

Vita
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EDUCATION, ACADEMIC HONORS and POSITIONS:

2013 - 2017	Elected Member at Large, Section J, AAAS
2011 - 2016	Elected to Governing Board of The Psychonomic Society
2010	Elected to the Memory Disorders Research Society (MDRS)
2007	Elected to the Society of Experimental Psychologists
2005	Elected Fellow, Association for Psychological Science
2001	Elected Fellow, American Association for Advancement of Science
1999	Elected Fellow, American Psychological Association, Div. 3
1992 - 2021	Professor, Carnegie Mellon University Faculty, Center for the Neural Basis of Cognition Member, Human Computer Interaction Institute Retired and voted Emerita Professor, July, 2021
1983 - 1992	Associate Professor, Carnegie Mellon University
1978 - 1983	Assistant Professor, Carnegie Mellon University
1978	Elected Member/Fellow of Psychonomic Society
1977 - 1978	Lecturer at Yale University
1976 - 1978	Awarded NRSA Post-Doctoral Fellowship
1976	Awarded Rackham Dissertation Grant
1973 - 1976	Awarded NSF Graduate Fellowship
1972 - 1976	University of Michigan, Ph.D. in Psychology
1972	Graduated with honors in Psychology Graduated Phi Beta Kappa
1968 - 1972	Stanford University, B.A. in Psychology

RESEARCH SUPPORT:

Principal Investigator

Years Inclusive	Grant and/or Contract Number and Title	Source
1998 - 2014	T32 MH19983 Combined Computational and Empirical Approaches to the Study of Cognitive Neuroscience	NIMH
1996 - 2010	R01 MH52808 Exploring the SAC Model of Memory	NIMH

1997 - 2001	AASERT grant to accompany A Computational Model of Individual Differences in Working Memory	AFOSR
1997 - 1999	Localizing Individual Differences in Task Performance via Computational Models of Working Memory Capacity	AFOSR
1995 - 1999	A Proposal to Model ATC in ACT	ONR
1995 - 1998	ASSERT grant to accompany A Proposal to Model ATC in ACT	ONR
1995 - 1996	Grant to support Carnegie Symposium on Cognition, entitled Metacognition and Implicit Memory	ONR
1990 - 1994	8908030 Tests of a Model of Question Answering	NSF
1988 - 1990	8719469 Components of Initial Skill Learning: Development of Effective Examples and Training Procedures	NSF
1983 - 1988	8303711 Strategies for Question-Answering: A Three-Stage Model	NSF
1983 - 1987	Design of Instructional Material for Optimizing Skill Learning	ONR
1983 - 1984	Carnegie-Mellon University grant for development of software for Educational Computing purposes	CMU
1979 - 1980	Grant from Institute on Aging, Portland, for memory research	Institute on Aging

Member or Co-Investigator:

Years Inclusive	Grant and/or Contract Number and Title	Source
2005 -	T90DA022762 & R90DA023426 Interdisciplinary Training in Computational Neuroscience	NIH NID A
2007 -	NIGMS GM081760 training grant on Brain and Behavior Carnegie Mellon-University of Pittsburgh Center for the Neural Basis of Cognition Undergraduate Research Fellowship in Computational Neuroscience	NIGMS
2007 -	GM75770-01A1 Research Training in Anesthesiology and Pain Management	NIGMS
2002 - 2005	N00014-02-2-0269 Cognitive Modeling of Individual Differences in Working Memory: Predicting Individual Differences in Complex, Interactive Environments	ONR
2000 - 2002	9983183 Computational Modeling of Individual Differences in Working Memory and Strategy Adaptivity	NSF

1998 - 2001

9873465 Computational Models and Coordinated
Neuroimaging of Learning and Cognitive
Function

NSF:
Learning
and
Intelligen
t Systems

PUBLICATIONS AND PAPERS IN PRESS:

