

Mirinda Whitaker

OHIO UNIVERSITY · DEPARTMENT OF PSYCHOLOGY

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Education

PhD, Psychology

University of Utah

Salt Lake City, UT, USA

December 2025

- Emphasis in Quantitative Psychology
- Dissertation: *Modeling pain variability in fibromyalgia*

MS, Psychology

University of Utah

Salt Lake City, UT, USA

May 2022

- Emphasis in Cognition & Neural Science
- Thesis: *Space and time symmetrically influence one another and are not impacted by fibromyalgia pain*

BS, Psychology/ BS, Writing & Rhetoric Studies

University of Utah

Salt Lake City, UT, USA

May 2019

- *summa cum laude*

Professional Appointments

Assistant Professor

Department of Psychology, Ohio University

2026-present

Grants

SUBMISSIONS UNDER REVIEW

February 2026	National Institutes of Health–National Institute of Dental and Craniofacial Research, R01: “Characterizing Dynamic Fluctuations in Self-Regulatory Mechanisms of Chronic Overlapping Pain Conditions” , Role: Co-I, Ohio University	\$150,019
February 2026	American Headache Society/Pfizer, “Modeling the Dynamics of Primary and Secondary Headaches” , Role: Co-I, PI: Dr. Sonia Sharma, SUNY Buffalo	\$250,000

EXTRAMURAL

2024-2026	National Institutes of Health–National Institute of Arthritis and Musculoskeletal and Skin Diseases, NRSA F31: “Modeling Pain Variability in Fibromyalgia” , Role: PI	\$81,427
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INTRAMURAL

2021	Clayton Excellence in Graduate Research Grant , Department of Psychology, University of Utah	\$1,000
2020	Online Research Small Grant , Department of Psychology, University of Utah	\$250
2019	Pilot Research Small Grant , Department of Psychology, University of Utah	\$300
2017–2018	Research Opportunities Grant , Office of Undergraduate Research, University of Utah	\$3,200

Honors and Awards

EXTRAMURAL

2023	Trainee Diversity Award , Society for Affective Science	\$200
2022	Research Highlight , Psychonomic Society's 63rd Annual Meeting	
2021	Graduate Research Fellowship: Honorable Mention , National Science Foundation	
2020	Travel Award , International Association for the Study of Pain	\$1,200

UNIVERSITY OF UTAH

2024	Kevin Hawley Memorial Award , Department of Psychology	\$1,000
	All Around Commendation , Department of Psychology	
2023	Professional Development Award , Department of Psychology	\$500
	Excellence in Research Commendation , Department of Psychology	
	Excellence in Service Commendation , Department of Psychology	
2022	Conference Travel Award , Graduate School	\$1000
	Virtual Conference Travel Award , Graduate School	\$200
	Travel Award , Associated Students of the University of Utah	\$600
	Excellence in Research Commendation , Department of Psychology	
2021	Clayton Excellence in Graduate Research Award , Department of Psychology	\$1000
	Klekas Outstanding Service Award: Runner-up , Department of Psychology	\$100
	Online Research Small Grant , Department of Psychology	\$250
	Excellence in Research Commendation , Department of Psychology	
	Excellence in Teaching Commendation , Department of Psychology	
	Undergraduate Research Mentorship Certificate , Office of Undergraduate Research	
2019	Pilot Research Small Grant , Department of Psychology	\$300
2018	Travel Award , Associated Students of the University of Utah	\$600
	Hagander Book Award , College of Humanities	\$500
2017-2018	Research Opportunities Grants , Office of Undergraduate Research	\$3200

Publications

* denotes mentee

PUBLISHED ARTICLES & BOOK CHAPTERS

10. **Whitaker, M. M.**, Okifuji, A., & Deboeck, P. R. (2026). How am I doing? It varies: Mixed-effects location scale modeling to examine intra-individual variability in health-related research. *Journal of Behavioral Medicine (Special Issue on Data Analysis for Behavioral Medicine)*.
9. MacIntyre, E., **Whitaker, M. M.**, Braithwaite, F. A., Stefanucci, J. K. & Stanton, T. R. (2025). Assessing visuospatial perception in clinical and healthy populations: Test-retest reliability and smallest real difference of hill steepness estimation and the distance-on-hill task. *Psychological Research*.
8. **Whitaker, M. M.**, Bergeman, C. S., & Deboeck, P. R. (2024). The Bayesian Reservoir Model of Psychological Regulation. *Psychological Methods*.
7. **Whitaker, M. M.**, Odell, D., Deboeck, P., Stefanucci, J. K., & Okifuji, A. O. (2024). Increased pain variability in chronic pain patients: A role for pain catastrophizing. *The Journal of Pain*.

