

Timothy J. Ricker, Ph.D.

Department of Psychology
University of South Dakota
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Education

- Ph.D., Psychology, University of Missouri, May 2013
Dissertation: The Nature of Time-Based Forgetting in Immediate Memory
Faculty Mentor: Dr. Nelson Cowan
- M.A., Psychology, University of Missouri, July 2009
Thesis: Cognitive Load and Time-Based Forgetting
Faculty Mentor: Dr. Nelson Cowan
- B.A., Psychology, Michigan State University, May 2006

Work History

- Assistant Professor, University of South Dakota
Department of Psychology
August 2020 - Present
- Assistant Professor, City University of New York
Department of Psychology, College of Staten Island, August 2015 – August 2020
The Graduate Center, March 2016 – August 2020
Center for Developmental Neuroscience, March 2018 – August 2020
- Post-Doctoral Fellow, University of Missouri
Perception & Cognition Laboratory, Department of Psychological Sciences
May 2013 – August 2015

Grants & Funding

Funded Research Grants

CBBRe Collaborative Grant: *Physiological, Mathematical, & Behavioral Approaches to Understanding Multitasking*

Funding Source: Center for Brain and Behavior Research, University of South Dakota
Award Period: July 2021 – June 2022
Total Budget: \$19,970
Role: Primary Investigator

PSC-CUNY Research Award (Traditional B): *Causes of Forgetting During Multitasking*

Funding Source: Professional Staff Council & The City University of New York
Award Date: July 1, 2020 – June 30, 2021
Total Budget: \$5,653.33
Role: Primary Investigator

PSC-CUNY Research Award (Traditional B): *Short-Term Consolidation and Long-Term Memory*

Funding Source: Professional Staff Council & The City University of New York
Award Date: July 2019 – June 2020
Total Budget: \$ 5,698.83
Role: Primary Investigator

PSC-CUNY Research Award (Traditional B): *Visual and Temporal Factors Influencing Working Memory Creation*

Funding Source: Professional Staff Council & The City University of New York

Award Date: July 2018 – June 2019

Total Budget: \$4,480

Role: Primary Investigator

Pilot Research Grant: *Mathematical Models of Motor and Mental Speed*

Funding Source: Consortium of Multiple Sclerosis Centers

Award Date: January 2018 – December 2019

Total Budget: \$39,083

Role: Consultant

Primary Investigator: Joshua Sandry

PSC-CUNY Research Award (Traditional B): *Working Memory Involvement in Impulsive Behavior and Emotional Control*

Funding Source: Professional Staff Council & The City University of New York

Award Date: July 2017 – June 2018

Total Budget: \$4,410

Role: Primary Investigator

National Research Service Award (F31): *Behavioral and Electrophysiological Measures of Forgetting in Working Memory*

Funding Source: National Institute of Mental Health

Award Date: July 2011 – May 2013

Total Budget: \$61,641

Role: Primary Investigator

Submitted Research Grants (External)

Under Review

COBRE Phase 1 Research Project: Does PTSD accelerate cognitive decline in older adulthood?

Capturing the interaction between PTSD, cognitive aging, and their neural indices.

Funding Source: National Institute of General Medical Sciences, NIH

Date Submitted: January 28, 2022

Total Budget: \$968,152

Role: Senior Personnel

Primary Investigator: Jong-Sung Yoon

Unfunded

Research Grant: Exploring the Impact of an Online Environment on Working Memory Function

Funding Source: National Science Foundation

Date Submitted: July 27, 2020

Total Budget: \$348,727

Role: Primary Investigator

Research Grant: Using Eye Tracking to Monitor the Deployment of Attention during Working Memory Consolidation

Funding Source: National Science Foundation

Date Submitted: July 31, 2019

Total Budget: \$331,053

Role: Primary Investigator

Research Grant: Towards a Social Psychology of Bureaucracy (sub-award to Ricker/College of Staten Island)

Funding Source: National Science Foundation

Date Submitted: July 31, 2019

Total Budget (Sub-Award): \$20,024

Role: Sub-Awardee/Faculty Associate

Primary Investigator: Ana Gantman

Research Grant: Accelerated Forgetting & Structural MRI Heterogeneity in Multiple Sclerosis

Funding Source: Biogen Inc.

Submission Date: August 2018

Total Award: \$100,000

Role: Consultant

Primary Investigator: Joshua Sandry

Research Grant: Tracking and Modeling the Time Course of Short-Term Consolidation

Funding Source: National Science Foundation

Date Submitted: July 31, 2017

Total Budget: \$321,116.00

Role: Primary Investigator

Other Funding

Funding Support Services Program

Tobii Pro

Funding Amount: \$1,000

July 2018 – December 2018

Invited Workshop Participant: *The Crossroads of Attention in Working Memory: Consolidation, Refreshing, & Removal*

Swiss National Science Foundation (Grant to Alessandra Souza)

Funding Amount (Estimate): \$2,500

June 2017 – July 2017

Scholarship to attend the ERP boot camp

Center for Mind and Brain, University of California, Davis

Funding Amount (Estimate): \$2,000

July 2011

Summer Grant Writing Fellowship

Department of Psychological Sciences, University of Missouri

Funding Amount: \$3,088.22

June 2010 - July 2010

Publications

Citations: 1003, **h-index:** 13, **i10-index:** 15, metrics compiled by Google Scholar

Journal Articles

Cotton, K. & Ricker, T.J. (accepted). Examining the relationship between working memory consolidation and long-term memory consolidation. *Psychonomic Bulletin & Review*.

