

MICHELLE M. RAMEY, Ph.D.**CURRICULUM VITAE**

Contact Information

Address: Department of Psychological Science E-mail: mmramey@uark.edu
 University of Arkansas
 Fayetteville, AR 72701

Research Interests

My work focuses on understanding episodic memory by investigating its interactions with other cognitive processes--particularly visual attention and semantic knowledge--in general and in aging. I primarily use eyetracking, novel task design, and computational modeling.

Academic Positions

2024 – Present	Assistant Professor of Cognitive Psychology at the Department of Psychological Science, University of Arkansas, Fayetteville
2023 – 2024	NSF SPRF Postdoctoral fellow at the Department of Psychological Science, University of Arkansas, Fayetteville
2021 – 2023	Postdoctoral researcher at the Department of Psychological Science, University of Arkansas, Fayetteville

Education

<u>Degree</u>	<u>Year</u>	<u>Institution</u>
Ph.D. in Psychology	2021	University of California, Davis
M.A. in Psychology	2018	University of California, Davis
B.A. in Psychology	2016	University of California, Berkeley

Extramural Grants**Awarded**

National Science Foundation	9/01/23 – 9/01/25
SPRF: <i>Taking a Computational Approach to Understanding Schema-Memory Interactions</i>	
Role: PI	
Amount awarded: \$160,000	
National Institutes of Health – National Institute on Aging (NIA)	9/30/23 – 9/30/26
F32: <i>How prior knowledge impacts episodic memory deficits in aging</i>	
Role: PI	
Impact Score: 16	
Amount awarded: \$210,372	

Unfunded Grants Sought

National Science Foundation

9/01/22 – 8/31/24

SPRF: *Determining the role of creative processes in familiarity-based associative memory*

Role: PI

Score: "Competitive"

Publications

Published Manuscripts

Ramey, M. M. & Lampinen, J. M. (in press). Precise schemas amplify memory biases: Extending Bayesian models of reconstructive memory. *Journal of Experimental Psychology: General*. Impact factor (2025): 3.7

Ramey, M. M. (2026) Prior knowledge biases episodic memory by filling in the gaps in imprecise memories: Simulating aging effects in younger adults. *Cognition*, 274, 106565, <https://doi.org/10.1016/j.cognition.2026.106565>
Impact factor (2024): 2.8

Pennekamp, P., **Ramey, M. M.**, Töredi, D., & Lampinen, J. M. (2026). Does Visual Attention to Non-Diagnostic Facial Features Predict Eyewitness Identification Accuracy? Implications for Diagnostic Feature Detection Theory. *PloS one*, 21(9), e0355167. <https://doi.org/10.1371/journal.pone.0355167>
Impact factor (2024): 2.8

Ramey, M. M. & Zabelina, D. L. (2025). Using visual imagery to manipulate recognition memory for faces whose appearance has changed. *Cognitive Research: Principles and Implications*, 10(1), 65, <https://doi.org/10.1186/s41235-025-00671-0>
Impact factor (2024): 3.1

Ramey, M. M., Henderson, J. M., & Yonelinas, A. P. (2025). Episodic memory and semantic knowledge interact to guide eye movements during visual search: Distinct effects of conscious and unconscious memory. *Psychonomic Bulletin & Review*, 32(5), 2395-2409. <https://doi.org/10.3758/s13423-025-02686-6>
Impact factor (2023): 3.2

Ramey, M. M., Yonelinas, A. P., & Henderson, J. M. (2024). How schema knowledge influences memory in older adults: Filling in the gaps, or leading memory astray? *Cognition*, 250, 105826, <https://doi.org/10.1016/j.cognition.2024.105826>
Impact factor (2022): 3.4

