University of Sydney

Sydney, Australia

### 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

### Current Grants

#### **Equipping patients using interventions for pain and depression (EQUIPD)**

Principal Investigator (Co-PI: Matthias) · NIH/NINR (R61/R33NR020845) · \$3,843,972 · 2022–2027

#### **Integrating music therapy into medication-assisted outpatient opioid treatment clinics – A multi-site feasibility study**

Principal Investigator · Indiana FSSA, DMHA · \$309,933 · 2025–2026

#### **Virtual perspective-taking training to reduce pain treatment disparities**

Principal Investigator (Co-PI: Mazurenko) · Indiana CTSI (UM1TR004402) · \$21,757 · 2023–2025

#### **Comparing strategies to improve non-pharmacologic pain relief for adults with back pain**

Co-Investigator · PCORI (grant number pending) · \$5,846,458 · 2025–2030

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

Co-Investigator · NCCIH & NEA (U24AT012602) · \$2,421,333 · 2023–2028

#### **Options for pain management using nonpharmacological strategies (OPTIONS)**

Co-Investigator · VA HSR&D (SDR 21-012) · \$1,199,971 · 2022–2026

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

Co-Investigator · NIDA/NIH (R01DA059026) · \$1,072,077 · 2023–2026

#### **Predictive modeling for social needs in emergency department settings**

Co-Investigator · AHRQ (R01HS028008) · \$1,967,217 · 2021–2026

#### **Training grant on genetic aspects of alcoholism**

Co-Investigator / Preceptor · NIAAA/NIH (T32AA007462) · \$2,660,541 · 2021–2026

#### **The role of pain attribution and perceived acceptability in physicians' pain treatment decisions**

Mentor (Mentee: Margaret Rose-McCandlish) · Foundation for Rehabilitation Psychology (FRP) Dissertation Award · \$2,500 · 2026–2027

#### **Development of a provider-focused intervention to improve health outcomes in pediatric sickle cell disease**

Co-mentor (Mentee: Siddika Mulchan) · NHLBI/NIH (K23HL175237) · \$781,700 · 2025–2029

#### **Leveraging health systems' data to address oral health disparities**

Co-mentor (Mentee: Heather Taylor) · NIDCR/NIH (K01DE033998) · \$737,646 · 2024–2029

#### **Characterizing provider biases in physical therapy**

Scientific Advisor (Mentee: Mark Vorensky) · HEAL Initiative National K12 Clinical Pain Career Development Program, NINDS/NIH (K12NS130673) · \$436,871 · 2024–2027

#### **Evaluating the association between general chronic pain liability and clinically recognized substance use**

Consultant (Mentee: Alynna Summit) · NIDA/NIH (F31DA061638) · \$97,948 · 2024–2026

### Completed Grants

#### **Music Therapy for Opioid or Stimulant Use Disorder (OSUD), Phase 2**

Principal Investigator (Co-PI: Myers-Coffman) · Indiana FSSA, DMHA · \$346,157 · 2023–2024

#### **Music Therapy for Opioid or Stimulant Use Disorder (OSUD), Phase 1**

Principal Investigator (Co-PI: Burns) · Indiana FSSA, DMHA · \$103,284 · 2023–2024

#### **Empowering Black patients with chronic pain to effectively engage in treatment decision-making**

Principal Investigator · OVCR Research Support Grant Funds (RSFG) · \$34,850 · 2021–2022

#### **Enhanced Mentoring Program with Opportunities for Ways to Excel in Research (EMPOWER)**

Principal Investigator / Mentor (Mentee: Veronica Derricks) · IUPUI OVCR · \$2,000 · 2021–2022

**GET PrEPD: Goal Elicitation, Treatment Prioritization, & Electronically-Practiced Discussion**

Principal Investigator · Racial Justice Research Fund of Indiana (AID2396) · \$15,776 · 2020–2021

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

Principal Investigator (Co-PI: Salyers) · NIMH, NIH (R34MH118314) · \$696,275 · 2018–2023

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

Principal Investigator · NIMHD, NIH (3R01MD008931-05S1; administrative supplement) · \$100,000 · 2018–2020

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

Principal Investigator · NIMHD, NIH (R01MD008931) · \$1,839,221 · 2014–2020

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

Principal Investigator · Purdue Research Foundation (International Travel Grant) · \$830 · 2019

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

Principal Investigator · Purdue Research Foundation (International Travel Grant) · \$1,115 · 2016

**The influence of patient race, provider bias, and contextual ambiguity on opioid treatment decisions**

Principal Investigator · American Pain Society (Future Leaders in Pain Research Grant) · \$20,000 · 2013–2014

**The influence of patient race, provider racial bias, and clinical ambiguity on opioid treatment decisions**

Principal Investigator · Purdue Research Foundation · \$10,000 · 2013

**Provider decision-making for the management of comorbid chronic pain and depression: A novel Virtual Human technology investigation**

Principal Investigator · Indiana University (Collaborative Research Grant) · \$51,675 · 2011–2012