Hebert, K.R. & Ricker, T.J. (accepted). Reliability of the emotional experiences in activities of daily living scale (EEADLs). *Occupational Therapy Journal of Research: Occupation, Participation and Health*.

Cotton, K. & Ricker, T.J. (2021). Working memory consolidation improves long-term memory recognition. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, 47, 208–219. doi:10.1037/xlm0000954

Sandry, J., Zuppichini, M.D., & Ricker, T.J. (2020). Attentional flexibility and prioritization improve long-term memory. *Acta Psychologica*, 208, 103104. doi:10.1016/j.actpsy.2020.103104

Sandry, J. & Ricker, T.J. (2020). Prioritization within visual working memory reflects a flexible focus of attention. *Attention, Perception, & Psychophysics*, 82, 2985–3004. doi:10.3758/s13414-020-02049-4

Ricker, T.J. & Vergauwe, E. (2020). Consistent failure to produce a cognitive load effect in visual working memory using a standard dual-task procedure. *Journal of Cognition*, 3, 1–10. doi:10.5334/joc.108.

Ricker, T.J., Sandry, J. Vergauwe, E., & Cowan, N. (2020). Do familiar memory items decay? *Journal of Experimental Psychology: Learning, Memory, and Cognition*. 46, 60–76. doi:10.1037/xlm0000719

Vergauwe, E., Ricker, T.J., Langerock, N., & Cowan, N. (2019). What do people typically do between list items? The nature of attention-based mnemonic activities depends on task context. *Journal of*

- Experimental Psychology: Learning, Memory, and Cognition*, 45, 779-794.
doi:10.1037/xlm0000625
- Ricker, T.J. & Sandry, J. (2018) The relationship between masking and short-term consolidation during recall from visual working memory. *Annals of the New York Academy of Sciences*, 1424, 91-101. doi:10.1111/nyas.13641
- Ricker, T.J., Nieuwenstein, M., Bayliss, D.M. & Barrouillet, P. (2018). Working memory consolidation: Insights from studies on attention and working memory. *Annals of the New York Academy of Sciences*, 1424, 8-18. doi:10.1111/nyas.13633
- Ricker, T.J. & Hardman, K.O. (2017). The nature of short-term consolidation in visual working memory. *Journal of Experimental Psychology: General*, 146, 1551-1573. doi:10.1037/xge0000346
- Ricker, T.J., Thiele, J., Swagman, A.R., & Rouder, J. (2017). Recognition decisions from visual working memory are mediated by continuous latent strengths. *Cognitive Science*, 41, 1510–1532. doi:10.1111/cogs.12436
- Hardman, K.O., Vergauwe, E., & Ricker, T.J. (2017). Categorical working memory representations are used in delayed estimation of continuous colors. *Journal of Experimental Psychology: Human Perception and Performance*, 43, 30-54. doi:10.1037/xhp0000290
- Ricker, T.J., Vergauwe, E., & Cowan, N. (2016). Decay theory of immediate memory: From Brown (1958) to today (2014). *Quarterly Journal of Experimental Psychology*, 69, 1969-1995. doi:10.1080/17470218.2014.914546
- Ricker, T.J. (2015). The role of short-term consolidation in memory persistence. *AIMS Neuroscience*, 2, 259–279. doi:10.3934/Neuroscience.2015.4.259
- Ricker, T.J., Vergauwe, E., Hinrichs, G.A., Blume, C.L., & Cowan, N. (2015). No recovery of memory when cognitive load is decreased. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, 41, 872-880. doi:10.1037/xlm0000084
- Cowan, N., Ricker, T.J., Clark, K.M., Hinrichs, G.A., & Glass, B.A. (2015). Knowledge cannot explain the developmental growth of working memory capacity. *Developmental Science*, 18, 132–145. doi:10.1111/desc.12197
- Ricker, T.J., Spiegel, L.R., & Cowan, N. (2014). Time-based loss in visual short-term memory is from trace decay, not temporal distinctiveness. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, 40, 1510-1523. doi:10.1037/xlm0000018
- Ricker, T.J. & Cowan, N. (2014). Differences in presentation methods in working memory procedures: A matter of working memory consolidation. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, 40, 417-428. doi:10.1037/a0034301
- Cowan, N., AuBuchon, A.M., Gilchrist, A.L., Ricker, T.J., & Saults, J.S. (2011). Age differences in visual working memory capacity: Not based on encoding limitations. *Developmental Science*, 14, 1066-1074. doi:10.1111/j.1467-7687.2011.01060.x.
- Ricker, T.J. & Cowan, N. (2010). Loss of visual working memory within seconds: The combined use of refreshable and non-refreshable features. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, 36, 1355-1368. doi:10.1037/a0020356
- Ricker, T.J., Cowan, N., & Morey, C.C. (2010). Visual working memory is disrupted by covert verbal retrieval. *Psychonomic Bulletin & Review*, 17, 516-521. doi:10.3758/PBR.17.4.516
- Ricker, T.J., AuBuchon, A., & Cowan, N. (2010). Working memory. In L. Nadel (Ed.), *Wiley Interdisciplinary Reviews: Cognitive Science*, 1, 573-585. doi:10.1002/wcs.50

