

# Anna McCarter, Ph.D.

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## Work Experience

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July 2025–  
June 2026      **College Fellow**  
Harvard University, Department of Psychology  
Research Advisor: Daniel Schacter, Ph.D.

## Education

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2021–2025      **PhD in Psychology, Cognition & Cognitive Neuroscience Concentration**  
University of Massachusetts Amherst  
Dissertation: *The Impact of Drawing & Tracing on Visual Long-Term Mem.*  
Advisor: Jeffrey Starns, Ph.D. (2023-2025)  
Rosemary Cowell, Ph.D. & David Huber, Ph.D. (2021-2022)

2020–2021      **Master of Science in Neuroscience**  
University of Delaware  
Master's Thesis: *The Role of Working Mem. in Visual Statistical Learning*  
Advisor: Timothy Vickery, Ph.D.

2017–2020      **Honors Bachelor of Science with Distinction in Neuroscience**  
University of Delaware  
Minor in Computer Science  
Senior Thesis: *The Role of Irrelevant Features in Reinforcement Learning*

## Teaching Experience

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### Instructor of Record, Harvard University

- The Truth Behind Amnesia (Spring 2026)
- Sophomore Tutorial (Spring 2026)
- Maximizing Your Memory (Fall 2025)

### Instructor of Record, University of Massachusetts Amherst

- Writing in Psychological and Brain Sciences (Spring 2025, Spring 2024, Spring 2023)
- Cognitive Psychology (Winter 2025, Spring 2024, Winter 2024)
- First Year Seminar: Maximizing Your Memory (Fall 2024)
- Introductory Psychology (Summer 2024)
- First Year Seminar: Marvels of Memory (Fall 2023)
- Methods of Inquiry in Psychology (Summer 2023)

### Teaching Assistant, University of Massachusetts Amherst

- Graduate Seminar on fMRI (Fall 2023)
- Cognitive Psychology (Fall 2023, Spring 2023)
- Statistics in Psychology (Fall 2022)
- Methods of Inquiry in Psychology (Fall 2021)

### Teaching Assistant, University of Delaware

- Advanced Neuroanatomy (Spring 2021)
- Developmental Psychology (Fall 2020)
- Introduction to Computer Science (Spring 2020, Fall 2019)

### Guest Lectures

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McCarter, A.C. (2024, Oct.) *Introduction to Cognitive Psychology*. Lecture conducted for Introductory Psychology at the University of Massachusetts Amherst, Amherst MA.

McCarter, A.C. (2023, Nov.) *Visual Imagery*. Lecture conducted for Cognitive Psychology at the University of Massachusetts Amherst, Amherst, MA.

McCarter, A.C. (2023, Sep.) *Visual System*. Lecture conducted for Cognitive Psychology at the University of Massachusetts Amherst, Amherst, MA.

McCarter, A.C. (2023, May) *Visual Imagery*. Lecture conducted for Cognitive Psychology at the University of Massachusetts Amherst, Amherst, MA.

McCarter, A.C. (2023, Mar.) *Long-Term Memory vs. Working Memory*. Lecture conducted for Cognitive Psychology at the University of Massachusetts Amherst, Amherst, MA.

McCarter, A. C. (2021, Nov.) *Quasi-Experimental Designs*. Lecture conducted for Methods of Inquiry in Psychology at the University of Massachusetts Amherst, Amherst, MA.

McCarter, A. C. (2021, Oct.) *Research Ethics*. Lecture conducted for Methods of Inquiry in Psychology at the University of Massachusetts Amherst, Amherst, MA.

McCarter, A. C. (2021, Feb.) *Spinal Cord Anatomy*. Lecture conducted for Advanced Neuroanatomy at the University of Delaware, Newark, DE.

### Teaching Conference Presentations

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McCarter, A. & Pope, D. (2024, Oct.). *The Benefit of Music for Small Group Discussions* [Poster]. Northeast Conference for Teachers of Psychology, Springfield, MA.

