

MICHELLE M. RAMEY, PH.D.

CURRICULUM VITAE

Contact Information

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Research Interests

My work focuses on episodic memory and its interactions with other cognitive processes (e.g., visual attention, semantic knowledge, and visual imagery) in general and in aging. Much of my work involves using eyetracking to probe memory processes, as well as developing novel methodologies (e.g., metrics and paradigms) for using eyetracking to probe cognitive processes more broadly.

Academic Positions

2023 – Present 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

Publications

Published Manuscripts

Ramey, M.M., Yonelinas, A.P., Henderson, J.M. (in press). How schema knowledge influences memory in older adults: Filling in the gaps, or leading memory astray? *Cognition*.
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., Shields, G. S., & Yonelinas, A. P. (2022). 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): 4.1

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 (2019): 2.5

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 (2019): 3.2

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 (2018): 3.5

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 (2018): 4.0

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 (2018): 2.2

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 (first submission)
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

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.

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

Conference Presentations

- 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

Behavior Research Methods

Cognition

Psychiatry Research

Journal of Experimental Psychology: General
Memory

Nutrients

PeerJ

Skills

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

GUI Software: SR Research ExperimentBuilder, Adobe Photoshop, Qualtrics (and embedding JavaScript within Qualtrics), LimeSurvey

Analytic Expertise: Eyetracking analysis, cluster analysis, calculus-based measures, 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