**Influence of patient sex, race, and disability diagnosis on provider decision-making for pain**

Principal Investigator · Indiana University–Purdue University Indianapolis · \$10,000 · 2011–2012

**Pain assessment and clinical decision making**

Principal Investigator · NINDS, NIH (F31NS049675) · \$85,992 · 2004–2007

**“Their pain is not our pain”: Unravelling how caregiver attention to pain and perspective taking contribute to racial disparities in child pain care**

Co-Investigator · Research Foundation – Flanders (FWO) · €533,786 · 2021–2024

**Erosive Tooth Wear perception among network dentists and patients**

Co-Investigator · NIDCR/NIH (UG3DE030087) · \$282,510 · 2021–2022

**Reducing disparities in nonpharmacological pain treatments**

Co-Investigator · Regenstrief Institute · \$20,000 · 2021–2022

**Impact of Race-Related Injustice Appraisals on Morbidity in Youth with Sickle Cell Disease**

Co-Investigator · Racial Justice Research Fund of Indiana · \$14,943 · 2020–2021

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

Co-Investigator · Indiana Clinical and Translational Sciences Institute (UL1TR002529) · \$11,366 · 2020–2022

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

Co-Investigator / Mentor · University of Alabama at Birmingham (UAB) · \$8,100 · 2020–2021

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

Co-Investigator · Bijzonder Onderzoeksfonds (BOF), Flemish Government · €200,000 · 2019–2023

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

Co-Investigator · National Cancer Institute, NIH (R01CA230542) · \$1,661,702 · 2019–2023

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

Co-Investigator · VA HSR&amp;D (IIR17-032) · \$1,100,000 · 2018–2022

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

Co-Investigator · Walther Cancer Foundation · \$150,000 · 2016–2019

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

Co-Investigator · GlaxoSmithKline (GSK Investigator-Sponsored Studies Programme) · \$250,834 · 2017–2019

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

Co-Investigator · IUPUI Department of Psychology · \$10,000 · 2015–2016

**Perceptions of symptom importance and interference in metastatic breast cancer patients: Preparation for intervention development**

Co-Investigator · Walther Cancer Foundation · \$50,000 · 2015–2016

**Pain treatment decisions: Influence of sex, race, and age**

Co-Investigator · NIDCR, NIH (R01DE013208) · \$1,046,327 · 2009–2012

**Enhancement of clinical health psychology professions via training in non self-report methods of data collection**

Co-Investigator · HRSA, U.S. Department of Health and Human Services (D76HP20905) · \$56,003 · 2010–2011

**A pilot intervention to reduce gender identity bias in primary care decision-making**

Consultant · Ambulatory Research Consortium, UMass Chan Medical School · \$25,000 · 2023–2024

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

Consultant · Fundação para a Ciência e Tecnologia (FCT–Portugal) (PTDC/MHC-PSC/2041/2014) · €145,704 · 2016–2019

**Pain treatment decisions: Influence of sex, race, and age**

Consultant · NIDCR, NIH (R56DE013208) · \$323,454 · 2008–2009

**Developing an intervention to improve the delivery of targeted health messages about HIV prevention to Black Americans**

Primary Mentor (Mentee: Veronica Derricks) · IU School of Medicine, PLUS Program · \$68,080 · 2023–2024

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

Primary Mentor (Mentee: Alexis Grant) · APA Division 38 (Graduate Student Research Grant) · \$2,000 · 2023–2024

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

Primary Mentor (Mentee: Alexis Grant) · Society for Addiction Psychology (APA) · \$1,000 · 2022–2023

**Investigating how institutional and provider racism contribute to pain treatment disparities in adults with sickle cell disease**

Mentor / Co-Investigator · American Psychological Foundation (Visionary Fund Grant) · \$19,250 · 2021–2023

**Developing an intervention to improve the delivery of targeted health messages about HIV prevention to Black Americans**

Primary Mentor (Mentee: Veronica Derricks) · Indiana CTSI (KL2 Program, UL1TR002529) · \$174,029 · 2021–2023

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

Primary Sponsor (student PI: Anastas) · NIMHD, NIH (F31MD014058) · \$86,866 · 2019–2021

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

Primary Sponsor (student PI: Hollingshead) · APA Division 38 (Graduate Student Research Grant) · \$1,500 · 2015–2016

**Research training in medical rehabilitation**

Postdoctoral Fellow · NCMRR, NIH (T32HD007424) · Annual stipend, travel, support expenses · 2008–2010

