

**Curriculum Vitae  
Robert L. Goldstone  
September, 2009**

**Current Position**

Class of 1969 Chancellor's Professor  
Department of Psychological and Brain Sciences/Program in Cognitive Science  
Indiana University

**Contact Information**

Indiana University	(812) 855-4853
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Bloomington, IN. 47405	<a href="http://cognitrn.psych.indiana.edu/">http://cognitrn.psych.indiana.edu/</a>

**Birthdate and Place**

September 14, 1964. Cleveland, Ohio

**Education**

Ph.D. in Psychology, University of Michigan at Ann Arbor, 1991  
M.A. in Psychology, University of Illinois at Urbana-Champaign, 1989  
B.A. in Cognitive Science (individual major), Oberlin College, 1986

**Professional Employment**

Class of 1969 Chancellor's Professor, 2006-2009  
Full Professor, Indiana University, 1999-2006  
Associate Professor, Indiana University, 1996-1998  
Visiting Research Fellow: University of Glasgow (1997); University of Warwick (1997), University  
of Southampton (1998), University College London (1998)  
Assistant Professor, Indiana University, 1991-1996  
Visiting Scholar, Northwestern University, Summer 1993

**Research Areas**

Cognitive Psychology; Cognitive Science  
Concept Learning, Perceptual Learning, Knowledge Representation, Computational Modeling of  
Mental Processes, Neural Networks, Visual Cognition and Pattern Recognition,  
Decision Making and Judgment, Collective Behavior

## Professional Organizations

Cognitive Science Society, American Psychological Association, American Psychological Society, Psychonomic Society, Society of Experimental Psychologists

## Professional Activities

Director of the Indiana University Cognitive Science Program, 2006-2009

Rumelhart Prize Selection Committee, 2007-2009

Associate Editor of Cognitive Psychology, 2007-2009

Executive Editor of Cognitive Science, 2001-2005; Board of Reviewers, 2006-2009

Associate Editor of Topics in Cognitive Science, 2007-2009

Editorial Board of Journal of Problem Solving, 2009.

Governing Board of the Indiana University Institute for Advanced Study, 2008-2009

Co-organizer (with Uri Wilensky) of the Complex System Strand at the Thirteenth International Conference on the Teaching of Mathematical Modeling and Applications, Bloomington, IN, 2007.

Co-organizer (with Zygmunt Pizlo) of the Purdue Winer Memorial Lecturers and Workshop on "New Perspectives on Human Problem Solving." West Lafayette, IN, 2008.

Program Committee for the Annual Meetings of the Cognitive Science Society, 2002-2009 (prize selection committees: 2006, 2007, 2008)

Organizing committee for ALIFE X (Artificial Life), 2005-2006, Bloomington, IN., Chair of the ALIFE-X Workshops and Tutorial committee.

Co-organizer (with Katy Borner) of the Workshop on Modeling the Structure and Evolution of Science. May, 2006. Bloomington, IN.

Organizing committee for the 2006 Workshop on Teaching Cognitive Science. Bloomington, IN.

Program committee for Eighteenth Annual Conference AAAI (American Association for Artificial Intelligence) 2006. Boston, MA.

Marr prize selection committee: Member 2002, Chair 2004

Organizing Committee for the Festschrift "Categorization In and Out of the Laboratory" in honor of Douglas Medin, 2002-2003.

Advisory board member for UCSD's NSF Science of Learning Center on "Temporal Dynamics of Learning," 2006-2009.

Advisory board member for the Pittsburgh NSF Science of Learner Center, 2007-2009.

Program Committee for 1<sup>st</sup> International Workshop on Multi-objective Cybernetics, in conjunction with IEEE-ICCC, 2006. Helsinki, Finland.

Program committee for the 2002 “Concepts and Categorization” workshop at Florida Artificial Intelligence Research Symposium

Reviewer for the 2001 Neural Information Processing Systems (NIPS) 14 conference.

Governing Board of the Cognitive Science Society, 2001-2005

Editor search committee for the Cognitive Science Society, 2004-2005

Advisory Board for the masters program in Mind, Language and Embodied Cognition, University of Edinburgh, 2005-2009.

Review panel, National Science Foundation, Division of Information and Intelligent Systems, Advanced Learning Technologies, 2004

Review panel, National Institute of Health, Biological and Behavioral Processes, 2003, 2006

Review panel, National Science Foundation, Directorate of Education and Human Resources; Division of Research, Evaluation, and Communication; Research On Learning and Education (ROLE) 2002, Winter and Summer (chair)

Associate Editor for Psychonomic Bulletin and Review, 1998-2000

Board of consulting editors for Journal of Experimental Psychology: Learning, Memory, and Cognition, 1994-1998

Advisory Board for Cognition, Brain, and Behavior (a journal of the Romanian Association for Cognitive Science), 2005-2009

Member of the Alliance of Distinguished and Titled Professors, 2006-2009.

Steering committee for the Indiana Science, Technology, Engineering, and Mathematics Education Center, 2006-2009.

Indiana University Individual Major Director Search Committee, 2009.

External Review Committee for the Indiana University Department of History and Philosophy of Science, 2009.

Member of the Office of the Vice Provost for Research Center and Institute Advisory Committee, 2006-2009

Member of the University-level Tenure Advisory Committee at Indiana University, 2004-2007.

Director of Indiana University’s Cognitive Science Undergraduate Curriculum, 1992-1996, 1998-2000

Chair of Indiana University’s Psychology Department’s Teaching Assistantship Committee, 1995-1997

Patten Lecture Committee, 1998-2001

Ad hoc university committee on the undergraduate experience at Indiana University, 1996-1997

Member of Indiana University's psychology department's Teaching Assistantship Committee, 1992-1995

Psychology faculty search committees at Indiana University: developmental (2000-2001), cognitive (1992-1994, 2001), clinical (1993-1995)

Cognitive Science faculty search committees at Indiana University: director (2004), cognitive linguistics (2004), philosophy of mind (1998-1999), artificial intelligence (1994-1995)

Junior and Senior faculty searches for a professor of "Evolutionary origins of human intelligence" (2007-2008).