- Popov, V., & Reder, L. (2024). Frequency effects in recognition and recall. In M. J. Kahana and A. D. Wagner (Eds.). *Oxford Handbook of Human Memory*. Oxford University Press. <https://doi.org/10.31234/osf.io/xb8es>
- Norton, C. M., Ibinson, J. W., Pcola, S. J., Popov, V., Tremel, J. J., Reder, L. M., Fiez, J.A., & Vogt, K. M. (2022). Neutral auditory words immediately followed by painful electric shock may show reduced next-day recollection. *Experimental Brain Research*, 1-13. <https://doi.org/10.1007/s00221-022-06467-8>
- Popov, V., & Reder, L. (in press). Frequency effects in recognition and recall. In Tulving, E., & Craik, F. I. M. (Eds.). *The Oxford Handbook of Memory*. Oxford University Press. <https://doi.org/10.31234/osf.io/xb8es>
- Popov, V., So, M., & Reder, L. M. (2021). Memory resources recover gradually over time: The effects of word frequency, presentation rate, and list composition on binding errors and mnemonic precision in source memory. *Journal of Experimental Psychology: Learning, Memory, and Cognition*. Advance online publication. <https://doi.org/10.1037/xlm0001072>
- Vogt, K., Ibinson, J., Smith, C., Citro, A., Norton, C., Karim, H., Popov, V., Mahajan, A., Aizenstein, H., Reder, L. & Fiez, J. (Featured article, 2021). Midazolam and ketamine produce distinct neural changes in memory, pain, and fear networks during pain. *Anesthesiology*. 135, 69–82. <https://doi.org/10.1097/ALN.0000000000003774>
- Zhang, J., Liu, X. L., So, M., & Reder, L. M. (Published online 2020). Familiarity acts as a reduction in objective complexity. *Memory & cognition*. 48(8), 1376-1387. <https://doi.org/10.3758/s13421-020-01055-z>
- Popov, V., & Reder, L.M. (Published online 2020). Greater discrimination difficulty during perceptual learning leads to stronger and more distinct representations. *Psychonomic Bulletin & Review. Advance Online Publication*. 27(6), 768–775. <https://doi.org/10.3758/s13423-020-01751-6>

- Popov, V., & Reder, L. (2020). Frequency effects on memory: A resource-limited theory. *Psychological Review*. 127(1), 1-46. <https://doi.org/10.1037/rev0000161>
- Popov, V., Marevic, I., Rummel, J., & Reder, L. (2019). Forgetting is a Feature, not a Bug: Intentionally Forgetting Some Things Helps Us Remember Others by Freeing up Working Memory Resources. *Psychological Science*. 30(9), 1303-1317. <https://doi.org/10.1177/0956797619859531>
- Vogt, K. M., Norton, C. M., Speer, L. E., Tremel, J. J., Ibinson, J. W., Reder, L. M., & Fiez, J. A. (2019). Memory for non-painful auditory items is influenced by whether they are experienced in a context involving painful electrical stimulation. *Experimental Brain Research*. <https://doi.org/10.1007/s00221-019-05534-x>
- Shen, Z., Popov, V. (co-first authors), Delahay, A., & Reder, L. (2018). Item strength affects working memory capacity. *Memory & Cognition*, 46(2), 204-215. <http://dx.doi.org/10.3758/s13421-017-0758-4>
- Delahay, A.B. & Reder, L.M. (2018). Short-term memory. In Frey, B. (Ed.), *The SAGE Encyclopedia of Educational Research, Measurement, and Evaluation*. Thousand Oaks, CA: Sage Publications. <http://dx.doi.org/10.4135/9781506326139.n628>
- Liu, X., Tan, D., & Reder, L. (2018). The Two Processes Underlying the Testing Effect---Evidence from Event-Related Potentials (ERPs), *Neuropsychologia*, ISSN 0028-3932. <http://dx.doi.org/10.1016/j.neuropsychologia.2018.02.022>.
- Popov V., & Reder, L. (2017). Target-to-distractor similarity can help visual search performance. In G. Gunzelmann, A. Howes, T. Tenbrink, & E. Davelaar (Eds.), *Proceedings of the 39th Annual Conference of the Cognitive Science Society* (pp.). Austin, TX: Cognitive Science Society.
- Manelis, A., Popov, V., Paynter, C., Walsh, M., Wheeler, M., Vogt, K., Reder, L. (2017). Cortical Networks Involved in Memory for Temporal Order. *Journal of Cognitive Neuroscience*, 29(7), 1253-1266. <http://dx.doi.org/10.1002/brb3.476>
- Walsh, M. M., Paynter, C. A., Zhang, Y., & Reder, L. M. (2016). Hitting the reset button: An ERP investigation of memory for temporal context. *Brain Research*, 1642, 524-531. <http://dx.doi.org/10.1016/j.brainres.2016.04.047>
- Liu, X., L. & Reder, L. M. (2016) fMRI Exploration of Pedagogical Benefits of Repeated Testing: When More Is Not Always Better. *Brain and Behavior*, 6(7). <http://dx.doi.org/10.1002/brb3.476>

