

MICHELLE M. RAMEY, Ph.D.

CURRICULUM VITAE

Contact Information

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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

Pennekamp, P., **Ramey, M. M.**, Töredi, D., & Lampinen, J. M. (in press). Does Visual Attention to Non-Diagnostic Facial Features Predict Eyewitness Identification Accuracy? Implications for Diagnostic Feature Detection Theory. *PLOS ONE*.
Impact factor (2024): 2.8

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.
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, 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. (Coauthors on presented work: John Henderson, Andrew Yonelinas, Grant Shields)

Ramey, M. M. (2023, January). *How schemas influence our memories.* Student Neuroscience Organization, University of Arkansas. (Coauthors on presented work: Andrew Yonelinas, John Henderson, Grant Shields)

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. (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. (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, MATLAB, Python, Julia, jsPsych (JavaScript), HTML & CSS
GUI Software:	SR Research ExperimentBuilder, Adobe Photoshop, Qualtrics (and embedding JavaScript within Qualtrics)
Analytic Expertise:	Eyetracking analysis, computational cognitive modeling, cluster analysis, multilevel models, 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