

AMY H. CRISS

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ACADEMIC POSITIONS

- 2017- Chair, Department of Psychology, Syracuse University
2017 - Full Professor, Department of Psychology, Syracuse University
2013 - 2017 Associate Professor, Department of Psychology, Syracuse University
2007 - 2013 Assistant Professor, Department of Psychology, Syracuse University

EDUCATION

- 2004 - 2007 Postdoctoral Fellow, Center for the Neural Basis of Cognition, Carnegie Mellon University (with James L. McClelland)
2004 Ph.D., Indiana University. Joint degree in Cognitive Psychology and Cognitive Science with a certificate in Mathematical Modeling (dissertation: *The representation of single items and associations in episodic memory*, advisor: Richard M. Shiffrin)
1997 B.A., Miami University. Psychology and Neuroscience (*magna cum laude*)

FUNDING

- 2013 National Science Foundation supplement to BCS-0951612, Role: PI
2012 Air Force Office of Sponsored Research. (AFOSR 12RSL077). *Festschrift in honor of Richard M. Shiffrin*, Role: PI
2011 - 2012 Air Force Office of Sponsored Research (AFOSR FA9550-10-1-0149). *A Distributed Representation of Remembered Time*, Role: Site PI (PI: Marc Howard, Boston University)
2010 - 2016 National Science Foundation (BCS-0951612). *CAREER: Cued Recall: Theory and Data*, Role: PI
1999 - 2002 National Science Foundation Graduate Student Fellowship

PUBLICATIONS

* indicates undergraduate student, underline indicates graduate student, % indicates postdoc, during the course of the research. Most papers are available at <http://memolab.syr.edu/Publications.html>. Authors are listed in order of their degree of involvement in the work, with the most active contributors listed first.

Journal Articles

32. Wilson, J.H., Criss, A.H., Spangler, S.A., *Walukevich, K., & Hewett, S. (in press). Analysis of acute naproxen administration on memory in young adults: A randomized double-blind placebo-controlled study. *Journal of Psychopharmacology*

31. %Cox, G. & Criss, A.H. (2017). Parallel interactive retrieval of item and associative information from event memory. *Cognitive Psychology* 97, 31-61.
30. Wilson, J. & Criss, A.H. (2017). The list strength effect in cued recall. *Journal of Memory & Language*, 95, 78-88.
29. Criss, A.H., *Salomão, C., Malmberg, K.J., Aue, W.A., Kılıç, A., & *Claridge, M. (in press). Release from Output Interference in Recognition Memory: A Test of the Attention Hypothesis. *Quarterly Journal of Experimental Psychology*
28. Aue, W.R., Criss, A.H., & *Novak, M.D. (2017). Evaluating mechanisms of proactive facilitation in cued recall. *Journal of Memory and Language*, 94, 103-118.
27. Kilic, A., Criss, A.H., Malmberg, K.J., & Shiffrin, R.M. (2017). Models that allow us to perceive the world more accurately also allow us to remember past events more accurately via differentiation. *Cognitive Psychology*, 92, 65-86
26. Kellen, D., Erdfelder, E., Malmberg, K.J., Dube, C., & Criss, A.H. (2016). The Ignored Alternative: An Application of Luce's Low-threshold Model to Recognition Memory. *Journal of Mathematical Psychology*, 75, 86-95.
25. %Koop, G. & Criss, A.H. (2016). The Response Dynamics of Recognition Memory: Sensitivity and Bias. *Journal of Experimental Psychology: Learning, Memory, & Cognition*, 52, 671-685
24. Annis, J., *Lenes, J. G., Westfall, H., Criss, A H, & Malmberg, K.J. (2015). The List-Length Effect Does Not Discriminate Between Models of Recognition Memory. *Journal of Memory and Language*, 85, 27-41.
23. Aue, W.A., Criss, A.H., %Prince, M. (2015). Dynamic memory searches: Output interference selectively impacts episodic memory. *Psychonomic Bulletin & Review*, 22, 1798-806. doi: 10.3758/s13423-015-0840-5.
22. Howard, M. W., Shankar, K., H., Aue, W.R., & Criss, A.H. (2015). A quantitative model of internal time in memory. *Psychological Review*, 122, 24-53.
21. %Koop, G.J., Criss, A.H., & Malmberg, K.J. (2015) The Role of Mnemonic Processes in Pure-Target and Pure-Foil Recognition Memory. *Psychonomic Bulletin & Review* 22(2):509-516. doi: 10.3758/s13423-014-0703-5
20. Malmberg, K.J., %Lehman, M., Annis, J., Criss, A.H., & Shiffrin, R.M. (2014). Consequences of Testing Memory. *Psychology of Learning & Motivation - Advances in Research and Theory*. 61, 285-313.
19. Criss, A.H., Aue, W.R., & Kilic, A. (2014). Age and response bias: Evidence from the strength based mirror effect. *Quarterly Journal of Experimental Psychology*, 67, 1910-1924.
18. %Hemmer, P. & Criss, A.H. (2013). The Shape of Things to Come: Evaluating Word Frequency as a Continuous Variable in Recognition Memory. *Journal of Experimental Psychology: Learning, Memory, & Cognition*, 39, 1947-1952. doi: 10.1037/t19791-000
17. Annis, J., Malmberg, K.J., Criss, A.H., & Shiffrin, R.M. (2013). Sources of interference in recognition testing. *Journal of Experimental Psychology: Learning, Memory, & Cognition*, 39,