- Reder, L., M., Liu, X., Keinath, A., & Popov, V. (2016). Building Knowledge Requires Bricks, Not Sand: The Critical Role of Familiar Constituents in Learning. *Psychonomic Bulletin & Review*, 23(1), 271-277.
<http://dx.doi.org/10.3758/s13423-015-0889-1>
- Dong, S., Reder, L. M., Yao, Y., Liu, Y., & Chen, F. (2015). Individual differences in working memory capacity are reflected in different ERP and EEG patterns to task difficulty. *Brain Research*, 1616, 146-156.
<http://dx.doi.org/10.1016/j.brainres.2015.05.003>
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- Manelis, A. & Reder, L. M. (2014) Effective Connectivity among the working memory regions during preparation for and during performance of the n-back task. *Frontiers in Human Neuroscience* 8:593.
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- Liu, X. L., Walsh, M. M., & Reder, L. M. (2014). An attentional adaptation account of spatial negative priming: Evidence from event-related potentials. *Cognitive, Affective, and Behavioral Neuroscience*, 14, 49–61.
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<https://doi.org/10.3758/BF03193229>
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<http://dx.doi.org/10.1016/j.cogbrainres.2005.04.001>
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INVITED PRESENTATIONS:

2nd Workshop on Mental Effort, September, 2021 (Virtual)

Mental effort: How familiarity and speed of input make tasks easy or hard

CogFog Seminar UCLA, June, 2021 (Virtual)

How Familiarity Affects Working Memory

Context and Episodic Memory Symposium, Philadelphia, Pennsylvania, May 2019

Frequency Effects on Memory: A Resource-Limited Theory

Annual Conference of the Japanese Society for Cognitive Psychology, Osaka, Japan, September 2018.

Symposium on Advances in Information Aggregation and Collective Intelligence Research.

Frequency Effects on Memory: A Resource-Limited Theory. [Keynote Address]

University of Pittsburgh, Department of Psychology, October 2017.

Reconceptualizing Working Memory.

Workshop on Memory and Skill, Duke University, Durham, North Carolina, April

2016. Not knowing what we know: A call for a theory-neutral database for empirical results in psychology.

Special Symposium of the Psychonomic Society Governing Board, University of Edinburgh, Edinburgh, Scotland, July 2015.

Building Knowledge Requires Bricks, Not Sand: The Critical Role of Familiar Constituents in Learning

Society for Neuroscience, Washington D.C., November 2011.

The evolution of a chunk: tracking changes in MTL during incidental learning of object-location associations (Manelis, Reder & Hanson) [Invited Symposium]

Symposium on Learning to Learn, sponsored by the Francisco Manuel Dos Santos

Foundation, University of Aveiro and University of Lisbon, October 2011. Applications of Cognitive Science Research to Educational Practice, [Featured Speaker]

The International Joint Conference on Active Media Technology and Brain Informatics, Beijing, China, October 2009.

How Midazolam Can Help Us Understand Human Memory: 3 Illustrations and a Proposal for a New Methodology. [Keynote Address]

The Institute of Psychology, Chinese Academy of Sciences, Beijing, China,

October 2009.

How Midazolam Can Help Us Understand Human Memory: 3 Illustrations and a Proposal for a New Methodology. [Invited Colloquium]

Successful Remembering and Successful Forgetting, Festschrift to celebrate the contributions of Robert A. Bjork in understanding human learning and memory. University of California, Los Angeles, January 10-11, 2009.
Context & Amnesia: How midazolam can help inform memory mechanisms.

The International Congress of Psychology, Berlin, Germany, July 2008.
Using drugs to help us understand human memory. [Invited Address]

The International Congress of Psychology, Berlin, Germany, July 2008.
Invited Symposium, Computational models of episodic memory. How a dual-process model of recognition accounts for spurious recollection.

The 20th Annual Association for Psychological Science, Chicago, IL, May 2008.
Experience is a double-edged sword: The encoding/retrieval tradeoff with familiarity. [Invited Address]

The 115th Annual Convention of the American Psychological Association, Division 3 Experimental Psychology, San Francisco, 2007.
Section on Uniting Psychology through Memory. Experience is a double-edged sword: A computational model of the encoding/retrieval tradeoff with familiarity. [Invited Address]

The (Grand) SLAMM: Symposium on Language and Memory at Manitoba, Winnipeg, 2007.
Memory Systems Do Not Divide on Consciousness. [Invited Address]

The 28th Annual Conference of the Cognitive Science Society 2006 (Vancouver),
Plenary Symposium on "The Synergy Of Implicit And Explicit Learning Processes" Implicit and explicit processes in learning & metacognition:
Giving consciousness too much attention.