Book Chapters

- Ricker, T.J. & Cowan, N. (2018). Cognitive load as a measure of capture of the focus of attention. In R. Zheng (Ed.), *Cognitive Load Measurement and Application: A Theoretical Framework for Meaningful Research and Practice*. New York, NY: Routledge. (pp. 129-146)

Conference Proceedings (Peer-Reviewed)

- Parshina, O., Obied, R. Che, E.S., Ricker, T.J., & Brooks, P.J. (2018). SRT and ASRT: Similar tasks tapping distinct learning mechanisms? *Proceedings of the Annual Meeting of the Cognitive Science Society*, 36, 2202-2207.

Manuscripts in Progress

- Sandry, J., & Ricker, T.J. (submitted). Motor speed does not impact the drift rate: A computational HDDM approach to differentiate cognitive and motor speed.
- Ricker, T.J., & Vergauwe, E. (submitted). Cognitive load effects in working memory reflect memory enrichment, not maintenance or forgetting.
- Vergauwe, E., Ricker, T. J., Hardman, K., Langerock, N., & Cowan, N. (under revision). The nature of attention-based maintenance in complex span tasks: Mere reactivation or elaboration as well?
- Mui, M., Ruben, R., Ricker, T.J., Dobryankova, E., & Sandry, J. (in preparation). Ex-Gaussian analysis of simple response time and the relationship with brain morphometry in multiple sclerosis.

Presentations

Invited Lectures

- Ricker, T.J. (2021, November). Computational models of fine-detail and categorical information in visual working memory: Unified or separable representations? Distributed Working Memory Series. Virtual meeting organized by the University of Zurich.
- Ricker, T.J. (2020, November). Cognitive load and multitask-impairment of working memory. Cognition and Neuroscience Colloquium, University of Missouri, Columbia, Missouri, USA.
- Ricker, T.J. (2018, November). The effects of distraction on precise and gist representations in working memory. Department of Psychology Lunch Talk Series, Seton Hall University, South Orange, New Jersey, USA.
- Ricker, T.J. (2017, July). Does masking influence short-term consolidation? The Crossroads of Attention in Working Memory: Consolidation, Refreshing, & Removal, Hotel Bains D'Ovronnaz, Valais, Switzerland.
- Ricker, T.J. (2017, June). A basic theoretical overview of short-term consolidation. The Crossroads of Attention in Working Memory: Consolidation, Refreshing, & Removal, Hotel Bains D'Ovronnaz, Valais, Switzerland.
- Ricker, T.J. (2017, June). Immunity to cognitive load in visual working memory recall. University of Geneva, Geneva, Switzerland.
- Ricker, T.J. (2017, June). Immunity to cognitive load in visual working memory recall. University of Zurich, Zurich, Switzerland.
- Ricker, T.J. (2016, December). Potential neural mechanisms underlying short-term consolidation. Neuroscience Collaborative Colloquium, Graduate Center of the City University of New York, Manhattan, New York, USA.
- Ricker, T.J. (2016, May). Consolidation of visual working memory representations. Vision Seminar, Johns Hopkins University, Baltimore, Maryland, USA.
- Ricker, T.J. (2016, March). A brief overview of short-term consolidation and potential neural mechanisms. Montclair Student Neuroscience Association Biannual Research Panel, Montclair, New Jersey, USA.

International Conference Presentations

- Cotton, K. & Ricker, T.J. (2021, November). How do mind-wandering, cognitive load, and environment affect working memory? Poster presented at the Annual Harvard Women in Psychology: Trends in Psychology Summit, Virtual Meeting.
- McCray, M.M., Cotton, K., & Ricker, T.J. (2021, November). Predicting working memory performance: Is perceived workload a better predictor than cognitive load? Poster presented at the Annual Harvard Women in Psychology: Trends in Psychology Summit, Virtual Meeting.
- Ricker, T.J. & Vergauwe, E. (2021, November). Orientation and color are remembered using fundamentally different types of representation in working memory, Annual convention of the Psychonomic Society, Virtual Meeting.
- Cotton, K. & Ricker, T.J. (2021, November). The effect of mind-wandering and cognitive load on working memory performance in online and in-person experiments. Annual convention of the Psychonomic Society, Virtual Meeting.
- McCray, M.M., Cotton, K. & Ricker, T.J. (2021, November). Working memory performance: Is subjective measurement a better predictor than cognitive load? Poster presented at the annual convention of the Psychonomic Society, Virtual Meeting.