- Ramey, M. M.** & Zabelina, D. L. (2024). Divergent thinking modulates interactions between episodic memory and schema knowledge: Controlled and spontaneous episodic retrieval processes. *Memory & Cognition*, 1-17, <https://doi.org/10.3758/s13421-023-01493-5>
Impact factor (2022): 2.4
- Ramey, M. M.**, Henderson, J. M., Yonelinas, A. P. (2022). Eye movements dissociate between perceiving, sensing and unconscious change detection in scenes. *Psychonomic Bulletin & Review*, 29, 2122-2132. <https://doi.org/10.3758/s13423-022-02122-z>
Impact factor (2021): 5.4
- Ramey, M. M.**, Henderson, J. M., Yonelinas, A. P. (2022). Episodic memory processes modulate how schema knowledge is used in spatial memory decisions. *Cognition*, 225, 105111. <https://doi.org/10.1016/j.cognition.2022.105111>
Impact factor (2021): 4.0
- Yonelinas, A. P., **Ramey, M. M.**, Riddell, C. (2022). The role of recollection and familiarity in recognition memory: A selective review. In M. J. Kahana & A. D. Wagner (Eds.), *The handbook of human memory: Foundations and applications*. Oxford University Press.
- Ramey, M. M.**, Yonelinas, A. P., Henderson, J. M. (2020). Why do we retrace our visual steps? Semantic and episodic memory in gaze reinstatement. *Learning & Memory*, 27(7), 275-283. <https://doi.org/10.1101/lm.051227.119>
Impact factor (2020): 2.5
- Ramey, M. M.**, Shields, G. S., Yonelinas, A. P. (2020). Markers of a plant-based diet relate to memory and executive function in older adults. *Nutritional Neuroscience*, 25(2), 276-285. <https://doi.org/10.1080/1028415X.2020.1751506>
Impact factor (2020): 5.0
- Ramey, M. M.**, Henderson, J. M., Yonelinas, A. P. (2020). The spatial distribution of attention predicts familiarity strength during encoding and retrieval. *Journal of Experimental Psychology: General*, 149(11), 2046-2062. <https://doi.org/10.1037/xge0000758>
Impact factor (2020): 4.9
- Ramey, M. M.**, Yonelinas, A. P., & Henderson, J. M. (2019). Conscious and unconscious memory differentially impact attention: Eye movements, visual search, and recognition processes. *Cognition*, 185, 71-82. <https://doi.org/10.1016/j.cognition.2019.01.007>
Impact factor (2019): 3.3
- Shields, G. S., Rivers, A. M., **Ramey, M. M.**, Trainor, B. C., & Yonelinas, A. P. (2019). Mild acute stress improves response speed without impairing accuracy or interference control in two selective attention tasks: Implications for theories of stress and cognition. *Psychoneuroendocrinology*, 108, 78-86. <https://doi.org/10.1016/j.psyneuen.2019.06.001>
Impact factor (2019): 4.7

Shields, G. S., **Ramey, M. M.**, Slavich, G. M., & Yonelinas, A. P. (2019). Determining the mechanisms through which recent life stress predicts working memory impairments: Precision or capacity? *Stress*, 22, 280-285. <https://doi.org/10.1080/10253890.2018.1556635>
Impact factor (2019): 3.1

Awards and Honors

2025	University of Arkansas Honors College Equipment Grant (\$5000)
2025	University of Arkansas Honors College Research Grant (\$5500)
2025	Fulbright Summer Research Stipend (\$5000)
2021	Psychonomic Society Graduate Conference Award (\$1000)
2021	Dissertation Fellowship award (\$13,755)
2016	Graduated <i>summa cum laude</i>
2012 – 2016	Regents' and Chancellor's scholarship
2012 – 2016	Dean's list

Selected Presentations

Invited Talks (in-person)

Ramey, M.M. (2026, November). *Modeling eye movements to probe memory processes*. Invited talk at the annual satellite meeting of the Society for Mathematical Psychology, San Diego, CA.

Ramey, M.M. (2026, October). *Rational reconstruction dynamics drive age-related increases in schema effects on memory*. Invited symposium talk at the annual meeting of the Memory Disorders Research Society, Toronto, ON, Canada.

Ramey, M. M. (2026, April). *Are memory distortions rational? Testing Bayesian models of reconstructive memory*. Behavior, Brain, & Cognition series, Department of Psychology, Washington University in St. Louis, St. Louis, MO.

Ramey, M. M. (2026, April). *How our expectations bias our eyes and memories*. Annual colloquium series, Department of Psychology, Rutgers University, Newark, NJ.

Ramey, M. M. (2025, April). *The making of a memory: How your brain reconstructs the past*. Butterfield Trails Village, Fayetteville, Arkansas.

