# Laura A. Carlson CURRICULUM VITA

#### **Personal Information**

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## **Educational History**

High school: Winchester High School Undergraduate: Dartmouth College

Graduate: Michigan State University, East Lansing, Michigan, M.A. (1991)

University of Illinois, Urbana-Champaign, Ph.D. (1994)

#### **Positions**

Academic	
2008 – present	Professor of Psychology, University of Notre Dame
1999 - 2008	Associate Professor of Psychology, University of Notre Dame
1994 - 1999	Assistant Professor of Psychology, University of Notre Dame
Administrative	
2013 – present	Vice President, Associate Provost and Dean of the Graduate School,
2013 – present	University of Notre Dame
2009 - 2013	Associate Dean of Professional Development, The Graduate School
2007 - 2009	Associate Chair, Psychology, University of Notre Dame
2001 - 2005	Director of Graduate Studies, Psychology, University of Notre Dame
Professional	
2016 – 2021	Elected member, Governing Board, Psychonomic Society
2011 - 2016	Elected member, Governing Board, The Cognitive Science Society
2012 – present	Editorial Board, Journal of Experimental Psychology: Learning,
2012 present	Memory and Cognition
2011	Program Co-Chair, CogSci2011 Annual Meeting of the Cognitive
	Science Society, Boston, MA, July 2011.
2011 - 2014	Associate Editor, Cognitive Psychology

2010	Guest Editor (with Nora Newcombe and James Hoffman), Special Section entitled "Spatial reference frames: Integrating Cognitive, Behavioral, and Cognitive Neuroscience Approaches," <i>Journal of Experimental Psychology: Learning, Memory and Cognition</i>
2008 - 2012	Associate Editor, Journal of Experimental Psychology: Learning, Memory and Cognition
2008 - 2010	Secretary-Treasurer, Psychonomic Society
2005 - 2008	Associate Editor, Memory & Cognition
2003 - present	Editorial Board, Perception & Psychophysics
2005 – present	Editorial Board, Visual Cognition
2006 - 2008	Program Committee, Midwestern Psychological Association
2005 - 2010	Local Representative, Midwestern Psychological Association
2005 – present	Consultant in Spatial Cognition, Sandia National Labs
2011	National Science Foundation, Graduate Research Fellowship Panel
2009	National Science Foundation, Cross-Directorate Review Panel (CDI)
2005	National Science Foundation, Cross-Directorate Review Panel
2001	National Science Foundation, SBE Advance Grant Review Panel
1999-2000	National Science Foundation SBE POWRE Grant Review Panel

Ad hoc Reviewer in last 4 years for: Acta Psychologica; Cognitive Psychology; Cognition; Journal of Cognitive Science; Journal of Cognitive Neuroscience; Psychological Science; Spatial Cognition and Computation; Journal of Experimental Psychology: Animal Behavioral Processes; Journal of Experimental Psychology: Human Perception and Performance; Journal of Experimental Psychology: General; Journal of Experimental Psychology: Learning, Memory and Cognition; Memory & Cognition; Psychology and Aging; Journal of Pragmatics

Evaluator for promotion and tenure for 6 cases at other institutions in last 4 years

## **Distinctions, Honors & Awards**

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2012	Fellow, Association of Psychological Science (Appointed)
2011	Selected member of initial cohort, NDLead
2008	Rev. Edmund P. Joyce C.S.C Award for Excellence in Undergraduate
	Teaching, University of Notre Dame
2005	Kaneb Teaching Award, College of Arts and Letters, Notre Dame
2002-2003	Kaneb Center Teaching Fellow, University of Notre Dame
2001	Kaneb Teaching Award, College of Arts and Letters, Notre Dame
1994	American Psychological Association Dissertation Award \$500
1987	Benjamin Benner Research Award in Psychology, Dartmouth College
1984	Class of 1846 Latin Prize, Dartmouth College

## **Professional Memberships**

Psychonomic Society, Member American Psychological Society Midwestern Psychological Association Cognitive Science Society, Member

## **Grants and Sponsored Programs**

#### **Current Awards**

2014-2017, Principal Investigator. **National Science Foundation CCE STEM:** "Cultivating cultures for Ethical STEM". Title: Cultivating Leaders for Ethical STEM. Partners: Don Howard, Melinda Gormley, Mark Bourgeois, Paul Slaggert: \$410,340

#### **Books and Monographs**

Carlson, L. A. & van der Zee, E (Eds). (2005). Functional features in language and space: Insights from perception, categorization and development. Oxford University Press.

**Refereed Publications** (\*designates graduate student/postdoc; † designates undergraduate)

## **Journal Articles and Refereed Conference Proceedings**

- \*Schultheis, H., & Carlson, L. A. (in press). "Mechanisms of Reference Frame Selection in Spatial Term Use: Computational and Empirical Studies" *Cognitive Science*.
- \*Lugo, JE, Schmiedeler, J.P., Batill, S. M., & Carlson, L. (2015). Quantification of Classical Gestalt Principles in Two-Dimensional Product Representations. *Journal of Mechanical Design*, 137(9), 094502.
- Carlson, L. A., Skubic, M., \*Miller, J., Huo, Z., Alexenko, T. (2014). Strategies for human-driven robot comprehension of spatial descriptions by older adults in a robot fetch task. *TOPICS in Cognitive Science*, 6 (3), 513-533.
- \*Lugo, J., Schmiedeler, J., Batill, S., and Carlson, L., (2014), Relationship between Product Aesthetic Subject Preference and Quantified Gestalt Principles. *ASME 2014 International Design Engineering Technical Conference & Computers and Information in Engineering Conference*, (2014/8/17), V007T07A045-V007T074045.
- \*Schultheis, H. & Carlson, L. A. (2013). Determinants of Attentional Modulation Near the Hands. Frontiers in Psychology: Perception Science, 18 November 2013 | doi: 10.3389/fpsyg.2013.00858