- Cotton, K. & Ricker, T.J. (2021, June). Consolidating a lasting memory: The role of creativity in the relationship between working memory and long-term memory. Virtual Working Memory Symposium.
- Ricker, T.J. & Vergauwe, E. (2020, November). Cognitive load effects are not driven by attentional availability. Annual convention of the Psychonomic Society, Virtual Meeting.
- Cotton, K. & Ricker, T.J. (2020, November). The role of creativity in the relationship between working memory consolidation and long-term memory. Annual convention of the Psychonomic Society, Virtual Meeting.
- Ricker, T.J. (2019, November). Exploring how visual masking disrupts working memory recall. Annual convention of the Psychonomic Society, Montreal, Quebec, Canada.
- Cotton, K. & Ricker, T.J. (2019, November). Working memory consolidation improves long-term recognition in words and non-words. Annual convention of the Psychonomic Society, Montreal, Quebec, Canada.
- Ricker, T.J. & Vergauwe, E. (2017, November). Can attention-based maintenance be used in visual working memory? Annual convention of the Psychonomic Society, Vancouver, British Columbia, Canada.
- Vergauwe, E. & Ricker, T.J. (2017, September). Forgetting and the mechanisms that counteract forgetting in working memory. 20th Conference of the European Society for Cognitive Psychology. Potsdam, Germany.
- Ricker, T.J. (2016, November). Short-term consolidation of continuous visual working memory. Annual convention of the Psychonomic Society, Boston, Massachusetts, USA.
- Zuppichini, M., Zlochevsky, N., Vilanova, N., Ricker, T.J., & Sandry, J. (2016, November). Adjusting working memory's focus of attention influences long-term memory retention. Poster presented at the annual convention of the Psychonomic Society, Boston, Massachusetts, USA.
- Parshina, O.A., Ricker, T.J., Che, E.S., Obeid, R., & Brooks, P.J. (2016, November). Relationships between statistical learning, sentence processing, and working memory. Poster presented at the annual convention of the Psychonomic Society, Boston, Massachusetts, USA.
- Langerock, N., Vergauwe, E., Hardman, K., Ricker, T.J., & Cowan, N. (2016, September). The nature of refreshing: mere reactivation or semantic elaboration as well? Poster presented at VIIIth European Working Memory Symposium. Liège, Belgium.
- Vergauwe, E., Ricker, T.J., Langerock, N., & Cowan, N. (2016, June) What do people typically do between list items? Parcevall Hall Meeting, Skipton, North Yorkshire, United Kingdom.
- Ricker, T.J. (2015, November). Short-term consolidation: A process separable from encoding and refreshing. Annual convention of the Psychonomic Society, Chicago, Illinois, USA.
- Hardman, K., Vergauwe, E., & Ricker, T.J. (2015, November) Testing the absolute validity of mathematical models used in working memory. Poster presented at the annual convention of the Psychonomic Society, Chicago, Illinois, USA.
- Ricker, T.J., Vergauwe, E., & Rouder, J. (2014, November). Continuous information in short-term memory is not affected by attention-based maintenance or processing. Poster presented at the annual convention of the Psychonomic Society, Long Beach, California, USA.
- Ricker, T.J., & Cowan, N. (2013, November). Presentation method influences time-based forgetting through working memory consolidation. Poster presented at the annual convention of the Psychonomic Society, Toronto, Ontario, Canada.
- Valle-Inclan, F., Lee, E.-Y., Li, D., Cowan, N., Ricker, T.J., and Hackley, S.A. (2013, September). Cortical thickness correlates of working memory capacity in healthy younger and older adults and in Parkinson's disease. Poster presented at the annual meeting of the Society for Psychophysical Research, Florence, Italy.
- Ricker, T.J. & Cowan, N. (2012, November). Presentation style influences time-based forgetting in working memory. Poster presented at the annual convention of the Psychonomic Society, Minneapolis, Minnesota, USA.
- Ricker, T.J., Cowan, N., & Hebert, K.R. (2011, November). Time-based forgetting from working memory, feature-by-feature. Poster presented at the annual convention of the Psychonomic Society, Seattle, Washington, USA.
- Ricker, T.J., & Cowan, N. (2010, November). Forgetting from visual working memory: Time and attention both matter. Paper presented at the annual convention of the Psychonomic Society, St. Louis, Missouri, USA.