**PEER-REVIEWED PUBLICATIONS** (\* indicates student/mentee)

- Shanahan, M.L., Shanahan, B.T., **Hirsh, A.T.**, Matthias, M.S., Stewart, J.C., & Rand, K.L. (in press). Negative, but not positive, expectancies predict 10-year changes in chronic pain outcomes for older adults with pain. *The Journal of Pain*.
- Taylor, H., Musey, P., **Hirsh, A.**, Thyvalikakath, T., Vest, J. (in press). The association of socioeconomic status and emergency department use for nontraumatic dental conditions. *Western Journal of Emergency Medicine*.
- Rassu, F.S., Mathur, V.A., Merriwether, E.N., & **Hirsh, A.T.** (2026). Accelerating the science of equity: Insights and innovations from *Health Psychology* on pain disparities. *Health Psychology, 45*, 1-4.
- Kenney, M.O., Rassu, F.S., Bartley, E.J., **Hirsh, A.T.**, Janevic, M.R., Mathur, V.A., & Merriwether, E.N. (2026). Joint call to action paper – Pain Disparities special issue: Why this, Why Now? A unified call at a critical time. *Health Psychology, 45*, 136-140 (jointly published in *The Journal of Pain (2025)*, 37, 105567).
- Vorensky, M., Squires, A., Trost, Z., Sturgeon, J.A., **Hirsh, A.T.**, Sajjani, N., Jones, S., & Rao, S. (2026). ‘Maybe you should have a bowl of ice cream’: Inequities in patient-clinician interactions among individuals with chronic low back pain. *The Journal of Pain*, 105599.
- Grol-Prokopczyk, H., Huang, R., Yu, C., Chen, Y., Kaur, S., Limani, M., Lin, T., Zajacova, A., Zimmer, Z., Cowan, P., Fillingim, R.B., Gewandter, J.S., Gilron, I., **Hirsh, A.T.**, Macfarlane, G.J., Meghani, S.H., Patel, K.V., Poleshuck, E.L., Strain, E.C., Symons, F.J., Wesselmann, U., Dworkin, R.H., & Turk, D.C. (2025). Over fifty years of research on social disparities in pain and pain treatment: A scoping review of reviews. *Pain, 266*, 2458-2472.
- Kissi, A., Van Ryckeghem, D.M.L., Mende-Siedlecki, P., **Hirsh, A.**, Van Alboom, I., Debeer, D., & Vervoort, T. (2025). Racialized bias in pediatric pain: The role of observers’ attentional processing and estimations of children’s pain. *PeerJ, 13*, e19969.
- Mulchan, S.S., Theriault, C.B., DiVietro, S., Litt, M.D., Wakefield, E.O., Sukhera, J., Tanabe, P., Thomas, H.R., Santos, M., Zempsky, W.T., Boruchov, D., & **Hirsh, A.T.** (2025). Initial evaluation of an intervention to address provider implicit bias in pediatric sickle cell disease pain care: A mixed methods pilot study. *Canadian Journal of Pain, 8*, 2486819.
- Kapos, K.P., Craig, K.D., Anderson, S.R., Bernardes, S.F., **Hirsh, A.T.**, Karos, K., Keogh, E., Losin, E.A., McParland, J.L., Moore, D.J., & Ashton-James, C.E. (2025). Response to Sullivan and Williams regarding “Social determinants and consequences of pain: Toward multilevel, intersectional, and life course perspectives.” *The Journal of Pain, 33*, 105459.
- Kissi, A., \*Carey, S., Debeer, D., Van Ryckeghem, D.M.L., **Hirsh, A.**, & Vervoort, T. (2025). Racialized disparities in pain and pain care among Belgian youth. *Frontiers in Psychiatry, 16*, 1579144.
- Mazurenko, O., Harle, C., Blackburn, J., Menachemi, N., **Hirsh, A.**, Grannis, S., Boustani, M., Musey, P., Schleyer, T., Sanner, L., & Vest, J.R. (2025). Effectiveness of a clinical decision support system with prediction modeling to identify patients with health-related social needs in the emergency department: Study protocol. *PLOS ONE, 20*, e0323094.
- Flegge, L.G., \*Estrella, E., Harris, E.K., **Hirsh, A.T.**, & Bushey, M.A. (2025). Symptomatic joint hypermobility is not a barrier to attendance, graduation, or satisfaction for adults participating in a multidisciplinary pain rehabilitation program. *Frontiers in Pain Research, 6*, 1472160.
- Tracy, C., Milder, M., Vater, L., Lagges, A., Lemanek, K., Wrona, S., Gilbert, E., **Hirsh, A.T.**, Miller, M.M., Donahue, K., Streicher, M., & Williams, A.E. (2025). A retrospective review of psychosocial correlates of chronic pain in cisgender, transgender, and gender-diverse youth receiving evaluation in interdisciplinary pediatric pain clinics. *Canadian Journal of Pain, 8*, 2477466.
- Matthias, M.S., Burgess, D.J., Daggy, J.K., Donnelly, C.E., Flores, P., Fowler, N.R., Garabrant, J., Henry, N., Huffman, M., Kavuri, P.J., Ofner, S., Perry, C., Rand, K.L., Robles, M., Salyers, M.P., Taylor, S.L., & **Hirsh, A.T.** (2025). Equity Using Interventions for Pain and Depression (EQUIPD): A pilot randomized trial. *Journal of Pain, 29*, 105353.
- Williams, M.K., Crawford, C.A., Zapolski, T.C., **Hirsh, A.T.**, & Stewart, J.C. (2025). Longer-term mental health consequences of COVID-19 infection: Moderation by race and socioeconomic status. *International Journal of Behavioral Medicine, 32*, 111-123.
- Lee, J.L., Donnelly, C.E., **Hirsh, A.T.**, Weiner, M., Sperry, H.A., Fuqua, M.R., Natividad, D., & Matthias, M.S. (2025). Role of the VA’s LGBTQ+ Veteran care coordinators in facilitating care for transgender and gender diverse Veterans. *The Permanente Journal, 1-7*.
- Mosher, C.E., Lee, S., Addington, E.L., Park, S., Lewson, A.B., Snyder, S., **Hirsh, A.T.**, Bricker, J.B., Miller, K.D., Ballinger, T.J., Schneider, B.P., Storniolo, A.M., Newton, E.V., Champion, V.L., & Johns, S.A. (2025).