- Carlson, L. A., Skubic, M., Miller, J., Huo, Z., & Alexenko, T. (2013). Assessing the effectiveness of older adults' spatial descriptions in a fetch task. *Proceedings of the Cognitive Science Society*, Annual Meeting, Berlin, (2013/7).
- \*Miller, J. E., Carlson, L. A., & McAuley, J. D. (2013). When what you hear influences when you see: Listening to an auditory rhythm influences the temporal allocation of visual attention. *Psychological Science*, 24 (1), 11-18. DOI: 10.1177/0956797612446707.
- Skubic, M., Huo, Z., Alexenko, T., Carlson, L., Miller, J. (2013). Testing an assistive fetch robot with spatial language from older and younger adults- RO-MAN, 2013 IEEE 697-702.
- Lugo, J., Batill, S., and Carlson, L., 2012 Modeling Product form Preference Using Gestalt Principles, Semantic Space and Kansei. In *Proceedings of the ASME 2012 International Design Engineering Technical Conference & Computers and Information in Engineering Conference*.
- Skubic, M., Alexenko, T., Huo, Z., Carlson, L., & \*Miller, J. (2012). Investigating spatial language for robot fetch commands. Grounding Language for Physical Systems. *AAAI Technical Report WS-12-07*. Workshops at the Twenty-Sixth AAAI Conference on Artificial Intelligence.
- Skubic, M., Zhiyu, H., Carlson, L. Li, X.O., & \*Miller, J. (2011). Human-driven spatial language for human-robot interaction. *Human-Robot Ineraction in ElderCare: Papers from the 2011 AAAI Workshops (WS-11-12)*. Twenty-fifth AAAI Conference on Artificial Intelligence.
- \*Li, X., Carlson, L. A., Mou, W., \*Williams, M. R., & \*Miller, J. E. (2011). Describing spatial locations from perception and memory: The influence of intrinsic axes on reference object selection. *Journal of Memory and Language*, 65, 222-236.
- \*Miller, J.E., Carlson, L. A, & \*Hill, P. L. (2011). Selecting a reference object. *Journal of Experimental Psychology: Learning, Memory & Cognition, 37*, 840-850.
- \*Miller, J. E., & Carlson, L. A. (2011). Selecting landmarks in a novel environment. *Psychonomic Bulletin & Review, 18(1)*, 184-191.
- Carlson, L. A., Hölscher, C., Shipley, T. F., & Conroy Dalton, R. (2010). Getting Lost in Buildings. *Current Directions in Psychological Science*, 19(5), 284-289.
- Carlson, L. A., Hoffman, J., & Newcombe, N. (2010). Introduction to the Special Section on Spatial Reference Frames: Examining what and how information is

- encoded through the integration of cognitive, behavorial, and neuroscience approaches. *Journal of Experimental Psychology: Learning, Memory & Cognition, 36*, 573-575.
- Carlson, L. A. & \*Hill, P. L. (2008). Processing the presence, placement and properties of a distractor during spatial language tasks. *Memory & Cognition*, 36, 240-255
- Carlson, L. A. & \*Van Deman, S. (2008). Inhibition within a reference frame during the interpretation of spatial language. *Cognition*, *106*, 384-407.
- \*Ashley, A. & Carlson, L. (2007). Interpreting proximity terms involves computing distance and direction. *Language and Cognitive Processes*, 22,1021-1044.
- West, R. L., Carlson, L. A., & Cohen, A-L. (2007). What the eyes can tell us about prospective memory. *International Journal of Psychophysiology*, 64, 269-277.
- Carlson, L. A, Regier, T., <sup>†</sup>Lopez, B. & Corrigan, B. (2006). Attention unites form and function in spatial language. *Spatial Cognition and Computation*, *6*, 295-308.
- Carlson, L. A. & <sup>†</sup>Kenny, R. (2006). Interpreting spatial terms involves simulating interactions. *Psychonomic Bulletin & Review, 13, 682-688.* [24/68; 1.76; 0]
- Carlson, L. A. & \*Covey, E. S. (2005). How *far* is *near*? Inferring distance from spatial descriptions. *Language and Cognitive Processes*, *20*, 617-632.
- Carlson, L. A. & \*van Deman, S. (2004). The space in spatial language. *Journal of Memory and Language*, *51*(3), 418-436.
- Carlson, L. A. (2003). Using spatial language. *Psychology of Learning and Motivation*, 43, 127-161.
- Carlson, L. A., West, R., Taylor, H. A., & †Herndon, R. (2002). Neural correlates of spatial term use. *Journal of Experimental Psychology: Human Perception and Performance*, 28, 1391-1408.
- <sup>†</sup>Brockmole, J. R., Carlson, L. A., & Irwin, D. E. (2002). Inhibition of attended processing during saccadic eye movements. *Perception & Psychophysics*, *64*, 867-881.
- Carlson, L. A. & Logan, G. D. (2001). Using spatial terms to select an object. *Memory & Cognition*, 29, 883-892.
- Regier, T. & Carlson, L. A. (2001). Grounding spatial language in perception: An empirical and computational investigation. *Journal of Experimental Psychology: General*, 130, 273-298. Order of authorship is arbitrary.