Regional Conference & Colloquia Presentations

- Cotton, K., Sandry, J., & Ricker, T.J. (2022, March). Mind-wandering and cognitive load effects on working memory performance across experimental contexts. Poster presented at 93rd Annual Eastern Psychological Association, New York, New York.
- Ricker, T.J. (2021, November). Are gist and precise representations always separable in visual working memory? Human Factors Colloquium, University of South Dakota, Vermillion, South Dakota, USA.
- McCray, M.M., Cotton, K., & Ricker, T.J. (2021, September). Does perceived workload better predict working memory performance than cognitive load? South Dakota Psychological Association Annual Conference, Rapid City, South Dakota, USA.
- Ricker, T.J. (2021, September). Motor slowing and the Drift Diffusion model. Human Factors Colloquium, University of South Dakota, Vermillion, South Dakota, USA.
- Ricker, T.J. (2020, October). Multitasking and visual recall from working memory. Human Factors Colloquium, University of South Dakota, Vermillion, South Dakota, USA.
- Ricker, T.J. (2019, March). Does the cognitive load of multitasking cause forgetting? Developmental Neuroscience Colloquium, College of Staten Island - City University of New York, Staten Island, New York, USA.
- Ricker, T.J. (2019, February). Multi-tasking and cognitive load effects in visual working memory. Cognitive and Comparative Psychology Colloquium, Graduate Center of the City University of New York, Manhattan, New York, USA.
- Vergauwe, E., Ricker, T.J., Langerock, N., & Cowan, N. (2018, June). Consolidation and/or refreshing: What do people typically do between list items? Poster at the 3rd Jean Piaget Conference, Geneva, Switzerland.
- Uittenhove, K., Ricker, T.J., Cowan, N., & Vergauwe, E. (2018, June). Sternberg memory scanning 50 years later: A new comparison between item and order retrieval rate. Poster at the 3rd Jean Piaget Conference, Geneva, Switzerland.
- Aguayo, S., Caminneci, A., DeMaio, E., Garcia, V., Zapata, P., Ricker, T.J., & Sandry, J. (2018, March). Distinctiveness of encoding does not explain flexibility within the focus of attention. Poster presented at the 2018 annual meeting of the Eastern Psychological Association, Philadelphia, PA, USA.
- Ricker, T.J. (2015, October). Short-term memory consolidation: A new component of memory formation. Department of Psychology Colloquium, College of Staten Island - City University of New York, Staten Island, New York, USA.
- Ricker, T.J. (2015, October). Consolidating short-term memory to prevent forgetting. Cognition, Language, and Development Training Area Colloquium, Graduate Center of the City University of New York, Manhattan, New York, USA.
- Ricker, T.J., Cowan, N., Rouder, J., Vergauwe, E., & Thiele, J. (2014, September). Time and memory. Cognition and Neuroscience Colloquium, University of Missouri, Columbia, Missouri, USA.
- Ricker, T.J. (2013, April). The nature of time-based forgetting in immediate memory. Public Dissertation Defense, University of Missouri, Columbia, Missouri, USA.
- Ricker, T.J., Cowan, N., & Spiegel, L.R. (2012, September). Forgetting from immediate memory: Remembering the importance of methodological effects. Cognition and Neuroscience Colloquium, University of Missouri, Columbia, Missouri, USA.
- Ricker, T.J., Cowan, N., Hebert, K.R., & Hackley, S. (2012, March). Why do we forget? Cognition and Neuroscience Colloquium, University of Missouri, Columbia, Missouri, USA.
- Ricker, T.J., Cowan, N., & Morey, C.C. (2011, January). Disruption of visual working memory by covert verbal retrieval. Cognition and Neuroscience Colloquium, University of Missouri, Columbia, Missouri, USA.
- Ricker, T.J. (2010, June). Roles of time and attention in forgetting from working memory. Show Me Mental State Conference, Washington University, St. Louis, Missouri, USA.
- Ricker, T.J., Morey, C.C., & Cowan, N. (2010, March). Time-based forgetting and cognitive load. Research and Creative Activities Forum, University of Missouri, Columbia, Missouri, USA.
- Ricker, T.J., & Cowan, N. (2009, October). Cognitive load and time-based forgetting. Cognition and Neuroscience Colloquium, University of Missouri, Columbia, Missouri, USA.

Ricker, T.J., & Cowan, N. (2009, March). Cognitive load and forgetting. Cognition and Neuroscience Colloquium, University of Missouri, Columbia, Missouri, USA.

Teaching Experience

Undergraduate Courses Taught as Instructor

University of South Dakota

General Psychology – Standard Format
Statistics in Psychological Research – Standard Format
Sensation and Perception – Standard & Hybrid Formats

College of Staten Island, City University of New York

Cognitive Psychology – Standard, Honors, & Online Formats
Psychology of Memory – Standard Format

University of Missouri

Perception and Thought – Standard Format

Graduate Courses Taught as Instructor

University of South Dakota

Eye Movement: Theory and Applications

Graduate Center, City University of New York

Cognitive Psychology
Decision Making
Cognition & Comparative Psychology Colloquium

Research Mentorship

Doctoral Students

Megan McCray (current)

Kelly Cotton (current, *Graduate Center Fellowship* recipient)

Thesis Advisor

Undergraduate Students, Honors in Psychology

Caryn Darmoni, “Mathematical Models of Masking Effects in Visual Working Memory”, College of Staten Island - CUNY, 2020.