Cognitive Science undergraduate program committee: 1992-2005

Program Committee for the Seventh Midwest Artificial Intelligence and Cognitive Science Conference, 1996

Program Committee for the Florida Artificial Intelligence Research Symposium, 1994

Indiana University Cognitive Science Colloquium committee, 2000-2009

Subject pool committee, 1992-1997, 2001-2002, 2006-2009

Undergraduate programs committee at Indiana University, 1992-1995, 2001-2002

Cognitive science steering committee at Indiana University, 1992-2009

Psychology Department Undergraduate Curriculum Committee, 2002-2009

Psychology Department Policy Committee, 2001-2002, 2005-2009

Psychology Department Budget Advisory Committee, 2003-2004

Ad hoc Reviewer for American Journal of Psychology; Behavior Research Methods, Instrumentation, and Computers; British Journal of Social Psychology; British Journal of Psychology; Cognitive Psychology; Connection Science; European Journal of Cognitive Psychology; Journal of Cognitive Neuroscience; Journal of Experimental Child Psychology; Journal of Experimental Psychology (Learning, Memory and Cognition: General; Human Perception and Performance); Memory and Cognition; North Atlantic Treaty Organization; National Science Foundation; Proceedings of the Cognitive Science Society; Journal of Mathematical Psychology; Psychological Bulletin; Psychological Review; Psychological Research; Psychological Science.

## Honors and Awards

Elected Fellow of the Association for Psychological Science, 2007.

Elected Fellow of the Cognitive Science Society, 2006.

Elected Fellow of the Society of Experimental Psychologists, 2004.

National Academy of Sciences Troland research award for “novel experimental analyses and elegant modeling that show how perceptual learning dynamically adjusts dimensions and boundaries of categories and concepts in human thought”, 2004.

American Psychological Association (APA) Distinguished Scientific Award for Early Career Contribution to Psychology in the area of Cognition and Human Learning, 2000.

James McKeen Cattell Sabbatical Award, 1997-1998

Indiana University Board of Trustees’ Teaching Excellence Recognition Award, 1997, 1998

Chase Memorial Award for Outstanding Young Researcher in Cognitive Science, 1996.  
Established by Carnegie Mellon University.

American Psychological Association (APA) Division of Experimental Psychology 1995 Young Investigator Award in Experimental Psychology: Learning, Memory, and Cognition.

American Psychological Association (APA) Division of Experimental Psychology 1995 Young Investigator Award in Experimental Psychology: General.

Marquis Award for Most Outstanding Dissertation in Psychology, University of Michigan, 1991

Visiting Scholar in the Department of Psychology at Northwestern University, 1993

University Fellowship, University of Illinois at Urbana-Champaign, 1986-1987

Phi Beta Kappa; Phi Kappa Phi

## **Courses Taught**

### **Undergraduate**

Cognitive Psychology  
Freshman Survey of Complex Adaptive Systems  
Experiments and Models in Cognitive Science  
Laboratory in Learning, Memory, and Cognition  
Research Design and Methods

### **Graduate**

Concept Learning and Representation  
Complex Cognitive Processes  
Complex Adaptive Systems  
Introduction to Cognitive Science  
Analogy and Similarity

## **Dissertation**

Similarity, Interactive Activation, and Mapping. University of Michigan. August, 1991

## **Grant Support**

“The dynamics of brain-body-environment interaction in behavior and cognition,” National Science Foundation, Interdisciplinary Graduate Education Research Training (IGERT 0903495 ) (PI: Randall Beer), \$3,124,368, August 2009-July 2013.

- “Transfer of perceptually grounded principles,” National Science Foundation, Research and Evaluation on Education in Science and Engineering (DRL-0910218), (PI: Goldstone), \$1,073,000, July 2009-June 2013.
- “Applying a neural network for translating between conceptual systems to database schema matching,” Lockheed Martin – Advanced Technologies Laboratory (PI: Goldstone), \$90,000, December 2007-April 2009.
- “Grounded and Transferable Knowledge of Complex Systems Using Computer Simulations” (REC-0527920), National Science Foundation, ROLE, (PI: Goldstone), \$196,086, October 2005 – September 2009.
- “Grounded and Transferable Knowledge of Complex Systems Using Computer Simulations” (R305H05116), Department of Education, Institute of Education Sciences (PI: Goldstone), \$796,479, August 2005-July 2010.
- “Dynamics of Information Flow and Decisions in Social Networks” (0527249), National Science Foundation HSD grant (PI: Eliot Smith), \$529,301, August 2005 - July 2009.
- “Embodied and Transferable Understanding of Complex Systems Using Computer Simulations,” Faculty Research Support Program grant (PI: Sasha Barab), Indiana University, \$40,000 direct costs, August 2005- September 2007.
- “Modeling the Structure and Evolution of Scholarly Knowledge,” James S. McDonnell Foundation proposal in the area Studying Complex Systems (PI: Katy Börner), \$420,164 direct costs only, August 2005 - December 2010.
- “The Dynamics of Rules in Commons Dilemmas” (0432894), National Science Foundation HSD grant (PI: Marco Janssen), \$595,000, September 2004- August 2009.
- “Learning and Representation of Quasi-Regular Categories,” Faculty sponsor for Dr. Mark Blair’s postdoctoral research fellowship award, National Institute of Health, \$78,000 total costs, October 2003-September 2005.
- “Translating Between Conceptual Systems”, Lockheed-Martin Corporation, (PI: Goldstone) \$25,000 total costs, October 2003-December 2004.
- “Facilitating the Understanding of Complex Adaptive Systems Through Computer Simulations” (0125287), National Science Foundation ROLE grant (PI: Goldstone), \$330,910 total costs, October 2001-September 2005.
- “Interactions Between Perceptual and Conceptual Learning” (R01 MH56871), National Institute of Mental Health (PI: Goldstone), \$302,500 total costs, August 1999 – July 2004.
- Advisory board member on “Consortium on Cognitive Science Instruction”, grant from National Science Foundation (PI: David Anderson), 2001-2004.
- Gill Fellow in Cognitive Science, \$50,000 direct costs, 1997-2002.
- “An Undergraduate Curriculum for the Cognitive and Information Sciences,” (Co-PIs: Richard Shiffrin, Robert Goldstone, Jon Barwise), National Science Foundation, \$250,000 total costs, October 1997 - February 2001.

Sabbatical Year in the U.K., funded by the James McKeen Cattell Fund, \$23,000 direct costs, August 1997 - August 1998.

“Concepts, Perceptions, and Their Interactions,” National Science Foundation (PI: Goldstone), \$91,000 total costs, July 1994 - July 1997.

“Active learning course development grant” for the course “Complex Adaptive Systems”, \$1,500 direct costs, May 1996 - July 1996.

Research Experiences for Undergraduates (REU) supplementary award, National Science Foundation, \$5,000 total costs, July 1995 - July 1996.