16. Criss, A. H., Wheeler, M. E., & McClelland, J. L. (2013). A differentiation account of recognition memory: Evidence from fMRI. *Journal of Cognitive Neuroscience*, 25, 421-435. doi:10.1162/jocn_a_00292
15. Kilic, A., Criss, A.H., and Howard, M. W. (2013). A causal contiguity effect that persists across time scales. *Journal of Experimental Psychology: Learning, Memory, & Cognition*. 39, 297-303. doi: 10.1037/a0028463
14. Malmberg, K.J., Criss, A.H., *Gangwani, T. & Shiffrin, R.M. (2012). Overcoming the negative consequences of interference that results from recognition memory testing. *Psychological Science*, 23, 115-119 [lead article].
13. Wagenmakers, E., Krypotos, A., Criss, A.H., & Iverson, G. (2012). On the interpretation of uninterpretable interactions: A survey of the field 32 years after Loftus. *Memory & Cognition*, 40, 145-160 [lead article].
12. Aue, W.R., Criss, A.H., *Fischetti, N. (2012). Associative information in memory: Evidence from cued recall. *Journal of Memory and Language*, 66, 109-122.
11. Criss, A.H., Malmberg, K.J., & Shiffrin, R.M. (2011). Output interference in recognition memory. *Journal of Memory and Language*, 64, 316-326.
10. Criss, A.H., Aue, W.R., & *Smith, L. (2011). The effects of word frequency and context variability in cued recall. *Journal of Memory and Language*, 64, 119-132.
9. Criss, A.H. (2010). Differentiation and response bias in episodic memory: Evidence from reaction time distributions. *Journal of Experimental Psychology: Learning, Memory, & Cognition*, 36, 484-499.
8. Criss, A.H. (2009). The distribution of subjective memory strength: List strength and response bias. *Cognitive Psychology*, 59, 297-319.
7. Criss, A.H. & Malmberg, K.J. (2008). Evidence in support of the elevated attention hypothesis of recognition memory. *Journal of Memory & Language*, 59, 331-345.
6. Criss, A.H. (2006). The consequences of differentiation in episodic memory: Similarity and the strength based mirror effect. *Journal of Memory & Language: Special Issue on Computational Models of Memory*, 55, 461-478.
5. Criss, A.H. and McClelland, J.L. (2006). Differentiating the differentiation models: A comparison of the retrieving effectively from memory model (REM) and the subjective likelihood model (SLiM). *Journal of Memory & Language: Special Issue on Computational Models of Memory*, 55, 447-460 [lead article].
4. Criss, A.H. and Shiffrin, R.M. (2005). List discrimination and representation in associative recognition. *Journal of Experimental Psychology: Learning, Memory, & Cognition*, 31, 1199-1212.
3. Criss, A.H. and Shiffrin, R.M. (2004c). Pairs do not suffer interference from other types of pairs or single items in associative recognition. *Memory & Cognition*, 32, 1284-1297.
2. Criss, A.H. and Shiffrin, R.M. (2004b). Interactions between study task, study time, and the low frequency hit rate advantage in recognition memory. *Journal of Experimental Psychology: Learning, Memory, & Cognition*, 30, 778-786.

1. Criss, A.H. and Shiffrin, R.M. (2004a). Context noise and item noise jointly determine recognition memory: A comment on Dennis & Humphreys (2001). *Psychological Review*, 111, 800-807.

Books (Editor)

2. *Computational Approaches to Cognition* Series Editor, Springer.
- 2c. Dunn, J. & Kalish, M. (out for review) *State Trace Analysis*
- 2b. Palestro, J., Sederberg, P., Osth, A., VanZandt, T., & Turner, B. (out for review) *Likelihood-Free Methodology*
- 2a. Turner, B., Steyvers, M. & Forstman, B. (out for review) *Joint Modeling*
1. Raaijmakers, J., Criss, A.H., Goldstone, R., Nosofsky, R., & Steyvers, M. (Eds.). (2015). *Cognitive Modeling in Perception and Memory: A Festschrift for Richard M. Shiffrin*. Psychology Press.