Hannah Bareket, “Is Mind Wandering the cause of Trace Decay in Working Memory?”, College of Staten Island - CUNY, 2020.

Danielle Aylmer, “Modeling Working Memory Capacity for Orientation”, College of Staten Island - CUNY, 2019.

Nicholas Cirrone, “Working Memory Load during Decision Making”, College of Staten Island - CUNY, 2019.

Alani Harrison, “Cognitive Load with Continuous Representations”, College of Staten Island - CUNY, 2019.

Research Mentorship of Undergraduate Students

Students receive one-on-one training in data collection, programming, writing, and presentation skills

Department of Psychology, University of South Dakota

Anika Gram (2021 - Present), *Grace Johnson* (2021 - Present), *Katie Roberson* (2021 - Present), *Kristen Quigley* (2021 - Present), *Madisen Lavin* (2021)

Department of Psychology, College of Staten Island - CUNY

Raquel Bartocci (2020 - 2020), *Victoria Nicoletta* (2020 - 2020), *Hannah Bareket* (2018 - 2020), *Caryn Darmoni* (2018 - 2020), *Alani Harrison* (2018 - 2019), *Danielle Aylmer* (2017 - 2019), *William Frickenstein* (2017 - 2019), *Nicholas Cirrone* (2017 - 2019), *Hadeel Ayesh* (2017 - 2018), *Greg Major* (2017 - 2018), *Iryna Pylypchuk* (2017 - 2018), *Hamza Tariq* (2017 - 2018), *Khadega Imam* (2016 - 2018), *Priscilla Hutchinson* (2017 - 2018), *Sochima Ezeude* (2016 - 2018), *Tiffany*

Galbo (2016 - 2018), Cinthya Ramirez (2016 - 2017), Mabel Etuknwa (2016 - 2017), Anthony Wong (2016 - 2017), Johna Palladino (2015 – 2017), Liya Thomas (2015 – 2017), Aileen Sammartano (2015 – 2016), Jose Ramirez (2015 – 2016)

Department of Psychological Sciences, University of Missouri

Garrett Hinrichs (2012-2013), Katherine Clark (2012), Lauren Spiegel (2011-2012)

Research Mentorship for Masters of Occupational Therapy Students

Department of Occupational Therapy, University of Missouri

2013: *Jenni Adkins, Victor Richard, & Shannon Stecher*

2012: *Justin Campbell, Tyler Eads, Christina Fox, & Melissa Smith*

2011: *Sarah Benson, Nancy Fronczak, & Katie Jones*

Graduate Student Mentee Grants & Awards

Megan McCray

Best Poster Award, September 2021, *South Dakota Psychological Association*, \$60

Governor's Giant Vision Finalist, April 2021, *South Dakota Governor's Office*, \$1000

Graduate Research and Creative Scholarship Grant, November 2020 – June 2021, *USD Graduate School*, \$750

Kelly Cotton

Doctoral Student Research Grant, June 2020 – May 2021, *CUNY Graduate Center*, \$1350

Psychology Fellowship, January 2020 – May 2020, *CCP Training Program - CUNY*, \$500

Conference Presentation Support, November 2019, *CUNY Graduate Center*, \$300

Undergraduate Student Mentee Grants & Awards

CUE Undergraduate Research Award (CSI/CUNY): \$200 - \$900 stipend

Awarded to: Iryna Pylypchuk, Nicholas Cirrone, Priscilla Hutchinson, Khadega Imam, Anthony Wong, Tiffany Galbo, Liya Thomas, Johna Palladino, & Aileen Sammartano

Mentored Summer Research Experience (CSI/CUNY): \$800 stipend

Awarded to: Hannah Bareket & Caryn Darmoni

Dean's Research Award (CSI/CUNY): \$2,000 stipend

Awarded to: Johna Palladino

Undergraduate & Masters Student Poster Presentations

Bareket, H. & Ricker, T.J. (2019, May). Is memory decay caused by mind wandering? Poster presented at the Undergraduate Conference on Research, Scholarship, and Performance, College of Staten Island - City University of New York, Staten Island, New York, USA.

Darmoni, C. & Ricker, T.J. (2019, May). Mathematical process modeling of visual masking. Poster presented at the Undergraduate Conference on Research, Scholarship, and Performance, College of Staten Island - City University of New York, Staten Island, New York, USA.

Harrison, A. & Ricker, T.J. (2019, May). Cognitive load with continuous stimuli in visual working memory. Poster presented at the Undergraduate Conference on Research, Scholarship, and Performance, College of Staten Island - City University of New York, Staten Island, New York, USA.

Galbo, T., Ayesh, H. & Ricker, T.J. (2018, April). Masking and the speed of consolidation into visual working. Poster presented at the Undergraduate Conference on Research, Scholarship, and Performance, College of Staten Island - City University of New York, Staten Island, New York, USA.