Eighth Annual CNBC Retreat, Hidden Valley, October 2004
The effect of midazolam on visual search: Implications for understanding amnesia. [Invited Talk]

Conference on Metacognition and Education, Barnard College, NYC, June 2004
Senior moments: Memory, meta-memory, and aging.

Invited Address at SWIM, SEPA, Atlanta, March, 2004
Distinctiveness: An operational definition and its effect on encoding and retrieval.

Symposium on the Mirror Effect. EPA, Baltimore, March, 2003
The mirror effect: A mechanistic, dual process account.

- Kent Forum on Applied Psychology: Visual Metacognition, June 2002
Visual and verbal metacognition: Are they really different?
- Georgia Institute of Technology, October 2000
Relating implicit and explicit memories: A source of activation confusion account.
- Stanford University, February 1999
SAC: An activation-based account of implicit and explicit memory phenomena.
- Metacognition: Process, Function, and Use, September 1999 (Clermont-Ferrand, France)
Metacognition: Giving consciousness too much credit.
- American Psychological Society, June, 1999 (Denver, CO)
Relating implicit and explicit memories: A source of activation confusion account. [Invited Address]
- Tsukuba International Conference on Memory, 1998
SAC: An activation-based account of implicit and explicit memory phenomena. Consciousness and memory. Current Progress and Challenges (Tsukuba, Japan).
- Models of Working Memory Conference, July 1997 (Boulder, CO)
Modeling working memory in a unified architecture. (Lovett, M., Reder, L.M., & Lebiere, C.)
- Attention and Performance XVII, July 1996 (Haifa, Israel)
Exploring individual differences in strategy selection: Adaptativity in an air traffic controller's task.
- International Conference on Memory, July 1996 (Padova, Italy)
Symposium speaker on the topic of Metacognition.
Symposium organizer and speaker on the topic of Computational Models of Working Memory Performance
- 27th Carnegie Symposium on Cognition, May 1995
Metacognition does not imply awareness: Strategy choice is governed by implicit learning and memory.
- Symposium on Metacognition and Social Psychology, Universite Catholique de Louvain, Louvain La Neuve, Belgium, May 1995
Rapid Feeling-of-Knowing: A Strategy Selection Mechanism.
- University of Trier, May 1995
A computational model of feeling of knowing and strategy choice.

- Practical Aspects of Memory, III, August 1994 (University of Maryland)
Learning in context: Situated learning and transfer.
- Lake Geneva Language Comprehension Conference, July 1994
Further explorations of the Moses illusion: An activation account.
- International Congress of Psychology, July 1992 (Brussels)
Symposium on Inferential Processes in Text.
Reading what isn't there: Further explanations of the Moses illusion.
- American Psychological Society, June 1992 (San Diego, CA)
Invited Multispecialty Symposium: Theoretical, Cognitive, Developmental, and Neuropsychological Aspects of Metacognition. Evidence and mechanisms for a strategy selection phase in memory retrieval.
- University of Colorado, February 1992
Strategy selection in question answering
- International Conference on Memory, Lancaster University, Lancaster, UK, July 1991
Strategy choice in letter rotation: How sensitive are we to the dynamics of the environment?
- International Conference on Memory, Lancaster University, Lancaster, UK, July 1991
Better the second time around: Re-presentation reverses verbalization's impairment of face recognition (with Schooler, J. & Ryan, R.)
- The Flinders University of South Australia, March 1991
Locus of the Moses illusion: Imperfect encoding, retrieval, or match?
- Queensland University of Technology: School of Mathematics, Science and Technology Education, Queensland, February 1991 (Queensland, Australia)
The role of memory load in algebra problem solving.
- University of Queensland, Department of Psychology, February 1991 (Queensland, Australia)
Locus of the Moses illusion: Imperfect encoding, retrieval, or match?
- Sylvia Beach Language Comprehension Conference, July 1989
Partial matching during reading: What word reading times tell us about the Moses illusion.
- Pennsylvania State University, April 1989
Strategy choice in question-answering: The role of feeling of knowing.
- Conference on Inference Generation during Discourse Comprehension, Memphis State University, March 1988
Plausible inference.

University of Adelaide, Australia, April 1987
Skill learning.

The Flinders University of South Australia, April 1987
Question answering.