Ramey, M. M. (2023, February). *How schemas and memory interact to influence memory decisions in older adults*. Psychology department, University of Missouri.

Ramey, M. M. (2023, January). *How schemas influence our memories*. Student Neuroscience Organization, University of Arkansas.

Invited Talks (virtual)

Ramey, M. M. (2025, February). *How schemas and episodic memory interact during retrieval: Bayesian interactions in memory decisions and attentional guidance*. Tompary Lab, Drexel University.

Conference Presentations (Talks)

Ramey, M.M. & Shields, G.S. (2026, November). *Eye movements reveal a threshold process in episodic memory*. Talk at the annual meeting of the Psychonomic Society, San Diego, CA. (In-person)

Ramey, M.M. & Shields, G.S. (2026, July). *Eye movements reveal a threshold process in memory*. Talk at the annual meeting of the Society for Mathematical Psychology, Montreal, Québec, Canada. (In-person)

Ramey, M. M. & Lampinen, J. M. (2025, November). *How prior knowledge biases memory: Eye movements reveal accurate episodic memory traces even when responses are schema-biased*. Talk at the annual meeting of the Psychonomic Society, Denver, CO. (In-person)

Ramey, M. M., Shields, G. S., & Lampinen, J. L. (2024, November). *The role of schema precision in schema-relevant episodic memory: Do more precise schemas lead to more biased memories?* Talk at the annual meeting of the Psychonomic Society, New York, NY. (In-person)

Ramey, M. M., Henderson, J. M., & Yonelinas, A. P. (2020, November). *Distinct patterns of visual sampling in perceiving and sensing-based change detection*. Talk at the annual Bay Area Memory Meeting, Palo Alto, CA. (Virtual)

Ramey, M. M., Yonelinas, A. P., & Henderson, J. M. (2017, August). *Contextual cueing and memory for scenes: Eye movements dissociate conscious from unconscious memory*. Talk at the annual meeting of the Cognitive Science Association for Interdisciplinary Learning, Hood River, OR. (In-person)

Conference Presentations (Posters)

* graduate mentee

Terry, B.A.,* Shields, G.S., & **Ramey, M.M.** (2026, November). *How Inhibitory Demand Impacts Memory Encoding*. Poster presented at the annual meeting of the Psychonomic Society, San Diego, CA.

- Shields, G.S. & **Ramey, M.M.** (2026, July). *Look at this: Eye movements can account for perceptual interference and a shrinking spotlight*. Poster presented at the annual meeting of the Society for Mathematical Psychology, Montreal, Québec, Canada.
- Terry, B.A.* & **Ramey, M.M.** (2025, November). *Prediction error improves memory for the source of the error, but not the broader scene: Examining schema congruency effects on recognition*. Poster presented at the annual meeting of the Psychonomic Society, Denver, CO.
- Shields, G.S. & **Ramey, M.M.** (2025, November). *Look at this: Eye movements can account for perceptual interference and a shrinking spotlight*. Poster presented at the annual meeting of the Psychonomic Society, Denver, CO.
- Ramey, M. M.** & Shields, G. S. (2023, October). *Do schemas and episodic memory cooperate or compete to influence memory decisions? A leaky competing accumulator modeling approach*. Poster presented at the annual meeting of ARMADILLO (Southern conference for cognitive psychology).
- Ramey, M. M.** & Shields, G. S. (2022, November). *Understanding the underlying dynamics of schema-memory interactions using computational modeling*. Poster presented at the annual meeting of the Psychonomic Society.
- Ramey, M. M.** & Zabelina, D. L. (2022, May). *Creative people use memory differently: Divergent thinking modulates how episodic memory is combined with semantic knowledge*. Poster presented at the annual meeting of the Society for the Neuroscience of Creativity.
- Ramey, M. M.** & Zabelina, D. L. (2022, April). *Divergent thinking modulates how episodic memory is combined with semantic knowledge*. Poster presented at the annual meeting of the Cognitive Neuroscience Society.
- Ramey, M. M.**, Henderson, J. M., & Yonelinas, A. P. (2021, November). *Schema knowledge and episodic memory trade off to influence spatial memory*. Poster presented at the annual meeting of the Psychonomic Society.
- Ramey, M. M.**, Shields, G. S., & Yonelinas, A. P. (2018, May). *Dietary Patterns in the Wild: Fiber and Fat Consumption Relates to Memory and Executive Function in Older Adults*. Poster presented at the annual meeting of the Association for Psychological Science, San Francisco, CA.
- Ramey, M. M.**, Shields, G. S., & Yonelinas, A. P. (2018, May). *Don't forget your vegetables: Markers of plant-based diets predict memory and executive function in older adults*. Poster presented at the Annual Psychology Conference at the University of California, Davis, Davis, CA. Won 2nd place in the presentation competition.
- Ramey, M. M.**, Yonelinas, A. P., & Henderson, J. M. (2017, November). *Contextual cueing and memory for scenes: Eye movements dissociate conscious from unconscious memory*. Poster presented at the annual meeting of the Psychonomic Society, Vancouver, British Columbia.