Pylypchuk, I. & Ricker, T.J. (2018, April). Precueing and the Attentional Blink in Working Memory. Poster presented at the Undergraduate Conference on Research, Scholarship, and Performance, College of Staten Island - City University of New York, Staten Island, New York, USA.

Cirrone, N., Hutchinson, P., & Ricker, T.J. (2018, April). Memory Load and Probabilistic Reward. Poster presented at the Undergraduate Conference on Research, Scholarship, and Performance, College of Staten Island - City University of New York, Staten Island, New York, USA.

Aylmer, D., Frickenstein, W. & Ricker, T.J. (2018, April). Modeling Categorical Representations in Memory for Object Orientations. Poster presented at the Undergraduate Conference on Research, Scholarship, and Performance, College of Staten Island - City University of New York, Staten Island, New York, USA.

Major, G., Tariq, H. & Ricker, T.J. (2018, April). Cognitive Load Effects in Visual Working Memory Recall. Poster presented at the Undergraduate Conference on Research, Scholarship, and Performance, College of Staten Island - City University of New York, Staten Island, New York, USA.

- Palladino, J., Ramirez, C. & Ricker, T.J. (2017, May). Cognitive Load in Visual Reproduction Tasks. Poster presented at the Undergraduate Conference on Research, Scholarship, and Performance, College of Staten Island - City University of New York, Staten Island, New York, USA.
- Galbo, T., Khadega, I. & Ricker, T.J. (2017, May). Masking Effects in Visual Working Memory. Poster presented at the Undergraduate Conference on Research, Scholarship, and Performance, College of Staten Island - City University of New York, Staten Island, New York, USA.
- Thomas, L., Etuknwa, M. & Ricker, T.J. (2017, May). Modeling Capacity for Orientation in Visual Working Memory. Poster presented at the Undergraduate Conference on Research, Scholarship, and Performance, College of Staten Island - City University of New York, Staten Island, New York, USA.
- Wong, A., Ezeude, S. & Ricker, T.J. (2017, May). Testing Theories of Short-Term Consolidation. Poster presented at the Undergraduate Conference on Research, Scholarship, and Performance, College of Staten Island - City University of New York, Staten Island, New York, USA.
- Palladino, J., & Ricker, T.J. (2016, April). The Time Course of Short-Term Consolidation. Poster presented at the Undergraduate Conference on Research, Scholarship, and Performance, College of Staten Island - City University of New York, Staten Island, New York, USA.
- Ramirez, J., & Ricker, T.J. (2016, April). The Effect of Working Memory Load on Impulsive Decision-Making. Poster presented at the Undergraduate Conference on Research, Scholarship, and Performance, College of Staten Island - City University of New York, Staten Island, New York, USA.
- Sammartano, A., & Ricker, T.J. (2016, April). Cognitive Load with Continuous Working Memory Representations. Poster presented at the Undergraduate Conference on Research, Scholarship, and Performance, College of Staten Island - City University of New York, Staten Island, New York, USA.
- Thomas, L., & Ricker, T.J. (2016, April). Sensory Memory Persistence and Working Memory Estimation. Poster presented at the Undergraduate Conference on Research, Scholarship, and Performance, College of Staten Island - City University of New York, Staten Island, New York, USA.
- Adkins, J., Stecher, S., Richard, V., Ricker, T.J., & Hebert, K.R. (2013, November). Task demands and consolidation in visual working memory. Poster presented at the University of Missouri Health Science Day, University of Missouri, Columbia, Missouri, USA.
- Campbell, J., Eads, T., Fox, C., Smith, M., Ricker, T.J., & Hebert, K.R. (2012, November). Time-dependent decay of information in working memory can be mitigated by presentation style. Poster presented at the University of Missouri Health Science Day, University of Missouri, Columbia, Missouri, USA.
- Clark, K.M., Sunday, M., Ricker, T.J., & Cowan, N. (2012, July). Short-term forgetting as a function of time and temporal distinctiveness. Summer Undergraduate Research Forum, University of Missouri, Columbia, Missouri, USA.
- Benson, S., Fronczak, N., Jones, K., Ricker, T.J., Cowan, N., & Hebert K. (2011, November). The role of decay in visual working memory performance: Implications for cognitive training therapies. Health Sciences Day, University of Missouri, Columbia, Missouri, USA

Professional Service & Activities

Consulting Editor

Journal of Experimental Psychology: General
January 2017 - Present

Journal of Experimental Psychology: Human Perception and Performance
January 2015 - Present

Ad-Hoc Reviewer: Professional Journals

Acta Psychologica, Annals of the New York Academy of Sciences, Attention Perception & Psychophysics, Behavior Research Methods, British Journal of Psychology, Cognition, Cognitive Psychology, Consciousness and Cognition, Journal of Cognitive Neuroscience, Journal of Cognitive Psychology, Journal of Experimental Psychology: General, Journal of Experimental Psychology: Human Perception and Performance, Journal of Experimental Psychology: Learning Memory & Cognition, Journal of Memory & Language, Memory, Memory & Cognition, Nature Communications, Nature Human Behaviour, Perception, PLOS ONE, Psychological Science, Psychonomic Bulletin & Review, Quarterly Journal of Experimental Psychology, Vision Research