Smithsonian Institute, October 1986
Lecture on memory.

Midwestern Psychological Association, May 1986
Strategy selection in question-answering.

International Workshop on Modeling Cognition, July 1985
The role of examples in learning a cognitive skill

The Ebbinghaus Centennial Conference, April 1985
Beyond associations: Strategic components in memory retrieval.

Temple University, November 1984
A strategy selection model for question-answering.

APA Symposium, August 1981
Comprehension and inference in textual information processing.

Thinking and Learning Skills, LRDC, October 1980
Techniques available to author, teacher, and reader to improve retention of
main ideas of a chapter.

University of Illinois, Center for the Study of Reading, February 1980
Comparison of texts and their summaries.

The National Reading Conference (Invited Address), November 1979
The role of elaborations in learning introductory material.

Midwestern Psychological Association (Invited Paper), May 1979
Comparison of textbook chapters with their summaries: Support for cliff
notes.

Rockefeller University, April 1978
Thematic relatedness, plausible reasoning and the fan effect.

Levels of Processing Conference, June 1977 (Rockport, MA)
Elaboration explanation of depth of processing.

ABSTRACTS AND CONFERENCE PRESENTATIONS:

ACT-R Workshop in the MathPsych/ICCM Conference, July 2022 (Toronto, ON).
A new conception of working memory resources

- Society of Experimental Psychologists, May 2022 (Chicago).
A New Look at Working Memory: How familiarity & presentation speed of input affects LTM retention
- Psychonomic Society Annual Meeting, November 2017 (Vancouver, B.C.).
Reconceptualizing Working Memory (with Popov, V.)
- Cognitive Science Society Annual Meeting, July 2017 (London, UK).
Repetition improves memory by strengthening existing traces: Evidence from paired- associate learning under midazolam. (Poster with Popov, V.)
- Cognitive Science Society Annual Meeting, July 2017 (London, UK).
Target-to-distractor similarity can help visual search performance. (with V. Popov)
- Summer Annual Interdisciplinary Conference (ASIC, 2017) Interlaken, Switzerland.
Working Memory Needs to be Re-conceptualized (with V. Popov).
- Psychonomic Society Annual Meeting, November 2016 (Boston)
Symbol Familiarity Interacts with Working Memory Demands during Mathematical Problem-Solving (with Shen, Z., Popov, V. & Delahay, A.)
- Memory Disorders Research Society, September 2016 (Princeton).
Working Memory Resources are Consumed according to the Inverse Strength/Familiarity of the Elements to be Processed
- Anesthesiology Annual Meeting, May 2016 (San Francisco).
Variability in the Effect of Experimental Pain on Longterm Memory During Sedation with Dexmedetomidine & Midazolam. Vogt, K., Ibinson, J., Tremel, J., Popov, V., Reder, L., & Fiez, J.
- Psychonomics, May 2016 (Granada, Spain)
Building Knowledge Requires Bricks, Not Sand: The Critical Role of Familiar Constituents in Learning.
Spoken presentation: (with Liu, X., Keinath, A., Popov, V.)
- Society of Experimental Psychologists, April 2016 (Columbia University).
Constructing new knowledge: The interplay of familiarity, discrimination, partial-matching and working memory (with V. Popov, X. Liu & A. Keinath)
- Psychonomics, November 2015 (Chicago, IL)
Building Knowledge Requires Bricks, Not Sand: The Critical Role of Familiar Constituents in Learning
Spoken presentation: (with Liu, X., Keinath, A., Popov, V.)
- Psychonomics, November 2014 (Long Beach, CA)
Brain Activity During Testing Predicts Later Learning Success
Spoken presentation (with Liu, X., Liang, P., & Li, K.)

