

Curriculum Vitae  
**CAREN M. ROTELLO**  
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Department of Psychological & Brain Sciences  
University of Massachusetts  
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### **Positions Held**

- 9/2017-pres. Department Chair, Psychological & Brain Sciences, University of Massachusetts - Amherst
- 1/2017-8/2017 Interim Department Chair, Psychological & Brain Sciences, University of Massachusetts - Amherst
- 2015-2016 Associate Chair for Research, Psychological & Brain Sciences, University of Massachusetts - Amherst
- 2006-present Professor of Psychological & Brain Sciences, University of Massachusetts - Amherst
- 2000-2006 Associate Professor of Psychology, University of Massachusetts - Amherst
- 1993-2000 Assistant Professor of Psychology, University of Massachusetts - Amherst

### **Education**

Ph.D., Psychology, 1993, Stanford University  
B.S. with Distinction, Psychology (Highest Honors) and Mathematics, 1989, University of Michigan

### **Honors**

Elected Fellow of the Society of Experimental Psychologists, 2018

### **Grant Activity**

Federal support (PI: Caren Rotello): Award Total \$2,387,438

National Institutes of Health Grant (R01 MH60274; Co-I for years 3-10: Neil A. Macmillan): 4/1/07-3/31/11 (no cost extension through 3/31/12), Total costs (Years 7-10): \$915,633;  
1/03-12/06, Total costs (Years 3-6) \$648,839;

6/00-5/02, Total costs (Years 1-2) \$189,202  
National Science Foundation Collaborative Research Grant (BCS-0616979; Co-PI: Evan Heit, UC-Merced), 8/15/06-8/14/09 (no cost extension through 7/15/10), UMass Total Costs (Years 1-3): \$152,353  
Department of Interior Grant (NBCH1050007; Co-PIs: Andrew Cohen, Kyle Cave), 3/29/05-3/28/06, Total Costs: \$432,820  
National Science Foundation POWRE Grant (SBR-9753136), 1/98-6/00, Total costs \$48,591

### Training Grant

Training in Applied and Basic Cognition and Development. Grant T32 MH16745 from the National Institute of Mental Health (1982-2009). Director/PI, 2008-2009. Total costs (Year 25): \$160,252

### Other support

Unilever Corporation Grant, PIs Keith Rayner, Caren M. Rotello, and Susan A. Duffy, total costs approximately \$21,600, 1/00-  
Faculty Research Grant, \$5185, University of Massachusetts, 2/99-1/01  
Faculty Research Grant, \$4576, University of Massachusetts, 4/97-3/98  
Healey Endowment Grant, \$5000, University of Massachusetts, 1994

## **Professional Activities**

### Associate Editor

*Psychological Science* (2018 - present)  
*Cognitive Psychology* (2010 - 2018)  
*Frontiers in Cognitive Science* Research Topic Editor (spring 2014, with B. K. Hayes & E. Heit)  
*Psychonomic Bulletin & Review* (2006 - 2009)  
*Journal of Experimental Psychology: Learning, Memory, and Cognition* (Sept. 2002- Dec. 2005)

### Member

Publications Committee, Psychonomic Society (2016 - present)  
Search Committee for Editor of *Psychonomic Bulletin & Review* (2018-2019)

### Editorial Board Member

*Journal of Experimental Psychology: Learning, Memory, and Cognition* (1993-1999; 2006-present)  
*Journal of Experimental Psychology: General* (2003 - present)  
*Psychological Review* (2003 - 2016)

### Standing Member, Grant review panel

National Institutes of Health: Cognition and Perception (July 2007 - June 2011)

### Ad Hoc Grant reviewing:

National Institutes of Health: Special Emphasis Panels ZRG1 BBBP-T(02) and ZRG1 BBBP-T(04): March and May, 2015

National Science Foundation: Decision Risk & Management Science, March 2015

National Institutes of Health Application Comparison Pilot: September 2014 [read and ranked 12 NIH proposals]

National Institutes of Health: ZRG1 BBBP-E (53), March 2013.

National Science Foundation: Cognition & Perception, October 2006, April 2007

National Science Foundation: Perception, Action, & Cognition, November 2007, October 2011

National Institutes of Health: Biobehavioral and Behavioral Processes panel (BBBP-4), February 2003

National Institutes of Health: Aging, Modeling, and Cognition (ZRG1 SSS-R), June 2003

National Institutes of Health: Aging, Memory, and Cognitive Processes (ZRG1 SSS-R 03), December 2003

National Institutes of Health: Fellowships in Language, Memory, and Cognition (ZRG1 BBBP-D 21), March 2004.

National Institutes of Health: Cognition Perception and Language Fellowships (ZRG1 F12A-20 L), November 2004.

National Institutes of Health: Special Topics in Cognition, Perception, Language and Communication (BBBP-D (02) M), March 2005.

National Institutes of Health: Special Emphasis Panel/Scientific Review Group 2006/05 (ZRG1 BBBP-D), February 2006.