- Carlson, L.A., Covell, E. R., & <sup>†</sup>Warapius, T. (2001). Transsaccadic coding of multiple objects and features *Psychologica Belgica*, *41* (Special Issue: Transsaccadic Object Perception), 9-28.
- Currie, C., McConkie, G., Carlson-Radvansky, L. A., & Irwin, D. E. (2000). The role of the saccade target object in the perception of a visually stable world. *Perception & Psychophysics*, 62, 673-683.
- Carlson-Radvansky, L. A., & \*Tang, Z. (2000). Functional influences on orienting a reference frame. *Memory & Cognition*, 28, 812-820.
- Carlson, L. A. (1999). Selecting a reference frame. *Spatial Cognition and Computation*, 1, 365-379.
- Carlson-Radvansky, L. A. (1999). Memory for relational information across eye movements. *Perception & Psychophysics*, *61*, 919-934.
- Carlson-Radvansky, L. A., \*Covey, E. S., & †Lattanzi, K. M. (1999). "What" effects on "where": Functional influences on spatial relations. *Psychological Science*, *10*, 516-521
- Carlson-Radvansky, L. A. & \*Jiang, Y. (1998). Inhibition accompanies reference frame selection. *Psychological Science*, *9*, 386-391.
- Carlson-Radvansky, L. A., & Logan, G. D. (1997). The influence of reference frame selection on spatial template construction. *Journal of Memory and Language*, *37*, 411-437.
- Carlson-Radvansky, L. A. & Radvansky, G. A. (1996). The influence of functional relations on spatial term selection. *Psychological Science*, 7, 56-60.
- Irwin, D. E., & Carlson-Radvansky, L. A. (1996). Cognitive suppression during saccadic eye movements. *Psychological Science*, *7*, 83-88.
- Irwin, D. E., Carlson-Radvansky, L. A., & Andrews, R. V. (1996). Information processing during saccadic eye movements. *Acta Psychologica*, 90, 261-273.
- Carlson-Radvansky, L. A., & Irwin, D. E. (1995). Memory for structural information across eye movements. *Journal of Experimental Psychology: Learning, Memory and Cognition*, 21, 1441-1458.
- Radvansky, G. A., Carlson-Radvansky, L. A., & Irwin, D. E. (1995). Uncertainty in estimating distances from memory. *Memory & Cognition*, 23, 596-606.
- Carlson-Radvansky, L. A., & Irwin, D. E. (1994). Reference frame activation during

- spatial term assignment. Journal of Memory and Language, 33, 646-671.
- Irwin, D. E., McConkie, G. W., Carlson-Radvansky, L. A., & Currie, C. (1994). A localist evaluation solution for visual stability across saccades. *Behavioral and Brain Sciences*, 17, 265-266.
- Carlson-Radvansky, L. & Irwin, D. E. (1993). Frames of reference in vision and language: Where is above? *Cognition*, 46, 223-244.
- Carlson, L., Alejano, A. & Carr, T. (1991). The level of focal attention hypothesis in oral reading: Influence of strategies on the context specificity of lexical repetition effects. *Journal of Experimental Psychology: Learning, Memory and Cognition, 17*, 924-931.

#### **Invited Book Chapters with External Review**

- \*Schultheis, H. & Carlson, L. A. (2013). *Spatial Reasoning*. Oxford Handbook of Cognitive Psychology, D. Reisberg (Ed.). Oxford University Press. DOI: 10.1093/oxfordhb/9780195376746.013.0045
- \*Miller, J. E., & Carlson, L. A. (2012). *Functional Effects in Spatial Language*. Y. Coello & A. Bartolo (Eds.). Language and action in the cognitive neurosciences. Psychology Press, (2012/12/7), 193.
- Carlson, L. A. (2010). Top-down and bottom-up processing. In B. Goldstein (Ed.), *Encyclopedia of Perception*, Sage.
- Carlson, L. A. Parsing space around objects (2010). In V. Evans & P. Chilton (Eds.). Language, Cognition, and Space: The state of the art and new directions. Advances in Cognitive Linguistics Series, Equinox Publishers.
- Carlson, L. A. (2010). Encoding space in spatial language. *Spatial Foundations of Cognition and Language (p. 157-187)* (Eds, K. S. Mix, L. B. Smith & M. Graesser), Language and Space Series (General Editor, E. van der Zee), Oxford University Press
- Carlson, L. A. & \*Hill, P. L. (2009). Formulating spatial descriptions across various dialogue contexts (pg. 89-103). In K. Coventry, T. Tenbrink, & J. Bateman (Eds.). *Spatial language and Dialogue*, Language and Space Series, Oxford University Press.
- Carlson, L. A. Commentator on "Thinking and Talking about Space". (2007). In J. Plumert & J. Spencer (Eds.). *The emerging spatial mind*, pp. 248-263. Oxford University Press.
- Carlson, L. A. & \*Hill, P. L. (2007). Experimental methods for studying language and