- Psychonomics, November 2014 (Long Beach, CA)
 Neural Mechanisms underlying Mnemonic Benefits of Repeated Retrieval,
 Poster presentation (Liu, X., Liang, P., Li, K. & Reder, L. M.)
- Cognitive Neuroscience Meeting, April 2014 (Boston, MA)
 Brain Activity During Testing Predicts Later Learning Success
 Poster presentation (Liu, X., Liang, P., Li, K. & Reder, L. M.)
- Psychonomics, November 2013 (Toronto, ON)
 Brain Activity During Testing Predicts Later Learning Success (Liu,
 X., Liang, P., Li, K. & Reder, L. M.)
- Annual Summer Interdisciplinary Conference, July 2011.
 Familiarity of Elements affects knowledge formation.
- Cognitive Neuroscience Meeting, April 2011 (San Francisco)
 An Attentional Adaption Account of Spatial Negative Priming-Evidence from
 ERP. Poster presentation (Liu X. L., Walsh M. & Reder, L. M.)
- Annual Interdisciplinary Conference, February 2011 (Jackson Hole),
 Combining fMRI and eye-tracking to understand contextual cueing in visual
 search (Manelis, A. & Reder, L.M.)
- Psychonomics, November 2010 (St. Louis)
 Comparison of Procedural and Contextual Learning Using fMRI and
 Eyetracking. Poster presentation (Manelis, A. & Reder, L.M.)
- Psychonomics, November 2009 (Boston)
 Context Effects in Episodic Recognition of Famous Versus Nonfamous Faces.
- Psychonomics, November 2009 (Boston)
 Recognition and Priming Under Midazolam.
- Poster presentation (Victoria, L.W., Reder, L.M., Dutcher, J.M., Aizenstein, H.J.,
 Quinlan, J.J., Gyulai, F.
- Society of Experimental Psychologists, April 2008 (Bloomington, Indiana)
 Using midazolam to address questions about the nature of human memory.
- Thirty-Third Annual Interdisciplinary Conference, Jackson Hole, WY, February, 2008.
 How Synthetic Amnesia Can Help Us Understand Human Memory.
- Psychonomics, November 2006 (Houston)
 A new paradigm for measuring the independent contributions of familiarity
 and recollection to recognition.
 Poster presentation (Buchler, N.E.G., Reder, L.M., & Light, L.L.)

- Psychonomics, November 2006 (Houston)
 Long- and short-term negative and positive priming.
 Poster presentation (Erickson, M., Shang, J., Buchanan, E., & Reder, L.)
- 5th Annual Summer Interdisciplinary Conference, (ASIC 2006) Andalsnes, Norway, July 2006.
 The interaction of implicit and explicit memory processes in learning and behavior.
- Psychonomics, November 2005 (Toronto)
 Recollection depends on unitization, but uncommon stimuli can be recognized by familiarity alone.
- Psychonomics, November 2005 (Toronto)
 Conjunction memory errors: The contribution of recollection.
 Poster presentation (Park, H., & Reder, L.M.)
- Psychonomics, November 2005 (Toronto)
 Manipulating word frequency effects by varying processing demands: Low-frequency words are more difficult to encode.
 Poster presentation (Diana, R.D., & Reder, L.M.)
- The Fourth Annual Summer Interdisciplinary Conference (ASIC 2005), Briancon, France, July 2005
 The role of consolidation in memory: Comparison of general vs. specific interference using midazolam.
- 12th Annual Cognitive Neuroscience Society Meeting, April 2005 (NYC, NY)
 Identifying the ERP correlate of a recognition memory search attempt.
 Poster presentation (Diana, R.D., Vilberg, K.L., & Reder, L.M.)
- Academy of Lifelong Learning at Carnegie Mellon University, January 2005
 Mechanisms of memory and how aging affects it.
- 29th Annual Interdisciplinary Conference, Jackson Hole, WY, February 2004
 The effect of midazolam on visual search: Implications for understanding hippocampal function.
- Psychonomics, November 2003 (Vancouver, BC, Canada)
 Distinctiveness: An operational definition with empirical support.
 Poster presentation (Park, H., Arndt, J. & Reder, L.M.)
- Psychonomics, November 2002 (Kansas City)
 The effect of distinctive visual information on false recognition.
 Poster presentation (Arndt, J. & Reder, L.M.)
- Psychonomics, November 2002 (Kansas City)
 The effects of irrelevant perceptual information on memory for faces