United-States – Israel Binational Science Foundation, Spring 2000, Spring 2002

## Publications

- Starns, J. J., Cataldo, A. M., **Rotello, C. M.**, et al. (in press) Assessing theoretical conclusions with blinded inference to investigate a potential inference crisis. *Advances in Methods and Practices in Psychological Science*.
- Dillon, B., Andrews, C., **Rotello, C. M.**, & Wagers, M. (2019). A new argument for co-active parses during language comprehension. *Journal of Experimental Psychology: Learning, Memory, & Cognition*, *45*, 1271-1286. doi: 10.1037/xlm0000649
- Rotello, C. M.**, Heit, E., & Kelly, L. J. (2019). Do modals identify better models? A comparison of signal detection and probabilistic models of inductive reasoning. *Cognitive Psychology*, *112*, 1-24. Doi: 10.1016/j.cogpsych.2019.03.004
- Rotello, C. M.**, Kelly, L. J., & Heit, E. (2018). The shape of ROC curves in shooter tasks: Implications for best practices in analysis. *Collabra: Psychology*, *4*(1): 32. DOI: <https://doi.org/10.1525/collabra.171>
- Heit, E., & **Rotello, C. M.** (2018). Putting replication in its place. *Behavioral and Brain Sciences*. Doi: 10.1017/S0140525X18000687
- Rotello, C. M.** (2017). Signal detection theories of recognition memory. In J. T. Wixted (Ed.), *Learning and Memory: A Comprehensive Reference, 2nd edition* (Vol. 4: *Cognitive Psychology of Memory*). Elsevier.

- Rotello, C. M.,** & Chen, T. (2016). ROC curve analyses of eyewitness identification decisions: An analysis of the recent debate. *Cognitive Research: Principles and Implications*, 1:10. DOI 10.1186/s41235-016-0006-7
- Chen, T., **Rotello, C. M.,** & Verhaeghen, P. (2016). A state-trace meta-analysis of the age-related associative memory deficit. In D. Bruno (Ed.), *The Preservation of Memory* (pp. 56-77). Routledge: New York.
- Rotello, C. M.,** Heit, E., & Dubé, C. (2015). When more data steer us wrong: Replications with the wrong dependent measure perpetuate erroneous conclusions. *Psychonomic Bulletin & Review*, 22, 944-954. DOI 10.3758/s13423-014-0759-2
- Chen, T., Starns, J. J., & **Rotello, C. M.** (2015). A violation of the conditional independence assumption of discrete state models of recognition memory. *Journal of Experimental Psychology: Learning, Memory, & Cognition*, 41, 1215-1222. doi: 10.1037/xlm0000077
- Corrected: Chen, T., Starns, J. J., & **Rotello, C. M.** (2016). A violation of the conditional independence assumption of discrete state models of recognition memory (vol 41, pg 1215, 2015). *Journal of Experimental Psychology: Learning, Memory, & Cognition*, 42, 167.
- Rana, S., Mout, R., Le, N. D. B., Saha, K., Tonga, G. Y, Bain, R. E. S., Miranda, O. R., **Rotello, C. M.,** & Rotello, V. M. (2015). Rapid cell-based drug profiling using a multichannel nanoparticle-fluorescent protein sensor. *Nature Nanotechnology*, 10, 25-69. doi: 10.1038/nnano.2014.285 [My contribution was statistical, but central to the paper.]
- Rotello, C. M.,** & Heit, E. (2014). The neural correlates of belief bias: activation in inferior frontal cortex reflects response rate differences. *Frontiers in Human Neuroscience*, 8. doi: 10.3389/fnhum.2014.00862.
- Cohen, A. L., **Rotello, C. M.,** & Fiorenzo, L. M. (2014). Memory for license plates. *Psychology, Public Policy, and Law*, 20, 347-360.
- Pazzaglia, A. M., Staub, A., & **Rotello, C. M.** (2014). Encoding time and the mirror effect in recognition memory: Evidence from eyetracking. *Journal of Memory & Language*, 75, 77-92.
- Starns, J. J., **Rotello, C. M.,** & Hautus, M. J. (2014). Recognition memory zROC slopes for items with correct versus incorrect source decisions discriminate the dual process and unequal variance signal detection models. *Journal of Experimental Psychology: Learning, Memory, & Cognition*, 40, 1205-1225.
- Hayes, B. K., Heit, E., & **Rotello, C. M.** (2014). Memory, reasoning and categorization: Parallels and common mechanisms. *Frontiers in Psychology*. 5:529. doi: 10.3389/fpsyg.2014.00529
- White, C. N., Kapucu, A., Bruno, D., **Rotello, C. M.,** & Ratcliff, R. (2014). Response bias for emotional words in immediate recognition memory is due to relatedness rather than emotional valence. *Cognition & Emotion*, 28, 867-880. DOI: 10.1080/02699931.2013.858028
- Heit, E., & **Rotello, C. M.** (2014). Traditional difference-score analyses of reasoning are flawed. *Cognition*, 131, 75-91.
- Dube, C., **Rotello, C. M.,** & Pazzaglia, A. M. (2013). The statistical accuracy and theoretical status of discrete-state MPT models: Reply to Batchelder and Alexander (2013). *Psychological Bulletin*, 139, 1213-1220.