- Randomized controlled trial of Acceptance and Commitment Therapy for fatigue interference with functioning in metastatic breast cancer. *Journal of Clinical Oncology*, 43, 662-671.
- Karos, K., Ashton-James, C.E., McParland, J., & **Hirsh, A.T.** (2025). COVID-19 and chronic pain: Implications and lessons learned. *Current Opinion in Psychology*, 62, 101985.
- Lee, J.L., **Hirsh, A.**, Radhakrishnan, A., Radhakrishnan, A., Jasuja, G.K., Taylor, S., Dickinson, S., Mineo, J., Carnahan, J., & Weiner, M. (2025). Mental health utilization among transgender Veterans. *JAMA Network Open*, 8, e2454694.
- Mazurenko, O., **Hirsh, A.T.**, Harle, C.A., McNamee, C., & Vest, J.R. (2024). Health-related social needs information in the emergency department: clinician and patient perspectives on availability and use. *BMC Emergency Medicine*, 25, 45.
- Miller, M.M., Kissi, A., Rumble, D.D., **Hirsh, A.T.**, Vervoort, T., Crosby, L. E., Madan-Swain, A., Lebensburger, J., Hood, A.M., & Trost, Z. (2024). Pain-related injustice appraisals, sickle cell stigma, and racialized discrimination in youth with sickle cell disease: a preliminary investigation. *Journal of Racial and Ethnic Health Disparities*, 1-10.
- Mazurenko, O., **Hirsh, A.**, Harle, C.A., Shen, J., McNamee, C., & Vest, J.R. (2024). Comparing the performance of screening surveys versus predictive models in identifying patients in need of health-related social need services in the emergency department. *PLOS ONE*, 19, e0312193.
- Mazurenko, O., **Hirsh, A.**, Harle, C.A., McNamee, C., & Vest, JR. (2024) A clinical decision support system for addressing health-related social needs in emergency department: Defining end user needs and preferences. *Applied Clinical Informatics*, 15, 1097-1106.
- Derricks, V., **Hirsh, A.T.**, Perkins, A.J., Daggy, J.K., & Matthias, M.S. (2024). Healthcare discrimination affects patient activation, communication self-efficacy, and pain for Black Americans. *The Journal of Pain*, 25, 104663.
- Mulchan, S.S., Theriault, C.B., DiVietro, S., Litt, M.D., Sukhera, J., Tanabe, P., Thomas, H.R., Zempsky, W.T., Boruchov, D. & **Hirsh, A.T.** (2024). Provider implicit racial bias in pediatric sickle cell disease. *Journal of Racial and Ethnic Health Disparities*, 1-9.
- Quinn, P.D., Mazurenko, O., Meraz, R., Chang, Z., Pujol, T.A., **Hirsh, A.T.**, Sjölander, A., Kroenke, K., & D'Onofrio, B.M. (2024). Varying definitions of long-term opioid therapy: Examining prevalence, prescription patterns, and substance-related adverse outcomes. *Pain Medicine*, 25, 687–689.
- Kapos, K.P., Craig, K.D., Anderson, S.R., Bernardes, S.F., **Hirsh, A.T.**, Karos, K., Keogh, E., Losin, E.A., McParland, J.L., Moore, D.J., & Ashton-James, C.E. (2024). Social determinants and consequences of pain: Towards multilevel, intersectional, and life course perspectives. *The Journal of Pain*, 104608.
- \*Mehok, L.E., Walsh, K.T., Miller, M.M., Anastas, T.M., & **Hirsh, A.T.** (2024). Exercise and dietary recommendations for women with chronic pain: What's weight and race got to do with it? *The Journal of Pain*, 104505.
- Mazurenko, O., **Hirsh, A.T.**, Harle, C.A., McNamee, C., Vest, J.R. (2024). Acceptance of automated social risk scoring in the emergency department: Clinician, staff, and patient perspectives. *Western Journal of Emergency Medicine*.
- Schuling, M.D., Shell, A.L., Callahan, C.M., Nurnberger, J.I., MacDonald, K.L., Considine, R.V., Wu, W., **Hirsh, A.T.**, Crawford, C.A., Williams, M.K., Lipuma, T.C., Gupta, S.K., Kovacs, R.J., Rollman, B.L., & Stewart, J.C. (2024). Effect of depression treatment on health behaviors and cardiovascular risk factors in primary care patients with depression and elevated cardiovascular risk: Data from the eIMPACT trial. *Psychological Medicine*, 54, 3303-3316.
- Shell, A.L., Crawford, C.A., Cyders, M.A., **Hirsh, A.T.**, & Stewart, J.C. (2024). Depressive disorder subtypes, depressive symptom clusters, and risk of obesity and diabetes: A systematic review. *Journal of Affective Disorders*, 353, 70-89.
- Matthias, M.S., Bolla, A.L., Bair, S.M., Adams, J., Eliacin, J., Burgess, D.J., & **Hirsh, A.T.** (2024). 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*, 39, 222-228.
- 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.** (2024). Communication and activation in pain to enhance relationships and treat pain with equity (COOPERATE): A randomized clinical trial. *Pain*, 165, 365-375.
- \*Anastas, T.M., Wu, W., Burgess, D.J., Stewart, J.C., Salyers, M.P., Kroenke, K., & **Hirsh, A.T.** (2024). The impact of patient race, patient socioeconomic status, and cognitive load of physician residents and fellow on chronic pain care decisions. *The Journal of Pain*, 25, 104480.