- Poster presentation (Diana, R.A. & Reder, L.M.)
- Cognitive Neuroscience Society, 2001 (New York, NY).
The role of perceptual fan in explicit recognition: Functional neuroimaging evidence. (Simmons, M.R., Reder L.M., Fiez, J.A.) Abstracts of the Eighth Annual Meeting of the Cognitive Neuroscience Society.
- Psychonomics, November 2001 (Orlando)
Evidence for a dual-process interpretation of the word frequency mirror effect. Poster presentation (Arndt, J. & Reder, L.M.)
- Psychonomics, November 2001 (Orlando)
Support for a dual-process account of mirror effects in recognition. Poster presentation (Cary, M. & Reder, L.M.)
- Psychonomics, November 2000 (New Orleans)
Modeling the role of perceptual features in word recognition and fragment completion. Poster presentation (Cary, M. & Reder, L.M.)
- Psychonomics, November 2000 (New Orleans)
The role of perceptual and conceptual fan in explicit recognition: Analogous processes. Poster presentation (Simmons, M., Reder, L.M., Donavos, D. K., & Fiez, J.)
- 24th Annual Interdisciplinary Conference, 1999 (Jackson Hole)
Negative priming, habituation, implicit learning in a spatial localization task.
- Psychonomics, November 1999 (Los Angeles)
Self-regulation of study time and the retention of rare and common events. Poster presentation (Dashen, M. & Reder, L.M.)
- Psychonomics, November 1999 (Los Angeles)
The role of perceptual similarity in explicit recognition: Evidence against multiple systems. Poster presentation (Reder, L.M., Donavos, D.K., & Erickson, M.A.)
- Psychonomics, November 1998
Feeling of knowing and strategy selection for solving arithmetic problems. Poster presentation (Reder, L.M. & Ritter, F.)
- American Educational Research Association, April 1998 (San Diego, CA)
The feeling-of-knowing in strategy selection. (Schunn, C.D. & Reder, L.M.)
- Psychonomics, November 1997 (Philadelphia) Individual differences in strategy adaptation. Poster presentation (Schunn, C.D. & Reder, L.M.)
- Cognitive Science Conference, August 1997 (Stanford)

- Modeling individual differences in a digit working memory task.
Poster presentation (Lovett, M., Reder, L.M., & Lebiere, C.)
- Cognitive Science Conference, August 1997 (Stanford)
Modeling the mirror effect in a continuous remember/know paradigm.
- Psychonomics, November 1997 (Philadelphia)
Spatial habituation and expectancy effects in a negative priming paradigm.
Poster presentation (Reder, L.M. & Weber, K.H.)
- Psychonomics, November 1996 (Chicago)
Modeling word frequency effects in a continuous remember/know judgment paradigm.
Poster presentation (Reder, L.M., Nhouyvanisvong, A., Schunn, C.D., Angstadt, P., & Hiraki, K.)
- Psychonomics, November 1996 (Chicago)
What do parity and five effects in arithmetic tell us about subjects' strategy control?
Poster presentation (Lemaire, P. & Reder, L.M.)
- AAAI-96 Workshop on Computational Cognitive Modeling, August 1996 (Portland) Modeling Changes in Strategy Selections Over Time. (Schunn, C.D. & Reder, L.M.)
- Psychonomics, November 1995 (Los Angeles)
Metacognition does not imply awareness: Implicit processes govern strategy selection.
- Psychonomics, November 1994 (St. Louis)
The malleability of validity judgements: Thinking versus justification.
Poster presentation (Kamas, E., Reder, L.M., & Schooler, J.)
- AIC (Annual Interdisciplinary Conference, 15th annual) session on Memory and Metamemory, January 1990
The role of feeling of knowing in selection of question answering strategies.
- American Educational Research Association, April 1988 (with D. Charney)
Learning by example, problem-solving, and discovery learning.
- American Educational Research Association, April 1987 (with D. Charney)
Designing interactive tutorials for computer users: Effects of the form of practice on skill learning.
- American Educational Research Association, April 1986 (with D. Charney)
Learning a skill from an instructional text: The role of elaborations.
- Conference on College Composition, March 1985 (with D. Charney)

The role of examples and explanations in teaching procedural skills.
(ERIC/IR Microfiche ED-259-718)

Psychonomics, November 1985

Mechanisms for strategy-selection in question answering.

Psychonomics, November 1982

Memory changes with age: Compensating shifts in strategy.

Cognitive Science, August 1981

Effects of integrated knowledge on fact retrieval and consistency: When does it help and when does it hurt?

Psychonomics, November 1981

What kind of pitcher can a catcher fill? Priming in sentence comprehension.

Psychonomics, November 1980

Plausibility judgments versus fact retrieval: efficient strategies for question-answering.

Psychonomics, November 1979

The role of integrating knowledge on fan effects.

International Joint Conference on Artificial Intelligence, August 1979

Use of thematic information to speed search of semantic nets.

Midwestern Psychological Association, May 1976

Elaborations and story processing.

EXTRACURRICULAR SERVICE:

Editorial Board:

Psychological Review (2010 - 2015)

Journal of Experimental Psychology: Learning, Memory and Cognition
(1983 - 1986, 1989 - 2002)

Memory and Cognition (1982 - 1990)

Journal of Cognitive Systems Research (1998 - 2009)

National Committee Service:

Steering Committee, American Association for the Advancement of
Science, Section J, psychology, 2014-2017.