6. Shayman, C., Barhorst-Cates, E., Hullar, T., **Whitaker, M. M.**, Creem-Regehr, S. H., & Stefanucci, J. K. (2024). A Redundant Auditory Cue Improves Spatial Updating in a Virtual Reality Navigation Task. *Attention, Perception, & Psychophysics*.
5. **Whitaker, M. M.**, *Hansen, R., Creem-Regehr S. H., & Stefanucci, J. K. (2024). The relationship between space and time perception: a registered replication of Casasanto and Boroditsky (2008). *Attention, Perception, & Psychophysics*.
4. Adams, H., Creem-Regehr S. H., **Whitaker, M. M.**, Stefanucci, J. K., & Bodenheimer, B. (2023). Perceiving Absolute Distance in Augmented Reality Displays with Realistic and Non-realistic Shadows. *ACM Transactions on Applied Perception*
3. Gill, D. M., **Whitaker, M. M.**, *Olpin, Z., & Stefanucci, J. K. (2022). The perceived duration of vast spaces is mediated by awe. *Attention, Perception, & Psychophysics*.
2. Stefanucci, J. K., Saxon, M., & **Whitaker, M. M.** (2021). Embodied perception and Action in Real and Virtual Environments. In: Robinson M.D., Thomas L.E. (eds) *Handbook of Embodied Psychology: Thinking, Feeling, and Acting* (pp. 311-336). Springer, Cham.
1. **Whitaker, M. M.**, Pointon, G. D., Tarampi, M. R., & Rand, K. M. (2020). Expertise effects on the perceptual and cognitive tasks of indoor rock climbing. *Memory & Cognition*, 1-17.

MANUSCRIPTS IN PREPARATION

- Whitaker, M. M.**, Stefanucci, J. K., Deboeck, P. R. & Okifuji A. (in preparation). Variability as a key facet of fibromyalgia: modeling approaches and potential mechanisms. *Target journal: PAIN*
- Whitaker, M. M.**, Okifuji A., Creem-Regehr, S. H., & Stefanucci, J. K. (in preparation). Space and time symmetrically influence one another in perception and are unaffected by chronic pain. *Target journal: Cognition & Emotion*
- Joiner, R., Nelson, N., Deboeck, P.R., **Whitaker, M. M.**, & Bergeman, C. S. (in preparation). Longitudinal reservoir model of stress dissipation and concomitant perceptions of control. *Target journal: Psychology and Aging*

Conference Presentations

⁺ presenting author, * mentored undergraduate

TALKS

- ⁺ **Whitaker, M.**, Stefanucci, J. K., Okifuji, A., & Deboeck, P. R. (March, 2026). *Modeling the Dynamics of Pain and Emotion: The Moderated Reservoir Model* Flash talk presented at the 2026 annual meeting of the Society for Affective Science.
- ⁺ **Whitaker, M.** & Deboeck, P. R. (May, 2025). *Beyond Means & Variances, Thinking about the Dynamics of Intensive Intraindividual Health and Psychological Data*. Symposium organized for the 2025 Society for Ambulatory Assessment Conference.
 - ⁺ **Whitaker, M.** Okifuji, A. & Deboeck, P. R. (May, 2025). *Modeling affective dynamics using the Bayesian Reservoir Model*. Symposia talk presented at the 2025 Society for Ambulatory Assessment Conference.
- ⁺ **Whitaker, M.**, Bergeman, C. S., & Deboeck, P. R. (June, 2023). *Summing the ups and downs of life: The Bayesian Reservoir Model of Psychological Regulation*. Talk presented at the 2023 Modern Modeling Methods Conference.
- ⁺ **Whitaker, M.**, Okifuji, A., Deboeck, P. R., Creem-Regehr, S. H., & Stefanucci, J. K. (April, 2023). *Modeling the dynamics of pain and emotional distress using the Bayesian Reservoir Model*. Flash talk presented at the 2023 annual meeting of the Society for Affective Science.
- ⁺ **Whitaker, M.**, Finney, H., *Elston, J., *Epperson, L., Creem-Regehr, S. H., & Stefanucci, J. K. (November, 2022). *The Perceptual Fidelity of Affordance Judgments in Real and Virtual Environments*. Presented at the 2022 annual meeting of the Psychonomics Society.
- ⁺ **Whitaker, M.**, Okifuji, A., Creem-Regehr S., & Stefanucci, J. (April, 2022). *Increased pain variability in chronic pain patients: a role for pain catastrophizing*. Flash talk presented at the 2022 annual meeting of the Society for Affective Science.