- space. In M. Gonzalez-Marquez, I. Mittelberg, S. Coulson, & M. Spivey (Eds.) *Methods in Cognitive Linguistics, pp. 250-276*, Amsterdam: John Benjamins.
- Carlson, L. A. & Logan, G. D. (2005). Attention and spatial language. In L. Itti, G. Rees, & J. Tsotsos (Eds.). *Neurobiology of attention (pp. 330-336)*. Academic Press.
- Carlson, L. A & <sup>†</sup>Kenny, R. (2005). Constraints on Spatial Language Comprehension. In D. Pecher & R. A. Zwaan (Eds), *The Grounding of Cognition: The role of perception and action in memory, language and thinking (pp. 35-64)*. Cambridge University Press
- Carlson, L. A., Regier, T., & \*Covey, E. S. (2003). Defining spatial relations: Reconciling axis and vector representations. In E. van der Zee & J. Slack (Eds.). *Representing direction in language and space* (pp. 111-131). Oxford University Press.
- Carlson, L. A. (2000). Object use and object location: The effect of function on spatial relations. In E. van der Zee & U. Nikanne (Eds.) *Cognitive interfaces: Constraints on linking cognitive information* (pp 94-115). Oxford: Oxford University Press.
- Carr, T.H., Dagenbach, D., Van Wieren, D. L., Carlson-Radvansky, L. A., Alejano, A., & Brown, J. (1994). Acquiring general knowledge from specific episodes of experience. In C. Umilta & M. Moscovitch (Eds.) *Attention and Performance XV: Conscious and nonconscious information processing* (p. 697-724): Cambridge: MIT Press.

#### **Unrefereed Publications**

- Carlson, L. A. (2004). On Applying the Science of Psychology to Life: A Research Methods Primer. In G. Howard (Ed.). *For the love of teaching*. Academic Publications, Notre Dame, IN.
- Carlson, L. A. and \*Covell, E. R. (2004). Defining functional features for spatial language. In L. Carlson & E. van der Zee (Eds.). *Functional features in language and space: Insights from perception, categorization and development.* Oxford University Press.
- Regier, T., Carlson, L. A., & Corrigan, B. (2004). Attention in spatial language: Bridging geometry and function. In L. Carlson & E. van der Zee (Eds.). *Functional features in language and space: Insights from perception, categorization and development*. Oxford University Press.

Regier, T. & Carlson, L. A. (2002). Spatial language: Perceptual constraints and linguistic variation. In N. Stein, P. Bauer, and M. Rabinowitz (Eds.), *Representation, Memory, and Development: Essays in Honor of Jean Mandler (199-222)*, Lawrence Erlbaum, Mahwah, NJ.

#### **Other Publications**

- Carlson, L. A. (2004). *On the "whats" and "hows" of "where"* Review of K. Coventry & P. Olivier (Eds.). Spatial Language: Cognitive and computational perspectives Dordrecht: Kluwer Academic Publishers, 2002. *Contemporary Psychology*, 49, 482-485
- Carlson-Radvansky, L. A. (1997). Room to talk: The language/space interface. Review of P. Bloom, M. A. Peterson, L. Nadel, and M. Garrett (Eds.), Language and space Cambridge, MA: MIT Press, 1996. *Contemporary Psychology, 42*, 1116.
- Carlson, L., McCandliss, B., Alejano, A. & Carr, T. H. (1990). Does attention control the context specificity of repetition benefits in oral reading? Bulletin of the Psychonomic Society, 28, 488-488.

#### **Invited Lectures, Addresses and Engagements**

- Carlson, L. (2014). Why we get lost, *Notre Dame Alumni Association Football Friday Lecture*, Notre Dame, IN, October 3, 2014.
- Carlson, L. A., Skubic, M., Miller, J., Huo, Z., & Alexenko, T. (2013). Assessing the effectiveness of older adults' spatial descriptions in a fetch task. Presented at Cognitive Science Society, Annual Meeting, Berlin. (read by Tim Shipley)
- Carlson, L. A. (2013). Deciding to be Green. Hesburgh Lecture presented to the Las Vegas Notre Dame Club.
- Carlson, L. A. (2013). Deciding to be Green. Hesburgh Lecture presented to the Greater Baltimore Notre Dame Club.
- Carlson, L.A. (2012). Invited participant at NSF-funded Specialist meeting: Spatial thinking across the college curriculum. December, Santa Barbara, CA.
- Carlson, L.A. (2011-2012). Member of the Inaugural ND Lead Class, Notre Dame, IN.
- Carlson, L.A. & Shelton, A. (2011). Organizers for Symposium to be given at Psychonomics: Wayfinding in the Seattle Public Library: What can we learn about navigational styles?, Seattle, Washington, November.
- Carlson, L. A. (2011). Wayfinding in the Seattle Central Public Library: Methodology. Paper presented in symposium at the Psychonomic conference in Seattle, WA, November.