- Dube, C., Payne, L., Sekuler, R., & **Rotello, C. M.** (2013). Paying attention to attention in recognition memory: Insights from models and electrophysiology. *Psychological Science, 24*, 2398-2408.
- Pazzaglia, A. M., Dube, C., & **Rotello, C. M.** (2013). A critical comparison of discrete-state and continuous models of recognition memory: Implications for recognition and beyond. *Psychological Bulletin, 139*, 1173-1203.
- Starns, J. J., Pazzaglia, A. M., **Rotello, C. M.**, Hautus, M. J., & Macmillan, N. A. (2013). Unequal-strength source zROC slopes reflect criteria placement and not (necessarily) memory processes. *Journal of Experimental Psychology: Learning, Memory, and Cognition, 39*, 1377-1392
- Dube, C., Starns, J. J., **Rotello, C. M.**, & Ratcliff, R. (2012). Beyond ROC curvature: Strength effects and response time data support continuous-evidence models of recognition memory. *Journal of Memory & Language, 67*, 389-406.
- Heit, E., & **Rotello, C. M.** (2012). The pervasive effects of argument length on inductive reasoning. *Thinking & Reasoning* (Special issue on Reasoning and Argumentation), *18*, 244-277.
- Heit, E., **Rotello, C. M.**, & Hayes, B. K. (2012). Relations between memory and reasoning. In B. Ross (Ed.), *Psychology of Learning and Motivation*, Vol. 57 (pp. 57-101). Amsterdam: Elsevier.
- Starns, J. J., **Rotello, C. M.**, Ratcliff, R. (2012). Mixing strong and weak targets provides no evidence against the unequal-variance explanation of zROC slopes: A comment on Koen & Yonelinas (2010). *Journal of Experimental Psychology: Learning, Memory, and Cognition, 38*, 793-801.
- Dube, C., & **Rotello, C. M.** (2012). Binary ROCs in perception and recognition memory are curved. *Journal of Experimental Psychology: Learning, Memory, and Cognition, 38*, 130-151.
- Dube, C., **Rotello, C. M.**, & Heit, E. (2011). The belief bias effect is aptly named: A reply to Klauer and Kellen (2011). *Psychological Review, 118*, 155-163.
- Dube, C., **Rotello, C. M.**, & Heit, E. (2010). Assessing the belief bias effect with ROCs: It's a response bias effect. *Psychological Review, 117*, 831-863.
- Kapucu, A., Macmillan, N. A., & **Rotello, C. M.** (2010). Positive and negative remember judgments and ROCs in the plurals paradigm: Evidence for alternative decision strategies. *Memory & Cognition, 38*, 541-554. PMID2887610
- Heit, E., & **Rotello, C. M.** (2010). Relations between inductive reasoning and deductive reasoning. *Journal of Experimental Psychology: Learning, Memory, and Cognition, 36*, 805-812.
- Wong, M., & **Rotello, C. M.** (2010). Conjunction errors and semantic transparency. *Memory & Cognition, 38*, 47-56. PMC2905215
- Rotello, C. M.**, & Heit, E. (2009). Modeling the effects of argument length and validity on inductive and deductive reasoning. *Journal of Experimental Psychology: Learning, Memory, and Cognition, 35*, 1317-1330.
- Masson, M. E. J., & **Rotello, C. M.** (2009). Sources of bias in the Goodman-Kruskal gamma coefficient measure of association: Implications for studies of metacognitive processes. *Journal of Experimental Psychology: Learning, Memory, and Cognition, 35*, 509-527.
- Evans, K., **Rotello, C. M.**, Li, X., & Rayner, K. (2009). Scene perception and memory revealed by eye movements and ROC analyses: Does a cultural difference truly exist? *Quarterly Journal of Experimental Psychology, 62*, 276-285. [PMCID: PMC2668147]