⁺**Whitaker, M.** (March, 2018). *Desirable difficulties in the writing center*. Paper presented at The Rocky Mountain Writing Center Conference.

POSTERS

- ⁺**Whitaker, M.**, Deboeck, P.R., & Okifuji, A. (August, 2024). *An application of mixed-effects location scale modeling to examine symptom variability in fibromyalgia*. Poster presented at the 2024 IASP World Congress on pain.
- ⁺**Whitaker, M.**, Okifuji, A., Stefanucci, J., & Deboeck, P.R. (June, 2024). *Modeling the dynamics of pain and emotion interactions in fibromyalgia using the valved Bayesian Reservoir Model*. Poster presented at the 2024 Modern Modeling Methods Conference.
- ⁺**Whitaker, M.**, Deboeck, P.R., Stefanucci, J., Creem-Regehr S., & Okifuji, A. (March, 2024). *Modeling pain variability in fibromyalgia*. Poster presented at the 2024 Society for Affective Science Conference.
- ⁺**Whitaker, M.**, Deboeck, P.R., & Okifuji, A. (June, 2023). *Derivative estimation to quantify pain variability in chronic pain patients*. Poster presented at the 2023 Modern Modeling Methods Conference.
- ⁺Munion, A., **Whitaker, M.**, & Okifuji, A. (April, 2023). *A DSEM exploration of EMA reports of pain and emotional distress for patients with fibromyalgia*. Poster presented at the 2023 annual meeting of the Society for Affective Science.
- ⁺**Whitaker, M.**, Deboeck, P., Bruce, R. A., Burstedt, D., Mistunaga, R., Odell, D. & Okifuji, A. O. (September, 2022). *Increased pain variability in chronic pain patients: A role for pain catastrophizing*. Poster presented at the 2022 IASP World Congress on pain.
- ⁺Faulkner, J., **Whitaker, M.**, & Rand, K. (November, 2022). *Effects of working memory on interference between space and time perception*. Poster presented at the 2022 annual meeting of the Psychonomics Society.
- ⁺**Whitaker M.**, Okifuji, A., Creem-Regehr S., & Stefanucci, J. (May, 2022). *The impact of fibromyalgia on space and time perception*. Poster presented at the 2022 annual meeting of the Vision Sciences Society.
- ⁺Konold, C., Geuss, M., Butner, J., **Whitaker, M.**, Murdock, R., Stefanucci, J., Creem-Regehr S., & Drew, T. (May, 2022). *Unintended consequences of trying to help: augmented target recognition cues bias perception*. Poster presented at the 2022 annual meeting of the Vision Sciences Society.
- ⁺Faulkner, J., **Whitaker, M.**, & Rand, K. (April, 2022). *Effects of Working Memory on Perception of Space and Time*. Poster presented at the 2022 Undergraduate Research Symposium.
- ⁺**Whitaker, M.**, Gill, D., Azbill, M.S., & Stefanucci, J.K. (November, 2021). *Perceived size of objects is affected by the vastness of a scene*. Poster presented at the 2021 annual meeting of the Psychonomics Society.
- ⁺Hansen, R., **Whitaker, M.**, & Stefanucci, J. (November, 2021). *Practice Makes Near Perfect: The Effects of Practicing Music on Perception of Time and Space*. Poster presented at the 2021 annual meeting the Psychonomics Society.
- ⁺**Whitaker, M.**, Stefanucci, J., Creem-Regehr S., & Okifuji, A..(September, 2020). *Perception of Action Capabilities with Experimentally Induced Pain*. Poster presented at the 2020 International Association for Pain Virtual Expo.
- ⁺**Whitaker, M.**, Rand, K., & Pointon, G. (November, 2018) *Expertise effects on affordance perception and action in indoor rock climbing*. Poster presented at the 2018 Annual Meeting of the Psychonomics Society, New Orleans, LA.
- Rand, K. M., Tarampi M. R., ⁺**Whitaker, M.**, & Pointon, G. (November, 2017). *The effect of expertise on motor sequence and visual memory for indoor rock-climbing routes*. Poster presented at the 2017 Annual Meeting of the Psychonomics Society, Vancouver, BC.

WORKSHOPS/ CONFERENCE COURSES

Whitaker, M., Creem-Regehr, S. & Bodenheimer, B. (July, 2024). Bayesian Statistics: A Practical Introduction for Computer Graphics. Short Course to be presented at the 2024 Association for Computing Machinery (ACM) Special Interest Group on Computer Graphics and Interactive Techniques (SIGGRAPH) Conference.

