

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—primarily visual attention and semantic knowledge—in general and in aging.

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: *Taking a Computational Approach to Understanding Schema-Memory Interactions*
Role: PI
Amount awarded: \$160,000

National Institutes of Health – National Institute on Aging (NIA) 9/30/23 – 9/30/26
F32: *How prior knowledge impacts episodic memory deficits in aging*
Role: PI
Impact Score: 16
Amount awarded: \$210,372

Unfunded Grants Sought

National Institutes of Health – National Eye Institute (NEI) 2024 – 2029
R01: *Determining the role of visual and oculomotor dynamics in working memory precision*
Role: Co-I

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”

Branco Weiss – Society in Science 9/01/22 – 8/31/24
Determining the effects of plant-based diets on cognition and stress reactivity across adulthood
Role: PI
Score: Not provided

Publications

Published Manuscripts

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*
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	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

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

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.

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)

Conference Presentations

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, New York.

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.,** 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.
- 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.,** 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.
- 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

Perception (Fall 2024)
Cognitive Psychology (Spring 2025)

Invited Lectures

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

Student Mentoring

Brody Terry, PhD Student (Fall 2024 – Present)

Sarah Waller, Honors Thesis Student (Spring 2025 – Present)

Professional Service

Editorial Board Member, *Cognition*

Ad hoc reviewer for journal articles:

Trends in Cognitive Sciences

Cognition

Journal of Experimental Psychology: General

Journal of Experimental Psychology: Learning, Memory, & Cognition

Behavior Research Methods

Memory & Cognition

Memory

Psychiatry Research

Nutrients

PeerJ

Psychology, Crime, & Law

Psychological Research

Cognitive Processing

Scientific Reports

Behavioral Brain Research

Developmental Psychology

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