Overseas Conference Award, Indiana University Office of International Programs, \$800, Summer 1996

“Concept Learning and Development of New Perceptual Features” (PHS S07 RR7031N), funded by a Biomedical Research Grant from the National Institute of Health to Indiana University, \$7,500 direct costs, May 1992 - May 1994.

Core faculty on “Training Grant for Modeling of Cognition” (NIH-T32) (PIs: Richard Shiffrin, James Townsend), funded by the National Institute of Mental Health, \$2,124,837 direct costs, July 1993-June 2008.

Core faculty on “Training Program in Integrative Developmental Processes” (NIH T32-HD-007475) (PI: Linda Smith), National Institute of Health, \$1,340,000, May 2005 – April 2009.

Consultant on “The Structure of Similarity” (89-18700) (PIs: Douglas Medin, Dedre Gentner) funded by the National Science Foundation, \$7,400 direct costs, Summer 1993.

Summer Research Fellowship, funded by Indiana University, \$4,500 direct costs, Summer 1992.

## **Publications**

### ***Books and Journal Special Issues***

Goldstone, R. L., & Gureckis, T. M. (2009). Guest editors of the “Collective Behavior” issue of Topics in Cognitive Science.

Ionescu, T., & Goldstone, R. L. (2007). Guest editors of a special issue on “The development of categorization” for Cognition, Brain, & Behavior.

Rocha, L. M., Yaeger, L. S., Bedau, M. A., Floreano, D., Goldstone, R. L., & Vespignani, A. (2006). Artificial Life X: Proceedings of the Tenth International Conference on the Simulation and Synthesis of Living Systems. Cambridge, MA: MIT Press.

Ahn, W., Goldstone, R. L., Love, B. C., Markman, A. B., & Wolff, P. (2005). (Eds.) Categorization Inside and Outside the Laboratory: Essays in Honor of Douglas L. Medin, Washington, DC: American Psychological Association.

Lamberts, K., & Goldstone, R. L. (2005). (Eds.) Handbook of Experimental Psychology. London: Sage Publications.

Psychology section editor for Nadel, L. (2003). (Ed.) Encyclopedia of Cognitive Science. London: Nature Publishing Group.

Goldstone, R. L., Schyns, P. G., & Medin, D. L. (1997). (Eds.) Psychology of Learning and Motivation: Perceptual Learning, Vol. 36. San Diego, CA: Academic Press.

### ***Journal Articles***

Barab, S. A., Scott, B., Siyahhan, S. Goldstone, R., Ingram-Goble, A., Zuiker, S., & Warren, S. (in press). Conceptual play as a curricular scaffold: Using videogames to support science education. Journal of Science Education and Technology.

Goldstone, R. L., Landy, D. H., & Son, J. Y. (in press). The education of perception. Topics in Cognitive Science.

Goldstone, R. L., & Hendrickson, A. T. (in press). Categorical Perception. Interdisciplinary Reviews: Cognitive Science.

Goldstone, R. L., & Gureckis, T. M. (2009). Collective Behavior. Topics in Cognitive Science, *1*, 412-438.

Son, J. Y., & Goldstone, R. L. (2009). Contextualization in perspective. Cognition and Instruction, *27*, 51-89.

Son, J. Y., & Goldstone, R. L. (2009). Fostering general transfer with specific simulations. Pragmatics and Cognition, *17*, 1-42.

Goldstone, R. L., & Wilensky, U. (2008). Promoting transfer by grounding complex systems principles. The Journal of the Learning Sciences, *17*, 465-516.

Hills, T., Todd, P., & Goldstone, R. L. (2008). Search in External and Internal Spaces: Evidence for Generalized Cognitive Search Processes. Psychological Science, *19*, 676-682.

Janssen, M. A., Goldstone, R. L., Menczer, F., & Ostrom, E. (2008). Effect of rule choice in dynamic interactive spatial commons. International Journal of the Commons, *2*, 288-312.

Mason, W. A., Jones, A., & Goldstone, R. L. (2008). Propagation of innovations in networked groups. Journal of Experimental Psychology: General, *137*, 422-433.

Son, J. Y., Smith, L. B., & Goldstone, R. L. (2008). Short-cutting abstraction in children's object categorizations. Cognition, *108*, 626-638.

Ionescu, T., & Goldstone, R. L. (2007). Introduction to a special issue on the Development of Categorization, Cognition, Brain, and Behavior, *11*, 629-633.

Landy, D., & Goldstone, R. L. (2007). How abstract is symbolic thought? Journal of Experimental Psychology: Learning, Memory, & Cognition, *33*, 720-733. **[Winner of the 2008 American Psychological Association Division of Experimental Psychology Young Investigator Award for article in Learning, Memory and Cognition]**

Landy, D., & Goldstone, R. L. (2007). Formal notations are diagrams: Evidence from a production task. Memory & Cognition, *35*, 2033-2040.

- Corneille, O., Goldstone, R. L., Queller, S., & Potter, T. (2006). Asymmetries in categorization, perceptual discrimination, and visual search for reference and non-reference exemplars. Memory & Cognition, 34, 556-567.
- Goldstone, R. L. (2006). The complex systems see-change in education. Journal of the Learning Sciences, 15, 35-43.
- Goldstone, R. L., Jones, A., & Roberts, M. E. (2006). Group path formation. IEEE Transactions on System, Man, and Cybernetics, Part A, 36, 611-620.
- Goldstone, R. L., & Leydesdorff, L. (2006). The import and export of *Cognitive Science*. Cognitive Science, 30, 983-993.
- Goldstone, R. L., Roberts, M. E. (2006). Self-organized trail systems in groups of humans. Complexity, 15, 43-50.
- Gureckis, T. M., & Goldstone, R. L. (2006). Thinking in groups. Pragmatics and Cognition, 14, 293-311.
- [reprinted as:** Gureckis, T. M., & Goldstone, R. L. (2008). Thinking in groups. In I. E. Dror and S. Harnad (Eds.) *Cognition distributed: How cognitive technology extends the mind*. London: John Benjamins Publishing Company (pp. 99-116).
- Janssen, M. A., & Goldstone, R. L. (2006). Dynamic-persistence of cooperation in public good games when group size is dynamic. Journal of Theoretical Biology, 234, 134-142.
- Quinn, P. C., Schyns, P. G., & Goldstone, R. L. (2006). The interplay between perceptual organization and categorization in the representation of complex visual patterns by young infants. Journal of Experimental Child Psychology, 95, 117-127.
- Roberts, M. E., & Goldstone, R. L. (2006). EPICURE: Spatial and Knowledge Limitations in Group Foraging. Adaptive Behavior, 14, 291-313.
- Feng, Y., Goldstone, R. L., & Menkov, V. (2005). A Graph Matching Algorithm and its Application to Conceptual System Translation. International Journal on Artificial Intelligence Tools, 14, 77-99.
- Goldstone, R. L., Ashpole, B. C., & Roberts, M. E., (2005). Knowledge of resources and competitors in human foraging. Psychonomic Bulletin & Review, 12, 81-87.
- Goldstone, R. L., & Janssen, M. A. (2005). Computational models of collective behavior. Trends in Cognitive Science, 9, 424-430.
- Goldstone, R. L., & Son, J. Y. (2005). The transfer of scientific principles using concrete and idealized simulations. Journal of the Learning Sciences, 14, 69-110.
- Landy, D., & Goldstone, R. L. (2005). How we learn about things we don't already understand. Journal of Experimental and Theoretical Artificial Intelligence, 17, 343-369.
- Börner, K, Maru, J. T., & Goldstone, R. L. (2004). The simultaneous evolution of article and author networks in PNAS. The Proceedings of the National Academy of Science, 101, 5266-5273.