- Carlson, L. A. (2011). Wayfinding in the Seattle Central Public Library. Invited paper presented at the Spatial Cognition and Architectural Design conference, New York, NY, November.
- Carlson, L. A., Hoelscher, C. & Shipley, T., (2011). Navigating in buildings: Building features, cognitive maps and individual differences. Paper presented as part of a symposium entitled "Where are we now?: Understanding spatial skills, strategies, and navigation. Association for Psychological Science, Washington, D.C.
- Carlson, L.A. (2011). *Deciding to be Green*. Hesburgh lecture, University of Tennessee at Chattanooga, October, 2011.
- Carlson, L. A. (2011). *Deciding to be Green*. Hesburgh lecture, Seton Hill University, October, 2011
- Carlson, L. A. (2011). Project Leader for weeklong intensive, *Experimental Methods in Cognitive Linguistics (EMCL 5.2)*, University of Chicago, June, 2011.
- Carlson, L. A. (2011). *Wayfinding in buildings*. Invited address at the Dublin Institute of Technology, Computational Linguistics Group, Dublin, Ireland, May, 2011.
- Carlson, L. A., Hölscher, C., Shipley, T. & Conroy Dalton, R. (2011). *A Spatial Cognition Framework for Understanding Wayfinding in Buildings*. Talk at the intensive "Design Implications of Spatial Cognition Research", EDRAMOVE, EDRA 42 Chicago, May 2011.
- Carlson, L. A. (2010). *Getting lost in buildings*. Presentation at the Building Complexity, Spatial Cognition and Individual Differences Panel for the School of the Built and Natural Environment and the Cognition and Communication Research Center in the School of Psychology and Sport Science, Northumbria University, Newcastle, UK, September, 2010.
- Carlson, L. A. (2010). *Encoding the locations of objects during navigation*. University of Freiburg, Germany, April, 2010.
- Carlson, L. A. (2010). Deciding to be Green, Hesburgh Lecture, Alvernia University, April, 2010.
- Carlson, L. A. (2010). *Deciding to be Green*, Hesburgh Lecture, Stockton College of New Jersey, April, 2010.
- Carlson, L. A. (2009). *Selecting reference objects for spatial descriptions* Invited speaker, Midwestern Psychological Association, Chicago, May, 2009.
- Carlson, L. A. (2009), *Space matters for spatial language, but so do function and action (sometimes)* University of Bremen, Germany, March, 2009.
- Carlson, L. A. (2009). *Space matters for spatial language, but so do function and action (sometimes)*. Invited speaker at ESF-CNCC Workshop "Motor representations and language and space", Lille, France. Jan 27<sup>th</sup>-30, 2009.
- Carlson, L. A. (2009). On the whats and hows of where: The role of salience in spatial descriptions Invited Speaker, University of Chicago, Cognitive Brown Bag, December, 2009.
- Carlson, L. A. (2008). On the whats and hows of where: The role of salience in spatial descriptions, Keynote Speaker, Spatial Cognition 2008, Freiburg, Germany, September, 2008.

- Carlson, L.A. (2008). *How prior experience constrains current spatial descriptions* Invited speaker at "Spatial Language in Context" workshop, Spatial Cognition, 2008, Freiburg, Germany, September.
- Carlson, L. A. (2008). *Representations and Processes in Spatial Language* Invited anchor speaker, Conference on Language and Perception, sponsored by P-N-P program, Department of Philosophy, Washington University, St. Louis, Feb 29-Mar 2, 2008.
- Carlson, L. A. (2007). *On the "whats" and "hows" of "where"*. Main speaker at the Spatial Language Symposium at the Endo-Neuro-Psycho (ENP) meeting, Doorwerth, Netherlands, June, 2007.
- Carlson, L. A. (2007). *Parameters of a reference frame*. Max Planck Institute for Psycholinguistics, Nijmegen, Netherlands, June, 2007.
- Carlson, L. A. (2007). On the "whats" and "hows" of "where". Naval Research Labs, April, 2007.
- Carlson, L. A. (2005). *Using spatial language*. Department of Psychology, Iowa State University.
- Carlson, L. A. & \*Hill, P. L. (2005). *Formulating spatial descriptions across various dialog contexts*. Workshop on Spatial Language and Dialog, Delmenhurst, Germany.
- Carlson, L. A. (2004). On the "whats" and "hows" of "where": Using spatial language. Invited talk given at the University of Plymouth, Plymouth, United Kingdom, December.
- Carlson, L. A. (2004). On the "whats" and "hows" of "where": Using spatial language. Invited talk given at Michigan State University, September.
- Carlson, L. A. (2003). *The space in spatial language*. Spatial Foundations of Cognition and Language conference, University of Indiana, Bloomington, IN, Oct. 12-14<sup>th</sup>.
- Carlson, L. A. & \*Klatt, S. R. (2002). *Spatial terms convey distance*. The 3rd Language and Space Workshop: Granularity in Language and Space, Bielefeld, Germany, July 8-9<sup>th</sup>.
- Carlson, L.A., \*Covell, E. & <sup>†</sup>Warapius, T. (2001). *Selecting the target of a saccade*. In the Visual Memory Symposium at the Third International Conference on Memory, Valencia, Spain.
- Carlson, L. A., Regier, T., & \*Covey, E. S. (2000). *Defining spatial relations: Reconciling axis and vector representations*. Workshop on Axes and Vectors in Language and Space, Lincoln, UK.
- Carlson, L. A. (2001). *Using spatial language*. Cognitive Colloquium Series, University of Illinois, Urbana-Champaign.
- Carlson, L. A. (2001). *Using spatial language*. Department of Psychology Colloquium Series, University of Georgia.
- Carlson, L. A. (2000). Representing information in transsaccadic memory. In the symposium on