- Rogers, S.K., Galloway, A., **Hirsh, A.T.**, Zapolski, T., Chen, C.X., & Rand, K.L. (2023). Efficacy of psychological interventions for dysmenorrhea: A meta-analysis. *Pain Medicine*, *24*, 1086-1099.
- \*Lynch Milder, M.K., Bazier, A., Ward, S., Rand, K.L., & **Hirsh, A.T.** (2023). Resilience, social support, and health in emerging adults with and without chronic health conditions. *Emerging Adulthood*, *11*, 557-571.
- \*Anastas, T.M., Stewart, J.C., Rand, K.L., & **Hirsh, A.T.** (2023). Pain in people experiencing homelessness: A scoping review. *Annals of Behavioral Medicine*, *57*, 288-300.
- \*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.
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- Robinson, M.E., Bulcourn, B.B., Atchison, J.W., Berger, J.J., Lafayette-Lucy, A., **Hirsh, A.T.**, & Riley, J.L. (2004). Compliance in pain rehabilitation: Patient and provider perspectives. *Pain Medicine*, 5, 66-80.

#### 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

- \*Estrella, E., Bocanegra, A., Williams, A., Powell, A., **Hirsh, A.**, & Gilbert, E. (2026, March). *Joint hypermobility is associated with pain and psychosocial outcomes in youth with chronic pain*. Poster presented at the annual conference of the US Association for the Study of Pain, Philadelphia, PA.
- \*Bogdan, K., Flegge, L., **Hirsh, A.**, & Bushey, M., (2026, March). *Meeting rural patients where they are: Predictors of enrollment and completion in a virtual biofeedback intervention*. Poster presented at the annual conference of the US Association for the Study of Pain, Philadelphia, PA.
- \*Summit, A., **Hirsh, A.**, Chen, C., Pettersson, E., Boersma, K., D'Onofrio, B., Lichtenstein, P., & Quinn, P. (2026, March). *Associations between chronic overlapping pain condition co-occurrence and substance use: A prospective, population-based study in Sweden*. Poster presented at the annual conference of the US Association for the Study of Pain, Philadelphia, PA.
- \*Carey, S., Rand, K., & **Hirsh, A.** (2026, March). *Patient treatment goals vary across chronic pain phenotypes*. Poster presented at the annual conference of the US Association for the Study of Pain, Philadelphia, PA.
- Mulchan, S., Theriault, C., DiVietro, S., Sharer, A., Sukhera, J., Zempsky, W., **Hirsh, A.**, & Litt, M. (2026, March). *Examining patient-provider communication in pediatric sickle cell disease: Perspectives of youth and their caregivers*. Poster presented at the annual conference of the US Association for the Study of Pain, Philadelphia, PA.
- Vorensky, M., Kattari, S., **Hirsh, A.**, Sturgeon, J., Veasley, C., Law, L., Norris, T., Lee, A., VanAntwerp, L., Skipper, H., Rothpletz-Puglia, P., Davis, T., Parrott, J., Williams, D., & Trost, Z. (2026, March). *Engaging people with lived experience (PWLE) to co-develop a chronic widespread pain case vignette survey for physical therapists*. Poster presented at the annual conference of the US Association for the Study of Pain, Philadelphia, PA.
- \*Bogdan, K., Grant, A., Anastas, T., & **Hirsh, A.** (2025, April). *Reducing pain care disparities: Insights from physicians' reactions to a virtual perspective-taking intervention*. Poster presented at the annual conference of the US Association for the Study of Pain, Chicago, IL.
- \*Carey, S., Daggy, J., Ofner, S., Rand, K., Matthias, M., & **Hirsh, A.** (2025, April). *Toward equity in chronic pain care: Pilot-testing a patient engagement intervention for Black patients with chronic pain and depression*. Poster presented at the annual conference of the US Association for the Study of Pain, Chicago, IL. [poster award winner]