- Goldstone, R. L. (2004). Believing is seeing. *American Psychological Society Observer*, *17*, 23-26. <http://www.psychologicalscience.org/observer/getArticle.cfm?id=1595>
- Goldstone, R. L., & Ashpole, B. C. (2004). Human foraging behavior in a virtual environment. *Psychonomic Bulletin & Review*, *11*, 508-514.
- Goldstone, R. L. (2003). A see-change in concept learning. *Psychological Science Agenda*, *17*. <http://www.apa.org/science/psa/november.html>.
- Goldstone, R. L. (2003). Do we all look alike to computers? *Trends in Cognitive Science*, *7*, 55-57.
- Goldstone, R. L., & Sakamoto, Y. (2003). The transfer of abstract principles governing complex adaptive systems. *Cognitive Psychology*, *46*, 414-466.
- Goldstone, R. L., Steyvers, M., & Rogosky, B. J. (2003). Conceptual Interrelatedness and Caricatures. *Memory & Cognition*, *31*, 169-180.
- Halberstadt, J., Goldstone, R. L., & Levine, G. M. (2003). Featural Processing in Face Preferences. *Journal of Experimental Social Psychology*, *39*, 270-278.
- Goldstone, R. L., & Rogosky, B. J. (2002). Using relations within conceptual systems to translate across conceptual systems. *Cognition*, *84*, 295-320.
- Goldstone, R. L., Lippa, Y., & Shiffrin, R. M. (2001). Altering object representations through category learning. *Cognition*, *78*, 27-43.
- Goldstone, R. L., & Steyvers, M. (2001). The sensitization and differentiation of dimensions during category learning. *Journal of Experimental Psychology: General*, *130*, 116-139.
- Lippa, Y., & Goldstone, R. L. (2001). The acquisition of automatic response biases through categorization. *Memory & Cognition*, *29*, 1051-1060.
- Schyns, P. G., Goldstone, R.L., & Thibaut, J. P. (2001). Functional identification of constraints on feature creation. *Behavioral Brain Sciences*, *24*, 1147-1148.
- Goldstone, R. L. (2000). Unitization during category learning. *Journal of Experimental Psychology: Human Perception and Performance*, *26*, 86-112.
- Goldstone, R. L. (1998). Perceptual Learning. *Annual Review of Psychology*, *49*, 585-612.
- Translated into Romanian as:** Goldstone, R. L. (2003). Învatarea perceptuala. *Cognitie Creier Comportament*, *7*, 31-59. (Translator: Thea Ionescu)
- Goldstone, R. L., & Barsalou, L. (1998). Reuniting perception and conception. *Cognition*, *65*, 231-262.
- reprinted as:** Goldstone, R. L., & Barsalou, L. (1998). Reuniting perception and conception. In S. A. Sloman and L. J. Rips (Eds.) *Similarity and symbols in human thinking*. (pp. 145-176). Cambridge, MA: MIT Press

- Kersten, A. W., Goldstone, R. L., & Schaffert, A. (1998). Two competing attentional mechanisms in category learning. Journal of Experimental Psychology: Learning, Memory, and Cognition, 24, 1437-1458.
- Schyns, P. G., Goldstone, R. L., & Thibaut, J. (1998). Development of features in object concepts. Behavioral and Brain Sciences, 21, 1-54. (Target article)
- Schyns, P. G., Goldstone, R. L., & Thibaut, J. (1998). Ways of featuring in object categorization. Behavioral and Brain Sciences, 21, 41-49. (response to commentaries)
- Goldstone, R. L., Medin, D. L., & Halberstadt, J. (1997). Similarity in Context. Memory & Cognition, 25, 237-255.
- Spencer-Smith, J., & Goldstone, R. L. (1997). The dynamics of similarity. Bulletin of the Japanese Cognitive Science Society, 4, 38-56.
- Translated into Japanese as:** Spencer-Smith, J., & Goldstone, R. L. (2001). The dynamics of similarity. in A. Ohnishi and H. Suzuki (Eds.) Ruii kara mita kokoro (Similarity-based approach to mind). Tokyo, Japan: Kyoritsu Shuppan.
- Goldstone, R. L. (1996). Isolated and Interrelated Concepts. Memory & Cognition, 24, 608-628.
- Goldstone, R. L. (1996). Alignment-based nonmonotonicities in similarity. Journal of Experimental Psychology: Learning, Memory, and Cognition, 22, 988-1001.
- Kroska, A., & Goldstone, R. L. (1996). Dissociations in the similarity and categorisation of emotions. Cognition and Emotion, 10, 27-45.
- Levine, G. M., Halberstadt, J. B., & Goldstone, R. L. (1996). Reasoning and the weighting of attributes in attitude judgments. Journal of Personality and Social Psychology, 70, 230-240.
- Goldstone, R. L. (1995). Effects of categorization on color perception. Psychological Science, 6, 298-304.
- Goldstone, R. L. (1995). Mainstream and avant-garde similarity. Psychologica Belgica, 35, 145-165.
- Medin, D. L., Goldstone, R. L., & Markman, A. (1995). Comparison and choice: Relations between similarity processes and decision processes. Psychonomic Bulletin and Review, 2, 1-19.
- Goldstone, R. L. (1994). Influences of categorization on perceptual discrimination. Journal of Experimental Psychology: General, 123, 178-200. **[Winner of the 1995 American Psychological Association Division of Experimental Psychology Young Investigator Award for article in General Psychology]**
- Goldstone, R. L. (1994). The role of similarity in categorization: Providing a groundwork. Cognition, 52, 125-157.