- Heit, E., & **Rotello, C. M.** (2008). Modeling two kinds of reasoning. *Proceedings of the Thirtieth Annual Meeting of the Cognitive Science Society*, 1831-1836. Austin, TX: Cognitive Science Society.
- Hautus, M., Macmillan, N. A., & **Rotello, C. M.** (2008). Toward a complete decision model of item and source recognition. *Psychonomic Bulletin & Review*, *15*, 889-905.
- Cohen, A. L., **Rotello, C. M.**, & Macmillan, N. A. (2008). Evaluating models of remember-know judgments: Complexity, mimicry, and discriminability. *Psychonomic Bulletin & Review*, *15*, 906-926.
- Kapucu, A., **Rotello, C. M.**, Ready, R. E., & Seidl, K. N. (2008). Response bias in 'remembering' emotional stimuli: A new perspective on age differences. *Journal of Experimental Psychology: Learning, Memory, & Cognition*, *34*, 703-711.
- Rotello, C. M.**, & Zeng, M. (2008). Analysis of RT distributions in the remember-know paradigm. *Psychonomic Bulletin & Review*, *15*, 825-832.
- Rotello, C. M.**, Masson, M. E. J., & Verde, M. F. (2008). Type I error rates and power analyses for single-point sensitivity measures. *Perception & Psychophysics*, *70*, 389-401.
- Rayner, K., Miller, B., & **Rotello, C. M.** (2008). Eye movements when looking at print advertisements: The goal of the viewer matters. *Applied Cognitive Psychology*, *22*, 697-707.
- Cave, K. R., Cohen, A. L., **Rotello, C. M.**, McCaffrey, A., Ross, M. G., Zeng, M., Zivot, M., Li, X., & Chang, K. (2008). Using eye movements to understand complex visual comparisons. In K. Rayner, D. Shen, X. Bai, & G. Yan (Eds.), *Cognitive and Cultural Influences on Eye Movements* (pp. 141-156), Tianjin People's Press/Psychology Press.
- Rotello, C. M.**, & Macmillan, N. A. (2008). Response bias in recognition memory. In A. S. Benjamin & B. H. Ross (Eds.), *The Psychology of Learning and Motivation: Skill and Strategy in Memory Use*, Vol. 48 (pp. 61-94). London: Academic Press.
- Dougal, S., & **Rotello, C. M.** (2007). "Remembering" emotional words is based on response bias, not recollection. *Psychonomic Bulletin & Review*, *14*, 423-429.
- Verde, M. F., & **Rotello, C. M.** (2007). Memory strength and the decision process in recognition memory. *Memory & Cognition*, *35*, 254-262.
- Rotello, C. M.**, Macmillan, N. A., Hicks, J. L., & Hautus, M. (2006). Interpreting the effects of response bias on remember-know judgments using signal-detection and threshold models. *Memory & Cognition*, *34*, 1598-1614.
- Rotello, C. M.**, & Macmillan, N. A. (2006). Remember-know models as decision strategies in two experimental paradigms. *Journal of Memory & Language*, *55*, 479-494.
- Verde, M. F., Macmillan, N. A., & **Rotello, C. M.** (2006). Measures of sensitivity based on a single hit rate and false-alarm rate: The accuracy, precision, and robustness of  $d'$ ,  $A_z$ , and  $A'$ . *Perception & Psychophysics*, *68*, 643-654.
- Macmillan, N. A., & **Rotello, C. M.** (2006). Deciding about decision models of remember and know judgments: A reply to Murdock. *Psychological Review*, *113*, 657-665.
- Heit, E., & **Rotello, C. M.** (2005). Are there two kinds of reasoning? *Proceedings of the Twenty-five Annual Meeting of the Cognitive Science Society*, 923-928. Mahwah, NJ: Erlbaum.
- Rotello, C. M.**, Macmillan, N. A., Reeder, J. A., & Wong, M. (2005). The remember response: Subject to bias, graded, and not a process-pure indicator of recollection. *Psychonomic Bulletin & Review*, *12*, 865-873.
- Macmillan, N. A., **Rotello, C. M.**, & Verde, M. F. (2005). On the importance of models in interpreting remember-know experiments: Comments on Gardiner et al.'s (2002) meta-analysis. *Memory*, *13*, 607-621.

- Verde, M. F., & **Rotello, C. M.** (2004). Strong memories obscure weak memories in associative recognition. *Psychonomic Bulletin & Review*, *11*, 1062-1066.
- Macmillan, N. A., **Rotello, C. M.**, Miller, J. O. (2004). The sampling distributions of Gaussian ROC statistics. *Perception & Psychophysics*, *66*, 406-421.
- Rotello, C. M.**, Macmillan, N. A., & Reeder, J. A. (2004). Sum-Difference Theory of Remembering and Knowing: A Two-Dimensional Signal Detection Model. *Psychological Review*, *111*, 588-616.
- Verde, M. F., & **Rotello, C. M.** (2004). ROC curves show that the revelation effect is not a single phenomenon. *Psychonomic Bulletin & Review*, *11*, 560-566.
- Verde, M. F., & **Rotello, C. M.** (2003). Does familiarity change in the revelation effect? *Journal of Experimental Psychology: Learning, Memory, and Cognition*, *29*, 739-746.
- Pollatsek, A., & **Rotello, C. M.** (2002). Attention, perception, and memory. *Encyclopedia of Life Support Systems (EOLSS)*. Oxford, U.K.  
[\[http://www.eolss.net\]](http://www.eolss.net)
- Rayner, K., **Rotello, C. M.**, Stewart, A. J., Keir, J., & Duffy, S. A. (2001). Integrating text and pictorial information: Eye movements when looking at print advertisements. *Journal of Experimental Psychology: Applied*, *7*, 219-226.
- Rotello, C. M.** (2000). Recall processes in recognition memory. In D. L. Medin (Ed.), *The Psychology of Learning and Motivation, Vol. 40* (pp. 183-221). San Diego, CA: Academic Press.
- Rotello, C. M.**, & Heit, E. (2000). Associative recognition: A case of recall-to-reject processing. *Memory and Cognition*, *28*, 907-922.
- Rotello, C. M.**, Macmillan, N. A., & Van Tassel, G. (2000). Recall-to-reject in recognition: Evidence from ROC curves. *Journal of Memory and Language*, *43*, 67-88.
- Stern, E. R., & **Rotello, C. M.** (2000). Memory characteristics of recently imagined events and real events experienced previously. *American Journal of Psychology*, *113*, 569-590.
- Dougal, S., & **Rotello, C. M.** (1999). Context effects in recognition. *American Journal of Psychology*, *112*, 277-295.
- Rotello, C. M.** (1999). Metacognition and memory for nonoccurrence. *Memory*, *7*, 43-63.
- Rotello, C. M.**, & Heit, E. (1999). Two-process models of recognition memory: Evidence for Recall-to-reject? *Journal of Memory and Language*, *40*, 432-453.
- Catrambone, R., **Jones, C. M.**, Jonides, J., & Seifert, C. (1995). Reasoning about curvilinear motion: Using principles or analogy. *Memory & Cognition*, *23*, 368-373.
- Jones, C. M.** (1994). Construction of a mental model. In R. F. Lorch, Jr., & E. J. O'Brien (Eds.), *Sources of Coherence in Reading*, (pp. 335-352). Hillsdale, NJ: Erlbaum.
- Jones, C. M.**, & Heit, E. (1993). An evaluation of the total similarity principle: Effects of similarity on frequency judgments. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, *19*, 799-812.
- Jonides, J., & **Jones, C. M.** (1992). Direct coding for frequency of occurrence. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, *18*, 368-378.