- \*Estrella, E., Frazier, P., & **Hirsh, A.** (2025, April). *Adults with symptomatic joint hypermobility report worse pain interference and health-related quality of life than adults with other chronic pain conditions.* Poster presented at the annual conference of the US Association for the Study of Pain, Chicago, IL.
- \*Rose-McCandlish, M., Flegge, L., & **Hirsh, A.** (2025, April). *Characterizing access to, and uptake of, biofeedback for chronic pain.* Poster presented at the annual conference of the US Association for the Study of Pain, Chicago, IL.
- Huang, P., Wegener, S., Aaron, R., **Hirsh, A.**, & Rasmussen, F. (2025, April). *Mind the gap: Success criteria versus treatment expectations among patients referred to a pain psychology clinic.* Poster presented at the annual conference of the US Association for the Study of Pain, Chicago, IL.
- Quinn, P., Meraz, R., Mazurenko, O., Chang, Z., Sjölander, A., Medlin, A., **Hirsh, A.**, Pujol, T., Kroenke, K., & D'Onofrio. (2025, April). *Risk of substance-related morbidity when tapering long-term opioid therapy.* Poster presented at the Collaborative Perspectives on Addiction Meeting, Providence, RI.
- Williams, M., Crawford, C., Schuiling, M., Shell, A., MacDonald, K., Bateman, D., Johnson, I., Gupta, S., **Hirsh, A.**, & Stewart, J. (2025, March). *Feasibility and acceptability of modernized collaborative care for depression among sociodemographically diverse primary care patients: Results from the eIMPACT-DM trial.* Poster presented at the 46<sup>th</sup> Meeting of the Society for Behavioral Medicine, San Francisco, CA.
- Williams, M., Crawford, C., Schuiling, M., Shell, A., MacDonald, K., Bateman, D., Johnson, I., Gupta, S., **Hirsh, A.**, & Stewart, J. (2025, March). *Modernized collaborative care for depression: Impact on psychological risk and protective factors for diabetes among sociodemographically diverse primary care patients.* Paper presented at the 82<sup>nd</sup> Meeting of the Society for Biopsychosocial Science and Medicine, Seattle, WA.
- Taylor, H., Thyvalikakath, T., **Hirsh, A.**, Ben-Assuli, O., & Vest, J. (2025, March). *Leveraging health systems' data to address oral health disparities.* Poster presented at the American Association for Dental, Oral, and Craniofacial Research Meeting, New York, NY.
- \*Grant, A., Bogdan, K., & **Hirsh, A.** (2024, August). *Mixed-methods analysis of prescribers' opioid treatment rationales for chronic pain.* Poster presented at the World Congress on Pain, Amsterdam, Netherlands.
- \*Bogdan, K., Procento, P., Grant, A., Miller, M., Arbutnot, D., Matthias, M. & **Hirsh, A.** (2024, August). *Enhancing patient activation and communication self-efficacy among Black patients with chronic pain.* Poster presented at the World Congress on Pain, Amsterdam, Netherlands.
- \*Lansing, M., Khairallah, J., **Hirsh, A.**, & Mazurenko, O. (2024, July). *Addressing physician treatment bias in chronic pain care with AI-generated Virtual Patient simulations.* Poster presented at IMPRS Research Symposium, Indiana University School of Medicine, Indianapolis, IN.
- \*Manjal, P., Gonsalves, J., Estrella, E., Bocanegra, A., & **Hirsh, A.** (2024, July). *Social determinants of health and pain management strategies among adults with chronic pain: Findings from the 2019 National Health Interview survey.* Poster presented at the CRL Summer Research Symposium, Indiana University, Indianapolis, IN.
- Taylor, H., Ajayi, D., Musey, P., **Hirsh, A.**, Thyvalikakath, T., & Vest, J. (2024, June). *Social and disease risk factors associated with ED use for non-traumatic dental conditions.* Poster presented at the AcademyHealth annual research meeting, Baltimore, MD.
- Lee, J., Taylor, S., Mineo, J., Dickinson, S., **Hirsh, A.**, Carnahan, J., Radhakrishnan, A., Jasuja, G., & Weiner, M. (2024, June). *Mental healthcare utilization by transgender and cisgender veterans with depression: A matched analysis.* Poster presented at the AcademyHealth annual research meeting, Baltimore, MD. [best poster, Women and Gender Health theme]
- Lee, J., Taylor, S., Mineo, J., Dickinson, S., **Hirsh, A.**, Carnahan, J., Radhakrishnan, A., Jasuja, G., & Weiner, M. (2024, May). *Mental healthcare utilization by transgender and cisgender veterans with depression: A matched analysis.* Poster presented at the annual meeting of the Society of General Internal Medicine, Boston, MA.
- \*Mulchan, S., Theriault, C., DiVietro, S., Thomas, H., Zempsky, W., & **Hirsh, A.** (2024, April). *Testing an intervention to address provider implicit bias in pediatric sickle cell disease: Using Virtual Patient technology to move the field forward.* Poster presented at the Annual Meeting of the Society of Pediatric Psychology, New Orleans, LA.
- \*Bocanegra, A., Miller, M., Williams, A., & **Hirsh, A.** (2024, April). *Injustice appraisals mediate the relationship between pain intensity and sleep impairment in children with chronic pain.* Poster presented at the annual conference of the US Association for the Study of Pain, Seattle, WA.
- \*Rose-McCandlish, M., Anastas, T., Miller, M., & **Hirsh, A.** (2024, April). *Gender bias in pain care: What physicians say vs. what they do.* Poster presented at the annual conference of the US Association for the Study of Pain, Seattle, WA.