- Goldstone, R. L. (1994). Similarity, Interactive Activation, and Mapping. Journal of Experimental Psychology: Learning, Memory, and Cognition, 20, 3-28. **[Winner of the 1995 American Psychological Association Division of Experimental Psychology Young Investigator Award for article in Learning, Memory, and Cognition]**
- Goldstone, R. L. (1994). An efficient method for obtaining similarity data. Behavior Research Methods, Instruments, & Computers, 26, 381-386.
- Goldstone, R. L., & Medin, D. L. (1994). The time course of comparison. Journal of Experimental Psychology: Learning, Memory, and Cognition, 20, 29-50.
- Goldstone, R. L. (1993). Feature distribution and biased estimation of visual displays. Journal of Experimental Psychology: Human Perception and Performance, 19, 564-579.
- Goldstone, R. L., & Chin, C. (1993). Dishonesty in self-report of copies made: Moral relativity and the Xerox machine. Basic and Applied Social Psychology, 14, 19-32.
- Medin, D.L., Goldstone, R.L., & Gentner, D. (1993). Respects for similarity. Psychological Review, 100, 254-278.
- Goldstone, R. L., Medin, D. L., & Gentner, D. (1991). Relational similarity and the nonindependence of features in similarity judgments. Cognitive Psychology, 23, 222-264.
- Medin, D. L., Ahn, W-K, Bettger J., Florian, F., Goldstone, R., Lassaline, M., Markman, A., Rubinstein, J., Wisniewski, E. (1990). Safe Takeoffs-Soft Landings. Cognitive Science, 14, 169-178.
- Medin, D. L., Goldstone, R. L., & Gentner, D. (1990). Similarity involving attributes and relations: Judgments of similarity and difference are not inverses. Psychological Science, 1, 64-69.

### ***Book Chapters***

- Goldstone, R. L., Day, S., Son, J. Y. (in press). Comparison. In B. Glatzeder, V. Goel, & A. von Müller (Eds.) *On thinking: Volume II, towards a theory of thinking*. The Parmenides Foundation.
- Gureckis, T.M. and Goldstone, R.L. (in press) Schema. *The Cambridge Encyclopedia of Language*.
- Goldstone, R. L. (2010). Foreword. In I. Gauthier, M. J. Tarr, & D. Bubb (Eds.) *Perceptual expertise: Bridging brain and behavior*. Oxford, England: Oxford University Press. (pp. v - x).
- Goldstone, R. L., Gerganov, A., Landy, D., & Roberts, M. E. (2009). Learning to see and conceive. In L. Tommasi, M. Peterson, & L. Nadel (Eds.) The New cognitive sciences (part of the Vienna Series in Theoretical Biology). Cambridge, MA.: MIT Press. (pp. 163-188).
- Goldstone, R. L., Landy, D., & Son, J. Y. (2008). A well grounded education: The role of perception in science and mathematics. In M. de Vega, A. Glenberg, & A. Graesser (Eds.) Symbols, embodiment, and meaning. Oxford Press. (pp. 327-355).

- Goldstone, R. L., Roberts, M. E., Mason, W., & Gureckis, T. (2008). Collective search in concrete and abstract spaces. In T. Kugler, J. C. Smith, T. Connelly, and Y. Sun (Eds.) Decision modeling and behavior in complex and uncertain environments. New York: Springer Press. (pp. 277-308).
- Ahn, W., Goldstone, R. L., Love, B. C., Markman, A. B., & Wolff, P. (2005). Douglas L. Medin, his life and his intellectual heritage. In W. Ahn, R. L. Goldstone, B. C. Love, A. B. Markman, & P. Wolff (Eds.) Categorization inside and outside the laboratory: Essays in honor of Douglas L. Medin. Washington, D. C.: American Psychological Association. (pp. 3-11).
- Goldstone, R. L., Feng, Y., & Rogosky, B. (2005). Connecting concepts to each other and the world. In D. Pecher & R. Zwaan (Eds.) Grounding cognition: The role of perception and action in memory, language, and thinking. Cambridge: Cambridge University Press. (292-314).
- Goldstone, R. L., Rogosky, B. J., Pevtsov, R., & Blair, M. (2005). Perceptual and semantic reorganization during category learning. In H. Cohen & C. Lefebvre (Eds.) Handbook of Categorization in Cognitive Science. (pp. 651-678). Amsterdam: Elsevier.
- Goldstone, R. L., & Son, J. (2005). Similarity. In K. Holyoak & R. Morrison (Eds.). Cambridge Handbook of Thinking and Reasoning. Cambridge, England: Cambridge University Press. (pp. 13-36).
- Rogosky, B. J., & Goldstone, R. L. (2005). Adaptation of perceptual and semantic features. In L. A. Carlson & E. van der Zee (Eds.), Functional features in language and space: Insights from perception, categorization and development. (pp. 257-273). Oxford, England: Oxford University Press.
- Goldstone, R. L. (2003). Learning to perceive while perceiving to learn. In R. Kimchi, M. Behrmann, & C. Olson (Eds.) Perceptual organization in vision: Behavioral and neural perspectives. (pp. 233-278). New Jersey: Lawrence Erlbaum Associates.
- Goldstone, R. L., & Johansen, M. K. (2003). Conceptual development from origins to asymptotes. In D. H. Rakison & L. M. Oakes (Eds.) Categories and concepts in early development. (pp. 403-418). Oxford, England: Oxford University Press.
- Goldstone, R. L., & Kersten, A. (2003). Concepts and Categorization. In A. F. Healy & R. W. Proctor (Eds.) Comprehensive handbook of psychology, Volume 4: Experimental psychology. (pp. 599-621). New Jersey: Wiley.
- Goldstone, R. L., Steyvers, M., Spencer-Smith, J., & Kersten, A. (2000). Interactions between perceptual and conceptual learning. In E. Diettrich & A. B. Markman (Eds.) Cognitive dynamics: Conceptual change in humans and machines. (pp. 191-228). Mahwah, NJ: Lawrence Erlbaum Associates.
- Goldstone, R. L. (1999). Similarity. In R. A. Wilson & F. C. Keil (Eds.) MIT encyclopedia of the cognitive sciences. (pp. 763-765). Cambridge, MA: MIT Press.
- Goldstone, R. L. (1998). Hanging Together: A connectionist model of similarity. In J. Grainger & A. M. Jacobs (Eds.) Localist connectionist approaches to human cognition. (pp. 283 - 325). Mahwah, NJ: Lawrence Erlbaum Associates.