### Submitted manuscripts

- Kapucu, A., & **Rotello, C. M.** (*under revision*). Recognition memory for specific emotion words: Anger, fear, and disgust. *Manuscript under invited revision*.
- Starns, J. J., Cataldo, A. M., & Rotello, C. M. (*under revision*). Blinded inference: An opportunity for mathematical modelers to lead the way in research reform. *Manuscript under invited revision*.

### Selected Conference Presentations

- Rotello, C. M.**, Starns, J. J., & Cataldo, A. M. (March, 2019). Validity of researcher inference in recognition memory: A blinded validation study. Talk presented at the annual meeting of the Society of Experimental Psychologists, New Brunswick, NJ.
- Rotello, C. M.**, Starns, J. J., & Cataldo, A. M. (November, 2018). Validity of researcher inference in recognition memory: A blinded validation study. Talk presented at the 59<sup>th</sup> Annual Meeting of the Psychonomic Society, New Orleans, LA.
- Dillon, B., Andrews, C., **Rotello, C. M.**, & Wagers, M. (March, 2017). A new argument for distinct, co-active parses during language comprehension. Talk at 30<sup>th</sup> Annual CUNY Conference on Human Sentence Processing, Boston MA. [presented by Dillon]
- Rotello, C. M.**, Heit, E., & Kelly, L. (November, 2016). Do modals identify better models? A comparison of signal detection and probabilistic models of inductive reasoning. Talk presented at the 57<sup>th</sup> Annual Meeting of the Psychonomic Society, Boston, MA.
- Kapucu, A., & **Rotello, C. M.** (November, 2016). Recognition memory for specific emotion words. Paper presented at the 57<sup>th</sup> Annual Meeting of the Psychonomic Society, Boston, MA.
- Rysling, A., **Rotello, C. M.**, & Dillon, B. (November, 2016). High confidence in illusory interpretations suggests misretrieval, not misreconstruction. Paper presented at the 57<sup>th</sup> Annual Meeting of the Psychonomic Society, Boston, MA.
- Heit, E., **Rotello, C. M.**, & Kelly, L. (November, 2016). ROCs show that shooter bias is response bias. Paper presented at the 57<sup>th</sup> Annual Meeting of the Psychonomic Society, Boston, MA.
- Rotello, C. M.**, Heit, E., & Kelly, L. (August, 2016). Do modals identify better models? A comparison of signal detection and probabilistic models of inductive reasoning. Talk presented at the International Conference on Thinking. Providence, RI.
- Rotello, C. M.**, Heit, E., & Dubé, C. (November, 2015). When more data steer us wrong: Replications with the wrong dependent measure perpetuate erroneous conclusions. Paper presented at the 56<sup>th</sup> Annual Meeting of the Psychonomic Society, Chicago, IL.
- Rotello, C. M.**, Heit, E., & Kelly, L. J. (November, 2015). Accuracy differences for congruent and incongruent belief bias problems reflect response bias. Paper presented at the 56<sup>th</sup> Annual Meeting of the Psychonomic Society, Chicago, IL.