- Transsaccadic Object Recognition at the 27th Annual Meeting of the International Congress of Psychology, Stockholm, Sweden.
- Carlson, L. A. (2000). *Cognitive psychology*. Psi Chi Panel Discussion on Alternatives to Ph.D. Clinical and Counseling Programs at the 72nd Annual Meeting of the Midwestern Psychological Association, Chicago, IL.
- Carlson-Radvansky, L. A. (1999). *Grounding spatial language in perception*. NSF Spatial Intelligence Workshop, University of Chicago, October.
- Carlson-Radvansky, L. A. (1999). Functional influences on selecting a reference frame. In symposium "Reference axes in language and space" at the 21st Annual Meeting of the Cognitive Science Society, Vancouver, BC.
- Carlson-Radvansky, L. A. (1999). *Selecting a reference frame*. Workshop on Systems of reference for spatial knowledge. Hamburg, Germany.
- Carlson-Radvansky, L. A. (1999). *Attention and vector-sum coding in spatial language*. In symposium "Spatial Attention and the Visual World" at the 71st Annual Meeting of the Midwestern Psychological Association, Chicago, IL.
- Carlson-Radvansky, L. A. (1998). *The online selection of a reference frame*. Annual meeting of the Midwestern Psychological Association, Chicago, IL.
- **Conference presentations** (\*designates graduate students/postdoc; † designates undergraduate) \*Kolesari, J., Carlson, L. (2014). Using space to understand time. *Psychonomic Society's* 55<sup>th</sup> Annual Meeting, Long Beach, CA, November 21, 2014.
  - \*Adams, D., \*Galeucia, C., \*Kolesari, J., Carlson, L., & Coventry, K. (2014). Evidence for dynamic-kinematic routines in the use of spatial terms. *Psychonomic Society's* 55<sup>th</sup> *Annual Meeting*, Long Beach, CA, November 21, 2014.
  - \*Galeucia, C., & Carlson, L. (2014). The effect of interaction on the selection of reference objects. *Psychonomic Society's 55<sup>th</sup> Annual Meeting*, Long Beach, CA, November 21, 2014.
  - Carlson, L. A., Skubic, M., Miller, J., Huo, Z., & Alexenko, T. (2013). Assessing the effectiveness of older adults' spatial descriptions in a fetch task. Presented at Cognitive Science Society, Annual Meeting, Berlin. (read by Tim Shipley)
  - Carlson, L. A., Skubic, M., \*Miller, J., \*Huo, Z, & \*Li, X. (2011). A corpus of spatial descriptions for the development of human-driven spatial language robot algorithms. Poster to be presented at the 52nd Annual meeting of the Psychonomic Society, Seattle, WA, November, 2011.
  - Carlson, L. A. & \*Miller, J. (2011). Defining salience for landmark selection. Poster to be

- presented at the Cognitive Science Society Annual Meeting, Boston, July, 2011.
- Carlson, L. A., Hölscher, C., & Shipley, T. Navigating in Buildings: Building Features, Cognitive Maps, and Individual Differences. Talk presented as part of the symposium "Where Are We Now?: Understanding Spatial Skills, Strategies, and Navigation, Annual Meeting of the Association for Psychological Science, Washington, DC, May, 2011.
- Carlson, L. A., Shipley, T., \*Li, X., Hölscher, C. (2010). Learning about objects along a route through a novel environment. Presentation at the 51<sup>st</sup> Annual meeting of the Psychonomic Society
- Carlson, L. A., Shipley, T., \*Li, X. & Hölscher, C. (2010). Why some people get lost in buildings. Paper presented at the unusual bodies and uncommon behaviors workshop at Spatial Cognition Conference, August, 2010, Portland, OR.
- \*Schultheis, H. & Carlson, L. A. (2010) "Towards a Comprehensive Computational Model of Spatial Term Use" Poster presented at Spatial Cognition Conference, August, 2010, Portland, OP
- \*Li, X., Carlson, L. A., & Mou, W. (2010). Describing spatial locations from perception and memory: The effect of spatial reference directions on reference object selection" Poster presented at Spatial Cognition Conference, August, 2010, Portland, OR.
- <sup>†</sup>Mickey, K., Carlson, L. A., & Freundschuh, S. (2010). "Location, Location, Location: Environmental constraints on interpreting spatial terms". Poster presented at the Annual Cognitive Science Society Conference, 2010, Portland, OR.
- \*Schultheis, H., Carlson, L.A., & Abrams, R. (2010). Attention for Action: Attentional Modulation by the Hands. Poster presented at Spatial Cognition Conference, August, 2010, Portland, OR.
- \*Miller, J. E\*. & Carlson, L. A. (2009). Selecting a reference object. Poster presented at the 50<sup>th</sup> Annual meeting of the Psychonomic Society, Boston, MA, November.
- \*Schultheis, H<sup>†</sup>. & Carlson, L. A. (2009). A computational model of reference frame selection in spatial term use. Poster presented at the 50<sup>th</sup> Annual meeting of the Psychonomic Society, Boston, MA, November
- Carlson, L. A., \*Miller, J. & \*Hillyard, J. (2009). What features constitute a good landmark? Paper to be given in Session Series on: Cognition, Behavior, and Representation, Association of American Geographers Annual Meeting, Las Vegas, March, 2009).
- Carlson, L. A., \*Williams, M. & \*Hill, P. L. (2007). Selecting a reference object. Poster presented at the 2007 Annual Meeting of the Psychonomics Society, Long Beach, CA.
- \*Tamplin, A. & Carlson, L. A. (2006). The cognitive processes involved in deception. Talk presented at the 78th Meeting of the Midwestern Psychological Association, Chicago, IL.
- \*Ashley, A. & Carlson, L. A. (2006). Understanding Motion Verbs Involves Spatial Reference Frames. Talk presented at the 78th Meeting of the Midwestern Psychological Association, Chicago, IL.