Teaching Experience

⁺denotes graduate level course

INSTRUCTOR OF RECORD

Spring 2026	*Introduction to Linear Regression Analyses , Instructor	Ohio University
Fall 2021	Statistical Methods in Psychology (online) , Graduate Lab Instructor	University of Utah
Summer 2021	Sensation and Perception (online) , Graduate Instructor	University of Utah

TEACHING ASSISTANT-SHIPS

Spring 2024	Honors Thesis Seminar II , Graduate Teaching Assistant	University of Utah
Fall 2023	Honors Thesis Seminar I , Graduate Teaching Assistant	University of Utah
Spring 2023	*Multi-Level Modeling II (hybrid) , Graduate Teaching Assistant	University of Utah
Spring 2022	*Multi-Level Modeling I (online) , Graduate Teaching Assistant	University of Utah
Spring 2021	*Quantitative Methods II: Generalized Linear Modeling (online) , Graduate Teaching Assistant	University of Utah
Fall 2020	*Quantitative Methods I: Correlation and Regression (online) , Graduate Teaching Assistant	University of Utah

CONFERENCE COURSES

July 2024	Bayesian Statistics: A Practical Introduction for Computer Graphics. , Short Course presented at the 2024 Association for Computing Machinery (ACM) Special Interest Group on Computer Graphics and Interactive Techniques (SIGGRAPH) Conference
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INVITED WORKSHOPS

November 2021	University of Utah Research Education , <i>Topics in Mentoring for Graduate/Undergraduate Students and Post-Doctoral Scholars</i>
February 2020	Undergraduate Research Opportunities Program , <i>Editing a Research Proposal</i>
October 2019	Undergraduate Research Opportunities Program , <i>Writing a Research Proposal</i>

GUEST LECTURES

April 2024	Sensation and Perception , <i>Quantifying Pain Variability</i>
November 2023	Honors Thesis Seminar , <i>Swiftistics</i>
April 2020	Sensation and Perception , <i>Pain Research</i>
November 2019	*Virtual Reality for Computer Science , <i>Pain and Perception in Virtual Reality</i>
Sept. 2019	*Research Methods in Kinesiology , <i>Research Writing in the Health Sciences</i>
November 2018	Sensation and Perception , <i>Touch and Pain</i>
Sept. 2018	Sensation and Perception , <i>Visual Receptive Fields</i>
Sept. 2018	Sensation and Perception , <i>Neural Integration in Vision</i>
March 2018	Memory and Cognition , <i>Suggestion and False Memory</i>

January 2018 **Memory and Cognition**, *Memory Errors—Absent-mindedness*
 November 2017 **Brain and Behavior**, *Pain Perception*

Professional Experience

UNIVERSITY OF UTAH

2024-2025 **Junior Statistical Consultant**, Department of Psychology
 2021-2022 **Statistical Consultant**, VAAST Lab/ Applied Visual Attention Lab
 2019-2020 **Graduate Health Sciences Writing Fellow**, University Writing Center
 2018-2020 **Research Writing Liaison**, University Writing Center/Office of Undergraduate Research
 2017-2019 **Undergraduate Writing Tutor**, University Writing Center

Service

AD HOC REVIEWER

**co-reviewed*

Quarterly Journal of Experimental Psychology - 2022 (1)
 Psychonomic Bulletin and Review - 2022 (1)
 Attention, Perception, and Psychophysics - 2021 (1), 2022 (1)
 Behavioral Brain Research - 2022 (1)
 Visual Cognition - 2020 (1)
 IEEE VR - 2022 (1)
 Human Movement Science - 2022 (1)
 Psychology of Sport and Exercise Science - 2020 (1), 2021 (1)
 Plos One - 2022 (1)
 Journal of Pain (3*)
 Journal of Behavioral Medicine - 2025 (3)
 Pain Practice (1*)
 PAIN - 2023 (1*)
 Annals of Behavioral Medicine - 2025 (1)

OUTREACH & PROMOTION OF INCLUSIVE SCIENCE

** bulleted items indicate presentations given or awards received*

Co-organizer, FemSTEM: quantitative reading group promoting accessibility in quantitative methods

2020-2025

- *QuantCrit & Accessibility in Data Visualizations* (Fall 2024)
- *Network Modeling* (Spring 2024)
- *Statistical Power* (Fall 2023)
- *Model Comparison & Estimation Algorithms* (Spring 2023)
- *Intensive Longitudinal Data Analysis* (Fall 2022)
- *Simulation Methods* (Spring 2022)
- *Psychometrics & Measurement Theory* (Fall 2021)
- *Multi-level Modeling & Intensive Data Methods* (Spring 2021)
- *Bayesian Statistics* (Fall 2020)