- \*Estrella, E., Miller, M., Williams, A., & **Hirsh, A.** (2024, April). *Differences in child- and parent-reported injustice appraisals, but not pain, are associated with worse pain outcomes in children with chronic pain.* Poster presented at the annual conference of the US Association for the Study of Pain, Seattle, WA.
- \*Grant, A. & **Hirsh, A.** (2024, April). *Impact of patient race, gender, and prior opioid misuse on physicians' opioid-related risk assessments.* Poster presented at the Collaborative Perspectives on Addiction Annual Meeting (APA Division 50), Denver, CO.
- Krater, C., Burns, D., Schuller-Hsu, S., **Hirsh, A.**, & Garland, E. (2024, April). *The efficacy of integrating a music-based intervention in MOUD community treatment clinics: Protocol for a feasibility trial.* Poster presented at the International Congress on Integrative Medicine & Health, Cleveland, OH.
- Williams, M., Zapolski, T., **Hirsh, A.**, & Stewart, J. (2024, March). *Depression as a causal risk factor for type 2 diabetes: A critical review.* Poster presented at the 45<sup>th</sup> Annual Meeting of the Society of Behavioral Medicine, Philadelphia, PA.
- 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 9<sup>th</sup> 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, CO.
- \*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 45<sup>th</sup> 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 17<sup>th</sup> 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 17<sup>th</sup> 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 17<sup>th</sup> 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 17<sup>th</sup> 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 17<sup>th</sup> 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 17<sup>th</sup> 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 39<sup>th</sup> 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 39<sup>th</sup> 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 39<sup>th</sup> 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 39<sup>th</sup> 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 39<sup>th</sup> 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 76<sup>th</sup> 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 76<sup>th</sup> 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 88<sup>th</sup> 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 11<sup>th</sup> 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 36<sup>th</sup> 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 36<sup>th</sup> 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 36<sup>th</sup> 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 36<sup>th</sup> 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 36<sup>th</sup> 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 38<sup>th</sup> 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 38<sup>th</sup> 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 38<sup>th</sup> 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 16<sup>th</sup> 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 16<sup>th</sup> 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 28<sup>th</sup> 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 35<sup>th</sup> 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 35<sup>th</sup> 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 35<sup>th</sup> Annual Scientific Meeting of the American Pain Society, Austin, TX.
- Valencia, C., Brzuzu, 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 35<sup>th</sup> 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 37<sup>th</sup> 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 10<sup>th</sup> 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 27<sup>th</sup> 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 34<sup>th</sup> 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 34<sup>th</sup> 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 34<sup>th</sup> Annual Scientific Meeting of the American Pain Society, Palm Springs, CA.
- \*Weppeler, 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 34<sup>th</sup> 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 34<sup>th</sup> Annual Scientific Meeting of the American Pain Society, Palm Springs, CA.
- Wheelis, 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 34<sup>th</sup> 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 15<sup>th</sup> 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 33<sup>rd</sup> 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 33<sup>rd</sup> 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 33<sup>rd</sup> 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 33<sup>rd</sup> 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 33<sup>rd</sup> 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 35<sup>th</sup> 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 35<sup>th</sup> 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 32<sup>nd</sup> 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 32<sup>nd</sup> 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 32<sup>nd</sup> 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 32<sup>nd</sup> 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 14<sup>th</sup> 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 90<sup>th</sup> 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 31<sup>st</sup> 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 31<sup>st</sup> 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 30<sup>th</sup> 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 27<sup>th</sup> Annual Meeting of the American Academy of Pain 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 13<sup>th</sup> 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 29<sup>th</sup> 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 29<sup>th</sup> 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 31<sup>st</sup> 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 31<sup>st</sup> 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 31<sup>st</sup> 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 28<sup>th</sup> 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 28<sup>th</sup> 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 28<sup>th</sup> 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 27<sup>th</sup> 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 27<sup>th</sup> 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 27<sup>th</sup> 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 27<sup>th</sup> 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 26<sup>th</sup> 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 25<sup>th</sup> 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 24<sup>th</sup> 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 2<sup>nd</sup> 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.** (2025, November). *Patient-centered coaching to promote racial equity and shared decision-making in chronic pain care*. Presentation at the Pain Management Research Institute, Sydney, NSW, Australia.
- Hirsh, A.T.** (2025, November). *Patient-centered coaching to promote racial equity and shared decision-making in chronic pain care*. Presentation at the Kolling Institute, MSK PRA Seminar Series, Sydney, NSW, Australia.
- Hirsh, A.T.** (2025, October). *Patient-centered coaching to promote racial equity and shared decision-making in chronic pain care*. Keynote Presentation at the Sydney Pain Consortium: Planning for Progress and Impact, Sydney, NSW, Australia.
- Hirsh, A.T.** (2025, May). Moderator/Discussant (with T. Stanton) for the co-hosted Pain, Mind, and Movement SIG and Social Aspects of Pain SIG webinar series. *The social dimensions of pain: Understanding their power and pitfalls in clinical interventions and outcomes*. Speakers: M. Lumley, A. Meulders, & F. Pourkazemi. International Association for the Study of Pain.