- \*Hill, P. L. & Carlson, L. A. (2006). Conceptual effects on spatial referencing. Talk presented at the 78th Meeting of the Midwestern Psychological Association, Chicago, IL.
- \*Ashley, A. & Carlson, L. A.(2005). Encoding direction during the processing of proximity terms. Poster presented at the 2005 Annual Meeting of the Psychonomic Society, Toronto, CA.
- \*Hill, P. L. & Carlson, L. A.(2005). Formulating spatial descriptions in scenes with multiple objects. Poster presented at the 2005 Annual Meeting of the Psychonomic Society, Toronto, CA.
- \*Ashley, A. & Carlson, L. A. (2004). As far as I know: Interpreting proximity terms involves computing distance and direction. Talk presented at the 2004 Annual Meeting of the Midwestern Psychological Association, Chicago, IL.
- \*Hill, P. & Carlson, L. A. (2004). Interpreting spatial descriptions of scenes with multiple objects. Talk presented at the 2004 Annual Meeting of the Midwestern Psychological Association, Chicago, IL.
- Carlson, L. A., Regier, T., †Lopez, B, & Corrigan, B. (2004). Attention unites form and function in spatial language. Paper presented at the 45th Annual Meeting of the Psychonomic Society, Minneapolis, November, 2004.
- Carlson, L. A., Regier, T., †Lopez, B, & Corrigan, B. (2004). Attention unites form and function in spatial language. Poster given at Cognitive Science Annual Meeting, Chicago, IL, August, 2004.
- Carlson, L. A., †Murray, M., †Shreiner, C. & †Carolan, P. (2004). Parsing space around objects. Poster given at the 16th Annual Meeting of the American Psychological Society, May, 2004.
- \*Klatt, S. R., \*Covey, E. S. & Carlson, L. A. (2002). How far is near? Examining the distance conveyed by spatial terms. Poster presented at the 2002 Annual Meeting of the Psychonomics Society, Kansas City, MO.
- \*Klatt, S. R. & Carlson, L. A. (2002). Inhibiting the different levels of a reference frame. Paper presented at the 2002 Annual Meeting of the Midwestern Psychological Association, Chicago, IL.
- Carlson, L.A. & Logan, G. D. (2001). Using spatial terms to select an object. Paper presented at the 42nd Meeting of the Psychonomics Society, Orlando, FL.
- Carlson, L.A., \*Covell, E. & †Warapius, T. (2001). The flexible encoding of a saccade target's features. Poster presented at the 1st Meeting of the Vision Sciences Society, Sarasota, FL.
- †Brockmole, J. R. & Carlson-Radvansky, L. A. (2000). Shifts of attentional scale are suppressed by saccadic eye movements. Paper presented at the 72nd Annual Meeting of the Midwestern Psychological Association, Chicago, IL.
- \*Covey, E. S. & Carlson-Radvansky, L. A. (2000). Spatial terms convey distance information. Paper presented at the 72nd Annual Meeting of the Midwestern Psychological Association, Chicago, IL.
- Carlson, L.A., West, R., †Herndon, R., & Taylor, H. (2000). Neural correlates of reference frame

- selection. Paper presented at the 41st Meeting of the Psychonomic Society, New Orleans, LA.
- Carlson-Radvansky, L. A., \*Covey, E. S., & †Lattanzi, K. (1999). The role of function in defining spatial relations. Paper presented at the Tenth Annual Winter Conference on Discourse, Text, & Cognition. Jackson Hole, WY.
- Carlson-Radvansky, L. A. (1998). Memory for relational information across eye movements. Poster presented at the meeting of the Psychonomics Society in Dallas, TX. Abstract available in Abstracts of the Psychonomic Society, 3, 1.
- Regier, T. & Carlson-Radvansky, L. A. (1998). Attention and population coding in spatial language. Paper presented in the Workshop on Grounding Word Meaning at the 15th Annual Conference on Artificial Intelligence.
- Carlson-Radvansky, L. A. & Regier, T. (1997). An empirical and computational investigation into the shape of linguistic spatial categories. Paper presented in the Language and Space workshop at the 14th Annual Conference on Artificial Intelligence.
- Carlson-Radvansky, L. A. (1996). The influence of reference frame selection on spatial template construction. Poster presented at the meeting of the Psychonomic Society in Los Angeles, CA.
- Carlson-Radvansky, L. A. (1996). Constructing spatial templates: The influence of reference frame selection. Paper presented in the Symposium on Language and Space at the 7th Midwest Artificial Intelligence and Cognitive Science Conference, Bloomington, IN.
- Carlson-Radvansky, L. A. (1995). Cooperation among spatial reference frames. Poster presented at the meeting of the Psychonomic Society in Los Angeles, CA.
- Carlson-Radvansky, L. A. (1994). Memory for structural information across eye movements. Poster presented at the meeting of the Psychonomic Society in St. Louis, MO.
- Currie, C. B., McConkie, G. W., Carlson-Radvansky, L. A., & Irwin, D. E. (1994). Maintaining visual stability across saccades: Role of the saccade target object. Paper presented at the meeting of the Psychonomic Society in St. Louis, MO.
- Irwin, D. E., & Carlson-Radvansky, L. A. (1993). Cognitive processing during saccadic eye movements. Paper presented at the meeting of the Psychonomic Society in Washington, D.C.
- Carlson-Radvansky, L. A., & Irwin, D. E. (1993). Reference frame activation in spatial term use. Paper presented at the meeting of the Midwestern Psychological Association in Chicago, II.
- Carlson-Radvansky, L. A. & Radvansky, G. A. (1993). The impact of functional relations on spatial term use. Paper presented at the meeting of the Midwestern Psychological Association in Chicago, IL.
- Carlson-Radvansky, L. & Irwin, D. E. (1992). Preferences among reference systems in the use of the spatial term "above". Poster presented at the meeting of the Midwestern Psychological Association in Chicago, IL.
- Carlson-Radvansky, L. & Irwin, D. E. (1992). Defining "above": An extrinsic, intrinsic or

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deictic preference. Paper presented at the meeting of the Psychonomic Society in St. Louis, MO.