Goldstone, R. L., Schyns, P. G., & Medin, D. L. (1997). Learning to bridge between perception and cognition. In R. L. Goldstone, P. G. Schyns, & D. L. Medin (Eds.) Psychology of learning and motivation, Vol. 36. (pp. 1-14). San Diego, CA: Academic Press.

Medin, D. L., & Goldstone, R. L. (1995). The predicates of similarity. In C. Cacciari (Ed.), Similarity in language, thought, and perception. (pp. 83-110). Brussels: BREPOL.

Goldstone, R.L., & Medin, D.L. (1994). Interactive activation, similarity, and mapping: An overview. In K. Holyoak and J. Barnden (Eds.) Advances in connectionist and neural computation theory, Vol. 2: Analogical connections. (pp. 321-362). Ablex : New Jersey.

**reprinted as:** Goldstone, R. L., & Medin, D. L. (2002). Interactive activation, similarity, and mapping: An overview. In T. A. Polk and C. M. Seifert (Eds.) Cognitive modeling. (pp. 817-847). Cambridge, MA: MIT Press

Medin, D. L., Goldstone, R. L. (1991). Concepts. In B. Blackwell (Ed.) Dictionary of cognitive psychology (pp 77-83). Oxford: Oxford University Press.

### ***Refereed Conference Proceedings***

Day, S. B. & Goldstone, R. L. (2009). Analogical transfer from interaction with a simulated physical system. Proceedings of the Thirty-First Annual Conference of the Cognitive Science Society. (pp. 1406-1411). Amsterdam, Netherlands: Cognitive Science Society.

Gerganov, A., Grinberg, M., & Goldstone, R. L. (2009). Partial position transfer in categorical perceptual learning. Proceedings of the Thirty-First Annual Conference of the Cognitive Science Society. (pp. 1828-1833). Amsterdam, Netherlands: Cognitive Science Society.

Goldstone, R. L., Griffiths, T., Gureckis, T., Helbing, D., & Steels, L. (2009). The emergence of collective structures through individual interactions. Proceedings of the Thirty-First Annual Conference of the Cognitive Science Society. (pp. 1004-1006).

Hendrickson, A. T., & Goldstone, R. L. (2009). Perceptual unitization in part-whole judgments. Proceedings of the Thirty-First Annual Conference of the Cognitive Science Society. (pp. 1084-1089). Amsterdam, Netherlands: Cognitive Science Society.

Landy, D. H., & Goldstone, R. L. (2009). How much of symbolic manipulation is just symbol pushing? Proceedings of the Thirty-First Annual Conference of the Cognitive Science Society. (pp. 1072-1077). Amsterdam, Netherlands: Cognitive Science Society.

Roberson, D., Majid, A., Goldstone, R. L., Spaepen, E., Davidoff, J., Boroditsky, L., Imai, M., & Lupyan, G. (2009). The interface between language and thought: Current directions. The emergence of collective structures through individual interactions. Proceedings of the Thirty-First Annual Conference of the Cognitive Science Society. (pp. 37-39).

Roberts, M. E., & Goldstone, R. L. (2009). Adaptive group coordination. Proceedings of the Thirty-First Annual Conference of the Cognitive Science Society. (pp. 2698-2704). Amsterdam, Netherlands: Cognitive Science Society.

- Roberts, M. E., & Goldstone, R. L. (2009). Sub-optimality in group foraging and resource competition. Proceedings of the Thirty-First Annual Conference of the Cognitive Science Society. (pp. 2371-2377). Amsterdam, Netherlands: Cognitive Science Society.
- Gureckis, T. M., & Goldstone, R. L. (2008). The effect of internal structure of categories on perception. Proceedings of the Thirtieth Annual Conference of the Cognitive Science Society. (pp. 1876-1881). Washington, D.C.: Cognitive Science Society.
- Hills, T. T., Goldstone, R. L., & Todd, P. M. (2008). Evidence for generalized cognitive search processes at multiple levels in a hierarchical problem solving task. Proceedings of the Thirtieth Annual Conference of the Cognitive Science Society. (pp. 843). Washington, D.C.: Cognitive Science Society.
- Landy, D. H., Jones, M. N., & Goldstone, R. L. (2008). How the appearance of an operator affects its formal precedence. Proceedings of the Thirtieth Annual Conference of the Cognitive Science Society. (pp. 2109-2114). Washington, D.C.: Cognitive Science Society.
- Wisdom, T. N., Song, X., & Goldstone, R. L. (2008). The effects of peer information on problem-solving in a networked group. Proceedings of the Thirtieth Annual Conference of the Cognitive Science Society. (pp. 583-588). Washington, D.C.: Cognitive Science Society.
- Baldwin D. & Goldstone R.L. (2007). Finding analogies within systems: Constraints on unsegmented matching. Proceedings of the Workshop on Analogies: Integrating Multiple Cognitive Abilities (AnICA07). Nashville, TN.
- Conway, C., Goldstone, R. L., & Christiansen, M. (2007). Spatial constraints on visual statistical learning of multi-element displays. Proceedings of the Twenty-ninth Annual Conference of the Cognitive Science Society. (pp. 185-190). Nashville, TN: Cognitive Science Society.
- Gerganov, A., Grinberg, M., Quinn, P. C., & Goldstone, R. L. (2007). Simulating conceptually-guided perceptual learning. Proceedings of the Twenty-ninth Annual Conference of the Cognitive Science Society. (pp. 287-292). Nashville, TN: Cognitive Science Society.
- Hills, T., Todd, P., & Goldstone, R. L. (2007). Priming and conservation between spatial and cognitive search. Proceedings of the Twenty-ninth Annual Conference of the Cognitive Science Society. (359-364). Nashville, TN: Cognitive Science Society.
- Landy, D., & Goldstone, R. L. (2007). The alignment of ordering and space in arithmetic computation. Proceedings of the Twenty-ninth Annual Conference of the Cognitive Science Society. (pp. 437-442). Nashville, TN: Cognitive Science Society.
- Landy, D., & Goldstone, R. L. (2007). How space guides interpretation of a novel mathematical system. Proceedings of the Twenty-ninth Annual Conference of the Cognitive Science Society. (pp. 431-436). Nashville, TN: Cognitive Science Society.
- Landy, D., & Goldstone, R. L. (2007). Grounding symbol structures in space: Formal notations as diagrams. Proceedings of the Twenty-ninth Annual Conference of the Cognitive Science Society. (pp. 425-430). Nashville, TN: Cognitive Science Society. **[Winner of the 2007 Marr Prize for Best Student Paper at the 2007 Meeting of the Cognitive Science Society]**