- Hirsh, A.T.** (2025, April). *Patient-centered coaching to promote racial equity and shared decision-making in chronic pain care*. In L. Goubert (Chair), Understanding and addressing health inequalities in pain care: Strategies for promoting inclusivity and mental health. Symposium presented at the annual conference of the European Pain Federation, Lyon, France.
- Hirsh, A.T.** (2025, March). *Empowering patients to achieve equity in pain care*. Presentation given at Science on Tap hosted by Guggman Haus Brewing Company and Indiana University, Indianapolis, IN.
- Hirsh, A.T.** (2024, September). *A virtual perspective-taking intervention to reduce race and SES disparities in pain care: Past, present, & future*. Presentation given at the Center for Health Policy Research Seminar Series, Richard M. Fairbanks School of Public Health, Indiana University, Indianapolis, IN.
- Hirsh, A.T.** (2024, September). *Patient-centered coaching to promote racial equity and shared decision-making in chronic pain care*. In S. Bernardes and L. Goubert (Chairs), Addressing disparities in pain care: Perspectives for inclusive healthcare. Symposium presented at the annual conference of the European Health Psychology Society, Cascais, Portugal.
- 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, 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, June). *Patient-focused interventions to enhance shared decision-making for minoritized patients with chronic pain*. Presentation given at the Integrated Pain Management meeting of Project ECHO (Extension for Community Healthcare Outcomes), Indianapolis, IN.
- Hirsh, A.T.** (2023, April). Moderator/Discussant for the Social Aspects of Pain SIG webinar series. *Demographic and sociological approaches to population pain: Trends, disparities, and the role of upstream factors*. Speakers: H. Grol-Prokopczyk & A. Zajakova. International Association for the Study of Pain.
- 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, IN.
- 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 2<sup>nd</sup> 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, IN.
- 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.** (2019, April). *Can A.I. improve pain care?* Presentation given at Science on Tap hosted by Blind Owl Brewing and Indiana University – Purdue University, Indianapolis, IN.

- 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 17<sup>th</sup> 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 17<sup>th</sup> 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 32<sup>nd</sup> 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 32<sup>nd</sup> 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 13<sup>th</sup> 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 30<sup>th</sup> 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 76<sup>th</sup> 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 (TRIPLL), 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 35<sup>th</sup> 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 33<sup>rd</sup> 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

*Course:* Behavioral Medicine  
*Level:* Graduate  
*Department:* Psychology, Indiana University Indianapolis

*Course:* Intervention I: Counseling Approaches  
*Level:* Graduate  
*Department:* Psychology, Indiana University Indianapolis

*Course:* Abnormal Psychology  
*Level:* Undergraduate  
*Department:* Psychology, Indiana University Indianapolis

## EDITORIAL ACTIVITIES

### Editorial Board

Annals of Behavioral Medicine  
 The Journal of Pain

### Guest Editor

Health Psychology & Journal of Pain, 2025 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

HEAL Pain Strategic Planning Committee – Optimization of Existing & Novel Interventions to Improve Pain Management Subcommittee, National Institutes of Health, 2024-2025  
 Mentor, Leadership Academy of the US Association for the Study of Pain (USASP), 2024-2025  
 Workshop on Advancing Health Equity in Pain Management – Multi-Level Interventions Panel leader, HEAL Initiative, National Institutes of Health (NIH), 2024  
 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 (ZAT AM05), NCCIH Training and Education Training and Education Review Panel (CT), National Center for Complementary and Integrative Health (NCCIH), National Institutes of Health (NIH), 2024

Special Emphasis Panel (ZNS1 SRB-F90), Interdisciplinary Training Awards in Clinical Pain Research (T90/R90), National Institute of Neurological Disorders and Stroke (NINDS), National Institutes of Health (NIH), 2024

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)

Canadian Pain Society (CPS)

Society of Behavioral Medicine (SBM)

Society for Biopsychosocial Science and Medicine (SBSM)

Academy of Behavioral Medicine Research (ABMR)