McCarter, A.C. (2024, Aug.). *How to Incorporate Reflection into Your Class* [Workshop Leader]. University of Massachusetts Amherst Teaching Academy, Amherst, MA.

McCarter, A.C. (2024, Apr.). *Instructor's Guide to Perusall* [Presentation]. College of Natural Sciences Faculty Webinar Series, Online.

McCarter, A.C. (2024, Jan.). *Engaging Student Curiosity and Creativity* [Brief Talk]. Massachusetts Project Kaleidoscope Winter Meeting, Online.

McCarter, A. C. (2023, Sep.). *How to Build Community in Your Class* [Workshop Leader]. University of Massachusetts Amherst Teaching Academy, Amherst, MA.

McCarter, A. C. (2023, May). *How to Foster a Sense of Community* [Discussion Leader]. University of British Columbia Graduate Students in Teaching Conference, Online.

## Teaching Workshops

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- 2025      **Grading for Growth Book Club** [6 weeks]  
Center for the Integration of Research, Teaching, and Learning (CIRTL)
- 2025      **ADA Compliance Training for Instructors** [self-paced]  
University of Massachusetts Amherst
- 2023      **The College Classroom** [12 weeks]  
Center for the Integration of Research, Teaching, and Learning (CIRTL)
- 2023      **Essentials of Online Teaching** [6 weeks]  
University of Massachusetts Amherst
- 2022      **Basics of Online Learning and Teaching** [10 weeks]  
Center for the Integration of Research, Teaching, and Learning (CIRTL)
- 2022      **Advancing Learning Through Evidence-Based STEM Teaching** [7 weeks]  
Center for the Integration of Research, Teaching, and Learning (CIRTL)
- 2021      **Workshop on Transforming Your Research into Teaching** [7 weeks]  
Center for the Integration of Research, Teaching, and Learning (CIRTL)
- 2021      **Inclusive Teaching Workshop** [3 weeks]  
University of Massachusetts Amherst

## Publications

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- McCarter, A. & Starns, J. (in preparation). Strategies to Improve Visual Feature Binding in Younger and Older Adults.
- McCarter, A. & Starns, J. (under revision). The Benefits of Drawing and Describing for Recognizing Object Images.
- McCarter, A. C., Huber, D. E., & Cowell, R. A. (2025). No evidence of a visual testing effect for novel, meaningless objects. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, 51(7), 1122–1140. <https://doi.org/10.1037/xlm0001430>

## Research Conference Presentations & Invited Talks

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- McCarter, A.C. (2025, Nov.) *The Benefits of Drawing and Describing for Visual Memory Binding* [Poster Presentation]. Psychonomic Society Annual Meeting, Denver, CO.
- McCarter, A.C. (2025, Nov.) *The Benefits of Drawing and Describing for Visual Memory Binding* [Poster Presentation]. Object Perception and Memory Symposium, Denver, CO.
- McCarter, A.C. (2025, July) *How to Learn Anything Faster: Cognitive Science Tips* [Panelist]. BranchOut! Community Workshop Series, Online.
- McCarter, A.C. & Starns, J. J. (2024, Nov.) *The Benefits of Drawing and Describing for Visual Long-Term Memory* [Talk]. Object Perception and Memory Symposium, New York City, NY.

