MICHELLE M. RAMEY, Ph.D.

CURRICULUM VITAE

Contact Information

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Research Interests

My work focuses on understanding episodic memory and its interactions with other cognitive processes (e.g., semantic knowledge and visual imagery) in general and in aging. I primarily leverage eyetracking, novel paradigm 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

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 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.,** 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

2021	Psychonomic Society Graduate Conference Award (\$1000)
2021	Dissertation Fellowship award (\$13,755)
2016	Graduated summa cum laude
2012 - 2016	Regents' and Chancellor's scholarship
2012 - 2016	Dean's list

Selected Presentations

Invited Talks

- **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.** (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 Experience

Teaching Assistantships

Human Memory (4 quarters) Perception (1 quarter)

Professional Service

Ad hoc reviewer for: Trends in Cognitive Sciences Cognition

Behavior Research Methods Psychiatry Research Memory & CognitionNutrientsJournal of Experimental Psychology: GeneralPeerJ

Memory Psychology, Crime, & Law

Skills

Programming: R, MATLAB, Python, Julia, jsPsych (JavaScript), HTML & CSS

GUI Software: SR Research ExperimentBuilder, Adobe Photoshop, Qualtrics (and

embedding JavaScript within Qualtrics), LimeSurvey

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 assays