Referred Conference Proceedings

2. Vempaty, A., Varshney, L.R., Koop, G.J., Criss, A.H., & Varshney, P. (2015). Decision Fusion by People: Experiments, Models, and Sociotechnical System Design. Proceedings of the IEEE Global Conference on Signal and Information Processing, GlobalSIP 2015, 83-87. doi:10.1109/GlobalSIP.2015.7418161
1. Vempaty, A., Koop, G.J., Criss, A.H., Varshney, L., & Varshney, P. (2014). How efficient are we at fusing decisions? in Conference on Digital Experimentation:CODE@MIT. Conference Proceedings. Cambridge, MA.

Book Chapters and Other Publications

10. Kilic, A. & Criss, A.H. (in press). Methods for Studying Memory Differences Between Younger and Older Adults. In: Otani, H.. & Schwartz, B. (Eds.) *Handbook on Research Methods in Human Memory Research*.
9. Criss (in press). In Vivo commentary on Basic Parameter Estimation chapter of Farrell & Lewandowsky *Computational Modeling in Cognition*
8. Criss, A.H. & Koop, G.J. (2015). Differentiation in Episodic Memory. In Raaijmakers, J., Criss, A.H., Goldstone, R., Nosofsky, R., & Steyvers, M. (Eds.). *Cognitive Modeling in Perception and Memory: A Festschrift for Richard M. Shiffrin*, (pgs 112-125). Psychology Press.
7. Criss, A. H. & Howard, M. (2015). Models of Episodic Memory. In J. Busemeyer, J. T. Townsend, Z. Wang, & A. Eidels (Eds.) *Oxford Handbook of Computational and Mathematical Psychology*, (pgs 165-183). Cambridge, Oxford University Press.
5. Criss, A. H., Malmberg, K. J. & Townsend, J.T. (2014). Editors' foreword for the special issue honoring William Kaye Estes. *Journal of Mathematical Psychology*, 59, 1-2. . <http://dx.doi.org/10.1016/j.jmp.2014.03.002>
4. Aue, W. R., Hemmer, P. & Criss, A. H. (2013). A Bayesian Analysis of Bias in Single Item Recognition for Continuous Word frequency [Abstract]. In M. Knauff, M. Pauen, N. Sebanz, & I. Wachsmuth (Eds.) *Proceedings of the 35th Annual Conference of the Cognitive Science Society* (p. 3873). Austin TX: Cognitive Science Society.
3. Klein, K.A., Shiffrin, R.M., and Criss, A.H. (2007). Putting context in context. In J. S. Nairne (Ed.), *The Foundations of Remembering: Essays in Honor of Henry L. Roediger II*. New York:

Psychology Press.

2. Criss, A.H. (2005). The representation of single items and associations in episodic memory. (Doctoral dissertation, Indiana University, 2004). *Dissertation Abstracts International-B*, 65(12), 6882.
1. Klein, K., Criss, A.H., and Shiffrin, R.M. (2004). Recency judgments and list context. [Abstract]. *Proceedings of the Twenty-Sixth Annual Meeting of the Cognitive Science Society* (p. 1578). Mahwah, NJ: Erlbaum.

AWARDS AND HONORS

APA Leadership Institute for Women in Psychology (2016)

FABBS (Federation of Associations in Behavioral & Brain Sciences) Foundation Early Career Impact Award (2015)

Indiana University Outstanding Young Alumni Award (2015)

Student Research Achievement Award, Indiana University, Department of Cognitive Science

Outstanding Dissertation Award, Indiana University, Department of Cognitive Science

Fellow, McDonnell Foundation Summer Institute in Cognitive Neuroscience, Dartmouth College

Patten Prize, Department of Psychology, Miami University

PROFESSIONAL SERVICE (selected)

Editor

Journal of Mathematical Psychology, Special Issue in Honor of W.K. Estes

Associate Editor

Behavior Research Methods

Editorial Board Member

Psychological Review, *Psychonomic Bulletin & Review*, *Journal of Experimental Psychology: Learning, Memory, & Cognition*, and *Journal of Memory & Language*

Board Member

2017 Psychonomic Society representative to FABBS

2011 –2017 Society for Mathematical Psychology (elected), Vice President 2013-14 ; President 2014-2016

WORKSHOPS

Priority Project on Human Multitasking Summer School in Cognitive Modeling

Computational Modeling Summer School