Ad-Hoc Reviewer: Granting Agencies

Israel Science Foundation
Swiss National Science Foundation
U.S.-Israel Binational Science Foundation

Professional Membership

Psychonomic Society

- Fellow, April 2015 – Present
- Review Committee, May 2018 – Present
- Member, May 2013 – April 2015

Institutional Service

Current

University of South Dakota

- Member, Faculty Search Committee – Instructor/Lecturer, February 2022 – Present
- Member, Human Factors Recruitment Committee, February 2021 – Present

Past

University of South Dakota

- Member, Research Methods Committee, October 2020 – July 2021
- Member, Psychology Dept. Faculty Evaluation Standards Committee, January 2021 – April 2021

College of Staten Island, CUNY

- Member, Psychology Department Assessment Committee, September 2019 – August 2020
- Member, College Academic Facilities Committee, September 2018 – August 2020
- Alternate Member, College Research Committee, September 2018 – August 2020
- Member, Course and Standing Committee, September 2016 – August 2018
- Member, Search Committee - High Performance Computing Center Director, Feb 2017 – Aug 2017
- Member, Honors Committee, College of Staten Island, September 2015 – August 2016

The Graduate Center, CUNY

- Organizer, Cognition, Language, & Development Colloquium, June 2017 – May 2018
- Member, Cognition, Language, & Development Admissions Committee, October 2016 – Dec 2018
- Member, Cognition & Comparative Psych Admission Committee, December 2018 – August 2020
- Member, Cognition & Comparative Psychology Executive Committee, August 2018 – August 2020

Reader: Doctoral Exams, Dissertations, & Theses

Dissertations

- Alixander Galinsky*, “Color vision in a VR headset”, University of South Dakota, expected 2022.
- Elizabeth Sterling*, “Anti-Counterfeiting Warnings: Do They Influence Consumer Behavior and Perception of Overt Indicators?”, University of South Dakota, expected 2022.
- Chelsea Reichert-Plaska*, “Examining the transient neural dynamics underlying working memory maintenance for complex visual stimuli”, The Graduate Center - CUNY, 2021.
- Nicholas Brosowsky*, “Memory-guided selective attention: An instance theory of automatic attentional control”, The Graduate Center - CUNY, 2019.

Preliminary/Comprehensive Examinations

- Nicole Amada*, “(Mal)adaptive Narrative Self Functioning: An Integrated Framework and Evaluation of Psychedelic Use and Meditative Practice”, The Graduate Center - CUNY, 2020.
- Casey Williamson*, “The role of the DLPFC in metamemory monitoring and control via non-invasive brain stimulation”, The Graduate Center - CUNY, 2019.
- Nicholas Brosowsky*, “Current approaches to auditory change detection and change deafness”, The Graduate Center - CUNY, 2018.
- Chelsea Reichert-Plaska*, “The behavioral and neural effects of rehearsal on working and long-term memory for novel naturalistic stimuli”, The Graduate Center - CUNY, 2018.

Masters Theses

- Nicole Amada*, “Narrative Self and the Psychedelic Experience: An exploratory qualitative study investigating psychedelic-induced changes to self-representation”, The Graduate Center - CUNY, 2019.
- Victoria Winters*, “The Effect of Future Oriented Tasks vs Incidental Orienting Task on Item-to-Item Associations”, Montclair State University, 2017.
- Olga Parshina*, “Relationships between Statistical Learning, Sentence Processing, and Working Memory”, The Graduate Center - CUNY, 2016.

Undergraduate Honors Theses

Tristiana Adragna, "The Relationship Between Gender and Body Image Satisfaction and Self-Esteem in Relation to Exercising", College of Staten Island – CUNY, 2020.

Gianna Cirrone, "Arduino-Based Monitoring of the Naked Mole-Rat Nest Environment", College of Staten Island – CUNY, 2019.

Maxim Yeremenko, "Comprehension and Reading Speed Before and After Commercial Speedreading Training", College of Staten Island - CUNY, 2018.

Dana Friedman, "Individual Differences in Night-Time Sleep and Motor Learning in Infants", College of Staten Island - CUNY, 2018.

Cynthia Dunne-Jaffe, "Hippocampal Neuropeptide-Y in Relation to Social Behavior", College of Staten Island - CUNY, 2017.

Miriam Sedrak, "Dying to Vote: Mortality Salience Affects Support for Donald Trump", College of Staten Island - CUNY, 2017.

Spogmay Khan, "Assessment of Stigma Towards Autism and Other Disabilities", College of Staten Island - CUNY, 2017.

Bianca Hernandez, "The Effects of Terror Management Theory on Political Standing", College of Staten Island - CUNY, 2016.