- Rotello, C. M. (May, 2015). Why the threshold/continuous distinction matters: Evidence from common tasks. Talk presented at the Association for Psychological Science. New York, NY.
- Rotello, C. M. (November, 2014). Why cognitive psychology is important for neuroscience: An example from research on reasoning. Talk presented at the first annual Symposium on Cognitive Science. Amherst, MA.
- Zobel, B. H., Dube, C., Sanders, L. D., & Rotello, C. M. (November, 2014). A neurobehavioral test of discrete-state and continuous recognition memory models. Paper presented at the 55th Annual Meeting of the Psychonomic Society, Long Beach, CA.
- Chen, T., Starns, J., Rotello, C. M., and Zobel, B. H. (November, 2014). A test of discrete state models of recognition memory: How do participants use a continuous response scale? Paper presented at the 55th Annual Meeting of the Psychonomic Society, Long Beach, CA.
- Dube, C., Payne, L., Sekuler, R., & Rotello, C. M. (November, 2013). Continuous Recollection Without Unitization or Familiarity. Paper presented at the 54th Annual Meeting of the Psychonomic Society, Toronto, ON.
- Chen, T., Starns, J. J., & Rotello, C. M. (November, 2013). Violations of the Conditional Independence Assumption of Discrete State Models of Recognition Memory. Paper presented at the 54th Annual Meeting of the Psychonomic Society, Toronto, ON.
- Starns, J. J., & Rotello, C. M. (May, 2013). A qualitative miss for the bivariate signal-detection model of recognition and source performance. Paper presented at the 2013 Context and Episodic Memory Symposium. Philadelphia, PA.
- Pazzaglia, A. M., & Rotello, C. M. (November, 2012). Assessing the Role of Recollection in the Mirror Effect. Paper presented at the 53rd Annual Meeting of the Psychonomic Society, Minneapolis, MN.
- Rotello, C. M., & Heit, E. (November, 2012). Evaluating measures of belief and logic effects in syllogistic reasoning. Paper presented at the 53rd Annual Meeting of the Psychonomic Society, Minneapolis, MN.
- Starns, J. J., Pazzaglia, A. M., Rotello, C. M., Hautus, M. J., & Macmillan, N. A. (November, 2012). No threshold recollection required: Decision biases underlie the effect of strength on source memory zROC slopes. Paper presented at the 53rd Annual Meeting of the Psychonomic Society, Minneapolis, MN.
- Dube, C., Starns, J. J., Rotello, C. M., & Ratcliff, R. (November, 2011). Binary ROCs in recognition memory: signal detection, multinomial processing tree, and diffusion models. Paper presented at the 52nd Annual Meeting of the Psychonomic Society. Seattle, WA.
- Pazzaglia, A., Staub, A., & Rotello, C. M. (November, 2011). Encoding time and the mirror effect in recognition memory: Evidence from eyetracking during reading. Paper presented at the 52nd Annual Meeting of the Psychonomic Society. Seattle, WA.
- Dube, C., & Rotello, C. M. (July, 2011). Binary ROCs in perception and recognition memory are curved. Paper presented at the 51st Annual Meeting of the Paper presented at the International Conference on Memory 5 [part of invited symposium]. York, England.

- Rotello, C. M., Hautus, M. J., & Macmillan, N. A. (August, 2011). Source and item recognition memory: Comparing likelihood-ratio signal-detection, dual-process signal-detection, and multinomial processing models. Paper presented at the International Conference on Memory 5 [part of invited symposium]. York, England.
- Dube, C., & Rotello, C. M. (November, 2010). Binary and rating ROCs in perception, reasoning, and memory are curved. Paper presented at the 51st Annual Meeting of the Psychonomic Society. St. Louis, MO.
- White, C. N., Kapucu, A., Bruno, D., Rotello, C. M., & Ratcliff, R. (November, 2010). Response bias for emotional words in immediate recognition memory is due to relatedness rather than emotional valence. Paper presented at the 51st Annual Meeting of the Psychonomic Society. St. Louis, MO.
- Hautus, M. J., Rotello, C. M., & Macmillan, N. A. (April, 2010). Tests of 3 models for source and item recognition memory. Paper presented at the 2010 Context and Episodic Memory Symposium. Philadelphia, PA.
- Bruno, D., Kapucu, A., & Rotello, C. M. (November, 2009). Recognition memory for emotional stimuli: Response bias or distribution shift? Paper presented at the 50<sup>th</sup> Annual Meeting of the Psychonomic Society. Boston, MA.
- Dube, C., Rotello, C. M., & Heit, E. (November, 2009). Assessing the belief bias effect with ROCs: It's a response bias effect. Paper presented at the 50<sup>th</sup> Annual Meeting of the Psychonomic Society. Boston, MA.
- Hautus, M. J., Rotello, C. M., & Macmillan, N. A. (November, 2009). Tests of a model for source and item recognition memory. Paper presented at the 50<sup>th</sup> Annual Meeting of the Psychonomic Society. Boston, MA.
- Rotello, C. M. (January, 2009). Modeling source memory. Paper presented at the 2009 Context and Episodic Memory Symposium. West Palm Beach, FL.
- Heit, E., & Rotello, C. M. (November, 2008). Multidimensional models of inductive and deductive reasoning. Paper presented at the 49<sup>th</sup> Annual Meeting of the Psychonomic Society. Chicago, IL.
- Wong, M., & Rotello, C. M. (November, 2008). Semantic transparency affects memory conjunction errors. Paper presented at the 49<sup>th</sup> Annual Meeting of the Psychonomic Society. Chicago, IL.
- Rotello, C. M. (2008, July). Toward a complete decision model of item and source recognition. Invited paper presented at the international conference on Formal Models of Memory, Judgment, and Decision Making. Mannheim, Germany.
- Heit, E., & Rotello, C. M. (2008, July). Modeling two kinds of reasoning. Presented at the Thirtieth Annual Meeting of the Cognitive Science Society. Washington, DC.
- Chang, K., Rotello, C. M., Li, X., & Rayner, K. (2008, May). Scene perception and memory revealed by eye movements and ROC analysis: Does a cultural difference truly exist? Paper presented at the 2008 meeting of the Vision Sciences Society. Naples, FL.
- Cohen, A. L., Rotello, C. M., & Macmillan, N. A. (2008, January). Mimicry in models of remember-know judgments. Paper presented at the 2008 Context and Episodic Memory Symposium. Tampa, FL.
- Cohen, A. L., Rotello, C. M., & Macmillan, N. A. (2007, November). Mimicry in models of remember-know judgments. Paper presented at the 48<sup>th</sup> Annual Meeting of the Psychonomic Society. Long Beach, CA.
- Hautus, M., Macmillan, N. A., & Rotello, C. M. (2007, November). Toward a complete decision model of item and source recognition. Paper presented at the 48<sup>th</sup> Annual Meeting of the Psychonomic Society. Long Beach, CA.