Psychonomic Society liason to the American Association for the
Advancement of Science, 2011-2016

Governing Board, Psychonomic Society, 2010-2016

American Psychological Association nominating committee for Early Career Awards, 2003-2005

American Association for the Advancement of Science, Electorate Nominating Committee for Psychology, Section J. 2002 – 2005

Institute for Educational Science, Read Panel, March, 2004

Institute for Educational Science, Basic Processes, 2007-2010

National Institute of Health: NIDA Review Panel, November 2000

National Institute of Mental Health T32 Review Panel, October 2003

National Research Council (National Academy of Sciences), Committee on Techniques for the Enhancement of Human Performance, 1991 – 1994

National Research Council (National Academy of Sciences), Special Oversight Commission for the Mathematics Learning Study, 1998–2000

National Science Foundation Human Cognition & Performance Review Panel, April 2000

SOCIETY AFFILIATIONS:

Society of Experimental Psychology

Memory Disorders Research Society

Cognitive Neuroscience Society

Psychonomic Society, Fellow

American Psychological Society, Fellow

American Association for the Advancement of Science, Fellow

Association for Psychological Science, Fellow

AD HOC REVIEWER:

American Educational Research Journal

Journal of Educational Psychology

American Journal of Psychology

Journal of General Psychology

American Psychologist	Journal of Gerontology
Attention, Perception & Psychophysics	Journal of Memory and Language
Brain & Behavior	Journal of Psychology and Aging
Cerebral Cortex	JVLVB
Cognition	Memory & Cognition
Cognition & Emotion	NeuroImage
Cognitive, Affective & Behavioral Neuroscience	Neuropsychology
Cognitive Psychology	PLOS One
Cognitive Psychology Letters	PNAS
Cognitive Science	Psychology and Aging
Cognitive Science Quarterly	Psychological Bulletin
Consciousness and Cognition	Psychological Review
Developmental Psychology	Psychological Science
Hippocampus	Psychonomic Bulletin & Review
JEP: General	Psychophysiology
JEP: Applied	Quarterly J. of Exp. Psychology
JEP: Human Learning and Memory	Review of Educational Research
JEP: Human Perception & Performance	

EXTERNAL GRANT REVIEWER:

National Institute of Education
 National Science Foundation
 National Sciences and Engineering Research Council of Canada
 National Academy of Sciences, Committee on Aging
 Air Force Office of Scientific Research
 Economic and Social Research Council
 University of Arizona, Center for Consciousness Studies
 Medical Research Council, U.K.
 Institute of Education Sciences, Basic Processes grant review panel
 Japan Society for the Promotion of Science
 Israeli Science Foundation

UNIVERSITY AND DEPARTMENTAL SERVICE:

Lecture in uPNC Summer Boot Camp Series, July 2010, 2012, 2016
 Lecture to RAMS students, July 2016

 Lecture in Osher Series, April 2015
 Director of EEG lab, fall 2006 – 2014

Presidential Review Committee 2006
 Lecture to the Academy of Lifelong Learning, January 2005
 Faculty evaluation committee, 2004-2005
 Cognitive Faculty Search Committee, 2003-2004
 Director of Training Grant on Combined Computational and Behavioral
 Approaches to the Study of Cognition, 1997 - 2014
 Steering Committee on SDS/Psych joint Ph.D. program, 2001 - 2010
 Head of Cognitive Faculty Search, 1999 - 2000
 College Faculty Organization Chair 1999 - 2000
 Promotions & Tenure Committee, 1999 - 2000
 Organizer of Training Grant Core Courses, 1999 Space
 Committee for New Wing, 1998 - 1999 Planning
 Committee for HCI major, 1995 - 1996 Graduate Core
 Course Restructuring Committee, 1995
 Organizer of the 27th Carnegie Symposium on Cognition, 1995
 Faculty Senate Nominating Committee, 1995
 University Committee on Special Faculty Appointments, 1994
 Committee of Investigation on Ethics in Research, 1994
 Faculty Senate, 1993 - 1996
 Department Head Search Committee, 1992 - 1993
 Study Abroad Coordinator, 1989 - 1995
 Internal Review Board, 1987 - 1991
 Graduate Education Restructuring Committee, 1987
 Library Representative, 1981 - 1985
 College Computing Committee, 1984
 Colloquium Organizer, 1978 - 1980