Carr, T.H., Dagenbach, D., Van Wieren, D. L., Carlson-Radvansky, L. A., Alejano, A., & Brown, J. (1992). Acquiring general knowledge from specific episodes of experience. Paper presented at Attention and Performance XV: Conscious and nonconscious information processing, Erice, Sicily, Italy.

Carlson, L. McCandliss, B., Alejano, A. & Carr, T. (1990). Does attention control the context specificity of repetition benefits in oral reading? Paper presented at the meeting of the Psychonomic Society in New Orleans, LA. Read by Tom Carr.

#### **Undergraduate Research Funding**

Kevin Mickey, Kevin Kimberly (UROP)

Greg Davis, Jeremy Hillyard, Kevin Kimberly, Jared Miller (to go to Spatial Cognition on Freiburg, Germany) (Learning Beyond the Classroom Grant)

Meaghan Jennings, Beck Roan, Amanda Spiegelberg, Matt Grosso, Gabrielle Michalak (to go to San Francisco to attend the Green Festival in conjunction with the Deciding to be Green Class) (Learning Beyond the Classroom Grant)

## **Psychology Undergraduate Honors Theses Directed**

Alexandra Amorati, Corinne Swearingen, Kevin Kimberly, Kevin Mickey, Ashley Herrmann

## University Service

#### Mentoring

000-2003 Faculty Mentor in McNair Scholars Program	
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Faculty Mentor, Provost's Office Informal Mentoring Initiative	
2001-2005, 2008- Building Bridges Mentor	
Faculty discussion leader at 1st Year Student Orientation, 2000-2005	
Faculty Mentor, Student/Athlete Honor's Program	
Invited participant, Residential Scholars Program	
Graduate School, REU	
Faculty mentor for female junior faculty member, Computer Science	
Engineering	

#### **Human Subjects**

1997-2003	University Committee for the Protection of Human Subjects, 1997 - 2003;
	Chair, 1998, 2001 – 2003
2007 - 2009	Madison Center, Institutional Review Board Member

## Current Committee Assignments (partial list)

Provost Advisory Committee; Academic Council; President's Leadership Council; President's Committee on Diversity and Inclusion; Dean's Council, Provost Staff, University Committee for Women Faculty and Staff; ND National Security Working Group; California Initiative, University Committee on Sponsored Research Programs; Digital Computing...

# Past Committee Assignments 2013-2015 Academic Coun

2013-2015	Academic Council (re-elected)
2010 - 2013	Executive Committee, Academic Council (re-elected)
2010-2013	Graduate Council
2010-2013	Graduate Council Executive Committee
2010	Hearing committee (Elected)
2009	Provost Review Committee (Elected)
2007-2013	Academic Council (Elected)
2007-2010	University Committee on Women Faculty and Students (Elected)
2007-2010	Graduate Council Executive Committee (Elected)
2008-2010	Executive Committee, Academic Council (Elected)
2008-2009	Dean Review Committee (First year of studies) (Elected and appointed chair)
2007-2008	Search Committee, Dean of Graduate School (Elected)
2007-2008	Representative to Graduate Council
2006-2007	Data Manager Search, College of Arts and Letters
2006-2007	Research Committee, College of Arts and Letters
2006	Reviewer, Institute for Scholarship in the Liberal Arts Annual Awards
2004	Speaker at Arts and Letters Orientation Workshop
2003-2004	Graduate Council
2003-2004	Chair, Subcommittee of Graduate Council on Health Insurance Subsidy
2003	Committee on Rationale & Learning Goals for Univ. Requirement in Social
	Science
1999	Reviewer, Faculty Research Program Grants

## Department Service

2007 - 2009	Associate Chair (declined renewal due to other administrative duties)
2007 - 2009	Committee on Appointments and Promotions, Psychology (re-elected in 2009
	but stepped down due to other service commitments)
2008 - 2010; 2	2012 - Full professor committee
2001 2005	Conducto Discotori

- 2001-2005 Graduate Director
  - Managed a budget of \$500,000 for departmental graduate stipends
  - Allocated stipends to programs

- Coordinated admissions of graduate students
- In collaboration with Kaneb Center, developed a teacher training sequence for graduate students
- Coordinated graduate level curricula
- Assigned teaching assistants to undergraduate courses

1998-2005	Graduate Committee
Spring, 2007	Committee on Appointments and Promotions, Psychology
2007 -	Chair, Adhoc Committee for Teaching Load Reduction, 2006
2006 -	Colloquium Committee, Chair
2005	Library Liasion, 2005
2005	Honesty and Grievance Committee
1997-2001	Computer Committee
1995-1997	Space Committee