- Kapucu, A., Rotello, C. M., Ready, R. E., & Seidl, K. N. (2007, November). Response bias in 'remembering' emotional stimuli: A new perspective on age differences. Paper presented at the 48<sup>th</sup> Annual Meeting of the Psychonomic Society. Long Beach, CA.
- Masson, M. E. J., & Rotello, C. M. (2007, November). Bias in the gamma coefficient as a measure of metacognitive accuracy. Paper presented at the 48<sup>th</sup> Annual Meeting of the Psychonomic Society. Long Beach, CA.
- Rotello, C. M., Masson, M. E. J., & Verde, M. F. (2007, November). Type I error rates and power analyses for single-point sensitivity measures. Paper presented at the 48<sup>th</sup> Annual Meeting of the Psychonomic Society. Long Beach, CA.
- Rotello, C. M., Masson, M. E. J., & Verde, M. F. (2007, July). Type I error rates and power analyses for single-point sensitivity measures. Paper presented at the joint meeting of the Psychonomic Society and the Experimental Psychology Society. Edinburgh, Scotland.
- Kapucu, A., Macmillan, N. A., & Rotello, C. M. (2006, November). Negative remembering. Paper presented at the 47<sup>th</sup> Annual Meeting of the Psychonomic Society. Houston, TX.
- Rotello, C. M., & Zeng, M. (2006, November). Analysis of RT distributions in the remember-know paradigm. Paper presented at the 47<sup>th</sup> Annual Meeting of the Psychonomic Society. Houston, TX.
- Cave, K.R., Cohen, A., Rotello, C., McCaffrey, A., Zeng, M., Li, X., Zivot, M., Chang, K., & Ross, M. (2006, June). Using eye movements to understand complex visual comparisons. *Second China International Conference on Eye Movements*. Tianjin Normal University, Tianjin, P.R.China.
- Dougal, S. & Rotello, C. M. (2005, November). "Remembering" emotional words is based on response bias not recollection. Paper presented at the 46<sup>th</sup> Annual Meeting of the Psychonomic Society. Toronto, Canada.
- Heit, E., & Rotello, C. M. (2005, November). Signal detection analyses of deductive and inductive reasoning. Paper presented at the 46<sup>th</sup> Annual Meeting of the Psychonomic Society. Toronto, Canada.
- Verde, M. F., & Rotello, C. M. (2005, November). Memory strength and the decision process in recognition memory. Paper presented at the 46<sup>th</sup> Annual Meeting of the Psychonomic Society. Toronto, Canada.
- Verde, M. F., & Rotello, C. M. (2004, November). Strength-based and Retrieval-based interference in cued recall. Paper presented at the 45<sup>th</sup> Annual Meeting of the Psychonomic Society. Minneapolis, MN.
- Rotello, C. M., Macmillan, N. A., Wong, M., & Gordon, R. R. (2004, November). On the flexibility of remember-know decision bounds. Paper presented at the 45<sup>th</sup> Annual Meeting of the Psychonomic Society. Minneapolis, MN.
- Rotello, C. M. (2004, July). On the flexibility of remember-know decision bounds. Paper presented at the Annual Summer Interdisciplinary Conference. Cavalese, Italy.

### **Selected Colloquia**

- Rotello, C. M. (February 1, 2019). Does science have an inference crisis? Assessing theoretical conclusions with blinded inference. Colloquium presented at the Department of Psychology, Stony Brook University, NY.

- Rotello, C. M. (April 19, 2018). Validity of researcher inference in recognition memory: A blinded validation study. Colloquium presented at the Basque Center for Brain and Language. San Sebastian, Spain.
- Rotello, C. M. (July 5, 2016). Do modals identify better models? A comparison of signal detection and probabilistic models of inductive reasoning. Colloquium presented at the Department of Psychology, University of Melbourne. Melbourne, Australia.
- Rotello, C. M. (October 15, 2015). The neuroscience of belief bias. Colloquium presented at the Cuban Neuroscience Center. Havana, Cuba.
- Rotello, C. M. (June, 2014). Using ROCs to understand data, and why they matter. Colloquium presented at Tel Aviv University, Department of Psychology. Tel Aviv, Israel.
- Rotello, C. M. (February, 2012). Using ROCs to understand data, and why they matter. Invited colloquium presented at the University of Maryland, Department of Psychology. College Park, MD.
- Rotello, C. M. (January, 2012). Eyewitness memory: A brief introduction. Invited talk given at the Massachusetts Continuing Legal Education Forensic Summit 2012. Boston, MA.
- Rotello, C. M. (2009, September). Modeling source memory. Invited presentation at Yale University. New Haven, CT.
- Rotello, C. M. (2009, September). Assessing the belief bias effect with ROCs: It's a response bias effect. Invited colloquium presented at Yale University. New Haven, CT.
- Rotello, C. M. (2008, May). Decision processes in remembering and knowing: Model-based investigations of recognition memory. Invited colloquium presented at Syracuse University. Syracuse, NY.
- Rotello, C. M. (2007, October). Decision processes in remembering and knowing: Model-based investigations of recognition memory. Invited colloquium presented at University of California – Los Angeles. Los Angeles, CA.