- Son, J. Y., Smith, L. B., & Goldstone, R. L. (2007). Re-representation using labels: Comparison or replacement. Proceedings of the Twenty-ninth Annual Conference of the Cognitive Science Society. (pp. 677-682). Nashville, TN: Cognitive Science Society.
- Son, J. Y., Smith, L. B., & Goldstone, R. L. (2007). Words that evoke schemas: The need for optimal vagueness. Proceedings of the Workshop on Analogies: Integrating Multiple Cognitive Abilities (AnICA07). Nashville, Tennessee.
- Wisdom, T. N., & Goldstone, R. L. (2007). Group problem solving behavior in a networked puzzle game. Proceedings of the Twenty-ninth Annual Conference of the Cognitive Science Society. (pp. 1665-1670). Nashville, TN: Cognitive Science Society.
- Jones, M., & Goldstone, R. L. (2006). The Structure of Integral Dimensions. Proceedings of the Twenty-eighth Annual Conference of the Cognitive Science Society. Hillsdale, New Jersey: Lawrence Erlbaum Associates. (pp. 2159)
- Landy, D., & Goldstone, R. L. (2006). Evidence for the Cognitive Role of Space on an Algebraic Production Task. Proceedings of the Twenty-eighth Annual Conference of the Cognitive Science Society. Hillsdale, New Jersey: Lawrence Erlbaum Associates. (pp. 2542)
- Roberts, M., & Goldstone, R. L. (2006). EPICURE: An agent-based foraging model. Artificial Life X: Proceedings of the Tenth International Conference on the Simulation and Synthesis of Living Systems. Cambridge, MA: MIT Press (379-385).
- Son, J. Y., Smith, L. B., & Goldstone, R. L. (2006). Generalizing from simple instances: An uncomplicated lesson from kids learning objects categories. Proceedings of the Twenty-eighth Annual Conference of the Cognitive Science Society. Hillsdale, New Jersey: Lawrence Erlbaum Associates. (pp. 2174-2179)
- Hockema, S. A., Blair, M. R., & Goldstone, R. L. (2005). Differentiation for novel dimensions. Proceedings of the Twenty-seventh Annual Conference of the Cognitive Science Society. Hillsdale, New Jersey: Lawrence Erlbaum Associates. (pp. 953-958).
- Landy, D., & Goldstone, R. L. (2005). Relational reasoning is in the eyes of the beholder: How global perceptual groups aid and impair algebraic evaluations. Proceedings of the Twenty-seventh Annual Conference of the Cognitive Science Society. Hillsdale, New Jersey: Lawrence Erlbaum Associates. (pp. 2509)
- Mason, W. A., Jones, A., & Goldstone, R. L. (2005). Propagation of innovations in networked groups. Proceedings of the Twenty-seventh Annual Conference of the Cognitive Science Society. Hillsdale, New Jersey: Lawrence Erlbaum Associates. (pp. 1419-1424)
- Roberts, M. E., & Goldstone, R. L. (2005). Explaining resource undermatching with agent-based models. Proceedings of the Twenty-seventh Annual Conference of the Cognitive Science Society. Hillsdale, New Jersey: Lawrence Erlbaum Associates. (pp. 1872-1877).
- Son, J. Y., & Goldstone, R. L. (2005). Relational words as handles: They bring along baggage. Proceedings of the Twenty-seventh Annual Conference of the Cognitive Science Society. Hillsdale, New Jersey: Lawrence Erlbaum Associates. (pp. 2050-2055).
- Feng, Y., Goldstone, R. L., & Menkov, V (2004). ABSURDIST II: A Graph Matching Algorithm and its Application to Conceptual System Translation. FLAIRS 2004.

- Goldstone, R. L., Jones, A., & Roberts, M. (2004). Group path formation. Proceedings of the Twenty-sixth Annual Conference of the Cognitive Science Society. Hillsdale, New Jersey: Lawrence Erlbaum Associates. (pp. 26).
- Goldstone, R. L., & Ashpole, B. C. (2003). The distribution of people to resources in a networked multi-player environment. Proceedings of the Twenty-fifth Annual Conference of the Cognitive Science Society. Hillsdale, New Jersey: Lawrence Erlbaum Associates. (pp. 462-467)
- Goldstone, R. L., & Rogosky, B. J. (2002). The role of roles in translating across conceptual systems. Proceedings of the Twenty-fourth Annual Conference of the Cognitive Science Society. Hillsdale, New Jersey: Lawrence Erlbaum Associates. (pp. 369-374).
- Goldstone, R. L. (2000). A neural network model of concept-influenced segmentation. Proceedings of the Twenty-second Annual Conference of the Cognitive Science Society. Hillsdale, New Jersey: Lawrence Erlbaum Associates. (pp. 172-177).
- Goldstone, R. L., Steyvers, M., Larimer, K. (1996). Categorical perception of novel dimensions. Proceedings of the Eighteenth Annual Conference of the Cognitive Science Society. (pp. 243-248). Hillsdale, New Jersey: Lawrence Erlbaum Associates.
- Goldstone, R. L., & Schyns, P. (1994). Learning new features of representation. Proceedings of the Sixteenth Annual Conference of the Cognitive Science Society. (pp. 974-978). Hillsdale, New Jersey: Lawrence Erlbaum Associates.
- McGraw, G., Rehling, J., & Goldstone, R. L. (1994). Letter perception: Toward a conceptual approach. Proceedings of the Sixteenth Annual Conference of the Cognitive Science Society. (pp. 613-618). Hillsdale, New Jersey: Lawrence Erlbaum Associates.
- Pevtzow, R., & Goldstone, R. L. (1994). Categorization and the parsing of objects. Proceedings of the Sixteenth Annual Conference of the Cognitive Science Society. (pp. 717-722). Hillsdale, New Jersey: Lawrence Erlbaum Associates.
- Goldstone, R. L. (1993). Evidence for interrelated and isolated concepts from prototype and caricature classifications. Proceedings of the Fifteenth Annual Conference of the Cognitive Science Society. (pp. 498-503). Hillsdale, New Jersey: Lawrence Erlbaum Associates.
- Goldstone, R. L. (1992). Locally-to-globally consistent processing in similarity. Proceedings of the Fourteenth Annual Conference of the Cognitive Science Society. (pp. 337-342). Hillsdale, New Jersey: Lawrence Erlbaum Associates.
- Aha, D. W., and Goldstone, R. L. (1992). Concept learning and flexible weighting. Proceedings of the Fourteenth Annual Conference of the Cognitive Science Society. (pp. 534-539). Hillsdale, New Jersey: Lawrence Erlbaum Associates.
- Goldstone, R. L. (1991). Feature diagnosticity as a tool for investigating positively and negatively defined concepts. Proceedings of the Thirteenth Annual Conference of the Cognitive Science Society. (pp. 263-268). Hillsdale, New Jersey: Lawrence Erlbaum Associates.