- McCarter, A.C. & Starns, J. J. (2024, Nov.) *The Benefits of Drawing and Describing for Visual Long-Term Memory* [Poster Presentation]. Psychonomic Society Annual Meeting, New York City, NY.
- McCarter, A.C. (2024, Apr.) *Learning to Optimize Memory*. Invited talk at Holyoke Community College, Holyoke, MA.
- McCarter, A. C., Cowell R. A., Huber, D. E., & Starns, J. J. (2023, Nov.) *No Testing Effect for Meaningless Verbal Content* [Poster Presentation]. Psychonomic Society Annual Meeting, San Francisco, CA.
- McCarter, A. C., Huber, D. E., & Cowell R. A. (2023, May). *No Evidence for a Visual Testing Effect for Novel, Meaningless Objects* [Talk]. Vision Sciences Society Annual Meeting, St. Pete Beach, FL.
- McCarter, A. C., Huber, D. E., & Cowell R. A. (2022, Nov.). *No Evidence for a Visual Testing Effect for Novel, Unnameable Objects* [Poster Presentation]. Psychonomic Society Annual Meeting, Boston, MA.
- McCarter, A. C., Huber, D. E., & Cowell R. A. (2022, Nov.). *No Evidence for a Visual Testing Effect for Novel, Unnameable Objects* [Poster Presentation]. Object Perception and Memory Symposium, Boston, MA.
- McCarter, A. C., Huber, D. E., & Cowell R. A. (2022, May). *No Evidence for a Visual Testing Effect for Novel, Unnameable Objects* [Poster Presentation]. Context and Episodic Memory Symposium, Philadelphia, PA.
- McCarter, A. C., Huber, D. E., & Cowell R. A. (2022, May). *No Evidence for a Visual Testing Effect for Novel, Unnameable Objects* [Poster Presentation]. University of Massachusetts Amherst Interdisciplinary Neurosciences Conference, Amherst, MA.
- McCarter, A. C., & Vickery, T. J. (2019, Nov.). *Tracking the Value of a Location-Varying Feature Depends on Working Memory Resources* [Poster Presentation]. Psychonomic Society Annual Conference, Montreal, CAN.
- McCarter, A. C., & Vickery, T. J. (2019, Nov.). *Effects of Motor Confounds on Tracking Value of Location-Based Features* [Poster Presentation]. Delaware IDeA Networks of Biomedical Research Excellence (INBRE) Symposium, Newark, DE.
- McCarter, A. C., & Vickery, T. J. (2019, Aug.). *Effects of Motor Confounds on Tracking Value of Location-Based Features* [Poster Presentation]. University of Delaware Undergraduate Research & Service Scholar Celebratory Symposium, Newark, DE.
- McCarter, A. C., & Vickery, T. J. (2018, Aug.). *How Does Human Reinforcement Learning Cope with Varying Task-Irrelevant Features?* [Poster Presentation]. University of Delaware Undergraduate Research & Service Scholar Celebratory Symposium, Newark, DE.

## Grants & Awards

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2024	Women in Cognitive Science (WiCS+) Networking Award (\$1,000)
2023	Females of Vision, et al. (FoVea) Travel and Networking Award (\$1,600)
2022	Object Perception and Memory Symposium (OPAM) Best Poster Award
2022	University of Massachusetts at Amherst Predissertation Grant (\$1,000)
2019	University of Delaware Undergraduate Travel Award (\$650)
2019	University of Delaware Summer Research Fellow (\$750)
2018	Delaware INBRE Summer Research Scholar (\$5,000)

## Leadership & Service

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2025-Present	Illinois Science & Technology Coalition Mentor
2024-Present	Letters to a Pre-Scientist Mentor
2024-2025	Department Graduate Assistant for Undergraduate Mentoring
2024-2025	Diversity Committee Undergraduate Mentoring Chair
2023-2025	Graduate Studies Committee Representative
2022-2025	Cognitive Area Co-Secretary
2021–2025	Diversity Committee Undergraduate Mentor
2022–2024	Eureka! – Girls Inc. Summer Workshop Leader
Spring 2024	Department Chair Search Committee Member
Winter 2024	Department PsychoPy Workshop Co-Director
2022-2023	Anderson-Myers Colloquium Organizer

## Technical Skills

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- Learning Management Systems: Canvas, Moodle, Blackboard
- Experimental Methods: fMRI, eye tracking, computational modeling
- Programming Languages: Python, R, Matlab, JavaScript