### **Ad Hoc Journal Reviews**

*Psychological Review* ▫ *Psychological Bulletin* ▫ *Cognition* ▫ *Cognitive Psychology* ▫ *Journal of Experimental Psychology: General* ▫ *Journal of Experimental Psychology: Learning, Memory, and Cognition* ▫ *Journal of Experimental Psychology: Applied* ▫ *Journal of Memory and Language* ▫ *Psychonomic Bulletin & Review* ▫ *Memory* ▫ *Memory & Cognition* ▫ *Contemporary Educational Psychology* ▫ *American Journal of Psychology* ▫ *Behavioral Research Methods, Instruments, & Computers* ▫ *European Journal of Cognitive Psychology* ▫ *Acta Psychologica* ▫ *Neuropsychologia* ▫ *Consciousness & Cognition* ▫ *Quarterly Journal of Experimental Psychology* ▫ *Journal of Mathematical Psychology* ▫ *Psychological Science* ▫ *Proceedings of the National Academy of Sciences* ▫ *The American Statistician* ▫ *Psychological Methods* ▫ *Law and Human Behavior* ▫ *Psychology and Aging*

**Departmental Service**

1994-1995; 2001-2002	Member, Human Subjects Committee
1995-1996	Member, Cognitive Faculty Search Committee
1995-2000	Member, Graduate Studies Committee
1997-1998	Co-organizer, Five College Seminars in Cognitive Science
1998-2000	Chair, Five College Seminars in Cognitive Science
2000 (Fall)	Member, Computer Network Committee
2001-2002	Member, Committee on Statistics Instruction
2003-2005	Member, Block Grant Committee
2002-2003	Member, Human Subjects Population Committee
2002-2003	Chair, Cognitive Faculty Search Committee
2003-2004	Member, Cognitive Faculty Search Committee
2004-2005	Co-Chair, Cognitive & Developmental Faculty Search Committee
2002-2005; 2009-2016	Member, Executive Committee
2002-2005; 2010-2014	Head of Cognitive Division
2002-2005	Head of Division II (Cognitive & Developmental)
2004-2011	Mentor to three junior faculty members (sequentially)
2005-2006	Chair, Human Subjects Committee
2005-2006	Member, Cognitive & Developmental Faculty Search
2006-2009	Participant & Mentor, Mutual Mentoring Initiative
2006-2007; 2008-2009	Member, Department Personnel Committee
2007-2008	Chair, Cognitive Faculty Search Committee
2008-2009	Chair, Cognitive Faculty Search Committee
2009-2010; 2011-2013	Chair, Department Personnel Committee
2013	Chair, Cognitive Neuroscience Search Committee
2013	Member, Search Committee for Chair of Psychological & Brain Sciences
2015-2016	Chair, Department Research Committee
2016 (Summer)	Chair, Search Committee for Department Director of Finance & Operations
2017-present	Member, Psychological Services Center Advisory Committee
2017-present	Chair, Department Executive Committee

**College of Natural Sciences Service**

2018-present	Member, Search Committee for CNS Director of Finance and Data Analytics
2019-present	Member, Committee on Interdisciplinary Graduate Program budget allocation
2019-present	Member, Search Committee for CNS Director of Communications

**University Service**

Fall 1999	Faculty Advisor, College of Arts and Sciences Information and Advising Center
2010-2012	Member, University Research Council
2010, 2011	Reviewer, Faculty Research Grants
2011-2012	Member, Massachusetts Society of Professors Contract Committee (and Research Issues sub-committee)
2011-2012	Mentor to a junior faculty member in Linguistics (part of Mellon Foundation Mutual Mentoring Initiative)
2011-2012	Chair, University Research Policy Committee [the steering committee of the University Research Council]
2011-2014 Committee	Member, University Research Council Executive
2012-2014	Chair, University Research Council
2015	Member, University Research Council
2015	Member, IT Strategic Planning Research Committee
2015-present	Mentor to a junior faculty member in Chemistry
2019-present	Bargaining Team Member for the Administration, Postdoc Union Contract

**Community Service**

Spring 2011	Member, Amherst Regional Public Schools, K-5 Mathematics Textbook Review Committee
Fall 2014	Presented research findings (with A. Cohen) to the Massachusetts EZ-ID Task Force, chaired by the Registrar of Motor Vehicles
2011-2017	Consultant to attorneys on memory issues

**Courses Taught***Undergraduate*

240(H)	Statistics in Psychology, regular and Honors sections
315(H)	Cognitive Psychology, regular and Honors sections
391	Seminars on the repressed/recovered memory debate; on eyewitness memory

*Graduate*

618	ABCD II: Applied, basic, cognitive & developmental psychology
640 & 641	Statistical Inference in Psychology I & II (traditional approach)
740	Bayesian Statistics in Psychology
891	Various seminars on mathematical models of memory, the time-course of judgment, the interpretation of response

893 probability and reaction time data, eyewitness memory, and  
signal detection theory  
Cognitive seminar

Nominated for Distinguished Teaching Award, 1999-2000

Nominated for College Outstanding Faculty Research Award, Spring 2012

**Professional Memberships**

Fellow of the Society of Experimental Psychologists

Fellow of the Psychonomic Society

Fellow of the Association for Psychological Science

American Psychological Association