Ramey, M. M., Yonelinas, A. P., & Henderson, J. M. (2017, November). *Conscious and unconscious memory differentially alter eye movements: Contextual cueing with real world scenes*. Poster presented at the annual meeting of the Object Perception, Attention, & Memory conference, Vancouver, British Columbia.

Ramey, M.M., Sazma, M.A., & Yonelinas, A.P. (2017, June). *The relationship between caloric intake and stress response*. Poster presented at the Mind and Brain Poster Day at the Center for Mind and Brain, Davis, CA.

Ramey, M. M., Sazma, M. A., & Yonelinas, A. P. (2017, May). *The relationship between caloric intake and stress response*. Poster presented at the psychology departmental conference at the University of California, Davis, Davis, CA.

Ramey, M. M. & Jacobs, L. F. (2016, May). *Personality in coevolved species: Olfactory tracking by search dogs and their human handlers*. Poster presented at the psychology departmental poster session at the University of California, Berkeley, Berkeley, CA.

Teaching and Mentoring

Courses Taught

Graduate seminar in learning, memory, & cognition (Fall 2026)

Perception (Fall 2024, Fall 2025, Fall 2026)

Cognitive Psychology (Spring 2025, Fall 2025, Spring 2026)

Invited Lectures

Research Practicum guest lecture: "How to write competitive grants" (Spring 2025, Spring 2026)

Student Mentoring

Brody Terry, PhD Student (2024 – Present)

Caden Fowler, PhD student (2026 – Present)

Vincent Baxley, Honors Thesis student (2026 – Present)

Tessa Powell, Honors Thesis student (2026- Present)

Sarah Waller, Honors Thesis Student (2024 –2026) – honors thesis achieved Summa

Professional Service

Editorial board member:

Cognition (June 2025 – Present)

Ad hoc reviewer for journal articles:

Behavior Research Methods

Behavioral Brain Research

Cognition

Cognitive Processing

Consciousness & Cognition

Developmental Psychology

Journal of Experimental Psychology: General
Journal of Experimental Psychology: Learning, Memory, & Cognition
Memory
Memory & Cognition
Nutrients
PeerJ
Psychiatry Research
Psychology, Crime, & Law
Psychological Research
Psychonomic Bulletin & Review
Scientific Reports
Trends in Cognitive Sciences

Ad hoc reviewer for grant submissions:

NSF (Perception, Action, and Cognition; PAC)

Israel Science Foundation

Skills

Programming:	R (<i>since 2014</i>), MATLAB (<i>since 2013</i>), Python (<i>since 2023</i>), Julia (<i>since 2024</i>), jsPsych (JavaScript; <i>since 2020</i>), HTML & CSS (<i>since 2004</i>)
GUI Software:	SR Research ExperimentBuilder, Adobe Photoshop, Qualtrics (and embedding JavaScript within Qualtrics)
Analytic Expertise:	Eyetracking analysis, developing novel computational cognitive models of behavioral and eyetracking data, multilevel models, diffusion models and leaky competing accumulators, mixture modeling, Bayes factor analysis, cluster analysis, receiver operating characteristics, dimensionality reduction, classification using neural networks and random forest models
Misc. Skills:	Eyetracking, EEG, scene stimuli creation (using MATLAB and Photoshop) and norming, ELISA