Member, University of Utah Advocacy, Community, & Engagement Committee

2019-2024

- University of Utah: 2021 Beacons of Excellence Award
- University of Utah College of Social and Behavioral Science: 2021 Advancing Equity and Connecting Communities Award

President & Co-organizer , Graduate School Application Advisory: graduate-student-run organization that matches undergraduate students interested in pursuing graduate school with graduate student mentors	2019-2023
• <i>Topics in Mentoring and Mentee-ing for Graduate/Undergraduate Student and Post-Doctoral Scholars</i>, University of Utah Research Education (November 2021) • <i>Applying to Graduate School</i>, University of Utah Asia Campus (April 2021) • <i>Panelist Graduate School Information Session</i>, University of Utah College of Social and Behavioral Sciences Solutions Scholars (November 2020)	
Judge , Annual Utah Charter School Science and Engineering Fair	February 2021
Member , University of Utah Psychology Department Outreach Committee	2019-2020
• <i>Psychology as a Science</i>, Bright Futures: Park City High School (November 2019)	
Volunteer Writing Tutor , Community Writing Center, Salt Lake Community College	2018-2020
DEPARTMENTAL SERVICE	
Graduate Student Representative , Quantitative Psychology Faculty Search Committee	Fall 2023
Graduate Student Representative , Cognition & Neural Science Faculty Search Committee	Fall 2022
CNS Area Representative , Professional Issues and Ethics(PIE) Committee: a departmental resource focused on professional issues and ethics with the aim of preventing serious ethical and boundary issues	Fall 2021- Spring 2022
Invited Member , Klekas Outstanding Service Award Review Committee	March 2022

Mentoring Experience

UNIVERSITY OF UTAH

2022-2023	Kimberly Zimmerman , Undergraduate Research Opportunities Program: The Influence of Anxiety on the Perception of Space and Time — <i>Currently completing a PhD in Psychology with a specialization in Brain & Cognition at Utah State University</i>
2021-2023	Jim Faulkner , Undergraduate Research Opportunities Program/ Quantitative Methods Certificate: The Effects of Working Memory on Perception of Space and Time — <i>Currently completing a PhD in Psychology with a specialization in Cognition & Cognitive Neuroscience at the University of Michigan</i>
2019-2022	Lucas Epperson , Human Factors Certificate: The Perceptual Fidelity of Affordance Judgments in Real and Virtual Environments— <i>Currently completing a Masters in Human Factors Engineering at Emory-Riddle Aeronautical University</i>
2019-2021	Rachael Hansen , Undergraduate Research Opportunities Program: <i>The Impact of Musical Expertise on the Perception of Space and Time</i> — <i>Currently employed at Microsoft</i>

Professional Memberships

International Association for the Study of Pain
The Society for Affective Science

Relevant Expertise _____

ADVANCED QUANTITATIVE TRAINING

Formal Coursework

- Spring 2025 *Dynamical Systems Theory*, University of Utah
- Spring 2025 *Missing Data*, University of Utah
- Spring 2023 *Advanced Multilevel Modeling*, University of Utah
- Spring 2022 *Introduction to Statistical Consultation and Collaboration*, University of Utah
- Fall 2021 *Structural Equation Modeling*, University of Utah
- Spring 2021 *Multilevel Modeling*, University of Utah
- Fall 2020 *Temporal Data Analysis*, University of Utah

Workshops

- Dec. 2025 *Advanced Bayesian Data Analysis*, Statistical Horizons
- Aug. 2024 *Passion-Driven Statistics*, InStats
- Oct. 2022 *Intensive Longitudinal Data Analysis*, Center Stat
- Sept. 2021 *Applied Bayesian Data Analysis*, Statistical Horizons
- May 2021 *Introduction to Structural Equation Modeling*, Center Stat

SKILLS

Programming Languages

R, STAN, Python, LaTeX, C++, JavaScript, Matlab, BUGS, JAGS

Statistical Software

RStudio, Mplus, SPSS, Graph Pad Prism, jamovi

Statistical Methods

OLS Regression, Generalized Linear Modeling (e.g., logistic/probit & Poisson regression), Multilevel Modeling, Bayesian Methods, Mixed-Effects Location Scale (MELS) Modeling, Structural Equation Modeling, Non-Parametric Methods, Missing Data Techniques (e.g. multiple imputation & maximum likelihood), Network Analysis, Factor Analysis, Time-Series Methods (e.g., auto-correlation/regression, moving average models)

Presentation & Communication

Adobe Suite Programs (e.g., photoshop, illustrator), Copy Editing

Computing

On-Demand High Performance Computing