- Aha, D. W., and Goldstone, R. L. (1990). Learning attribute relevance in context in instance-based learning algorithms. Proceedings of the Twelfth Annual Conference of the Cognitive Science Society. (pp. 141-148). Hillsdale, New Jersey: Lawrence Erlbaum Associates.
- Goldstone, R. L., Gentner, D., & Medin, D. L. (1989). Relations Relating Relations. Proceedings of the Eleventh Annual Conference of the Cognitive Science Society. (pp. 131-138). Hillsdale, New Jersey: Lawrence Erlbaum Associates.
- Matheus, C. J., Rendall, L. R., Medin, D. L., & Goldstone, R. L. (1989). Purpose and conceptual functions: A framework for concept representation and learning in humans and machines. The Seventh Conference of the Society for the Study of Artificial Intelligence and Simulation of Behavior. Sussex, England.

### ***Book Reviews and Commentaries***

- Goldstone, R. L. (1998). Objects, please remain composed. [A commentary on S. Edelman]. Behavioral and Brain Sciences, 21, 472-473.
- Goldstone, R. L. (1995). Many categories, few structures. Contemporary Psychology, 40, 147-149.
- Goldstone, R. L. (1994). Categorization. Science, 265, 552. [review of Estes' Classification and Cognition].
- Goldstone, R. L., & Kruschke, J. K. (1994). Are rules and instances subserved by separate systems? [A commentary on D. Shanks and M. St. John]. Behavioral and Brain Sciences, 17, 405.
- Goldstone, R. L. (1993). Human Cognition, and the More General Case. Contemporary Psychology, 38, 61-62.

### Presentations

- Goldstone, R. L. (2009). How giving two things the same label can increase, or decrease, their perceptual discriminability. Invited symposium speaker at The Thirty-First Annual Conference of the Cognitive Science Society. Amsterdam, Netherlands.
- Goldstone, R. L. (2009). Collective behavior. Invited symposium speaker at The Thirty-First Annual Conference of the Cognitive Science Society. Amsterdam, Netherlands.
- Goldstone, R. L. (2009). What's wrong with kids these days? Invited discussant at The 2009 Meeting of the Society for Mathematical Psychology. Amsterdam, Netherlands: Cognitive Science Society.
- Goldstone, R. L. (2009). A perceptually well-grounded education. Invited speaker at the Gordon Research Conference on Visualization in Science and Education. Oxford, England.
- Goldstone, R. L. (2009). Five Lectures on Collective Behavior. Summer School Lecturer: International Cognitive Science Summer School. Sofia, Bulgaria.

- Goldstone, R. L. (2009). Collective Behavior. Invited speaker at the Central European University Summer School on Complex Systems and Social Simulations. Budapest, Hungary.
- Goldstone, R. L. (2009). Human behavior as a complex system. Invited symposium speaker at the 35<sup>th</sup> Annual Meeting of the Society for Philosophy and Psychology. Bloomington, Indiana.
- Goldstone, R. L. (2009). Introductory remarks. First Annual Midwest Undergraduate Cognitive Science Conference. Bloomington, Indiana.
- Goldstone, R. L. (2009). Experimental explorations of the hive mind. Keynote Psi Chi Organization speaker. Saint Louis University, Saint Louis, Missouri.
- Goldstone, R. L. (2009). The diffusion of innovations in social networks. Invited speaker at the German Physics Society Annual Meeting. Dresden, Germany.
- Goldstone, R. L. (2009). A well-grounded education: The role of perception in learning transferable scientific principles. Invited Cognitive Science Colloquium. Teachers College, Columbia University. New York City, New York.
- Goldstone, R. L. (2009). The patterns of exploration and innovation that groups form. Cognitive Colloquium lecture. Arizona State University, Tempe, Arizona.
- Goldstone, R. L. (2009). What's good for the group: Experimental work on innovation diffusion. Lab and Field Experiments on Diverse Social Dilemmas Workshop. Arizona State University, Tempe, Arizona.
- Goldstone, R. L. (2008). Emergent patterns of collective behavior. Invited speaker as the National Institute of General Medical Science's Workshop on Modeling Social Behavior. Bethesda, Maryland.
- Goldstone, R. L. (2008). Community resiliency. Invited discussant as the National Institute of General Medical Science's Workshop on Modeling Social Behavior. Bethesda, Maryland.
- Goldstone, R. L. (2008). Experiments and Models of Collective Behavior. Invited colloquium for the cognitive area, University of Michigan. Ann Arbor, Michigan.
- Goldstone, R. L. (2008). Models of Collective Behavior. Invited colloquium at the Cognitive Science Program, University of Wisconsin. Madison, Wisconsin.
- Goldstone, R. L. (2008). Accelerated and Extended Learning. Invited speaker at the Department of Defense workshop on Accelerated Learning. Alexandria, Virginia.
- Goldstone, R. L. (2008). Five Lectures on Collective Behavior. The International Max Planck Research School on Adapting Behavior in a Fundamentally Uncertain World. Jena, Germany.
- Goldstone, R. L. (2008). Human collective behavior as a complex system. Invited speaker at the Universite du Quebec a Montreal Cognitive Science Institute Summer Institute on Social Cognition. Montreal, Canada.
- Goldstone, R. L. (2008). Concrete and Abstract Learning. Invited colloquium at the Psychological Institute, University of Tuebingen, Germany.

- Goldstone, R. L. (2008). Perceptual Learning. Invited speaker at the Perception, Action, and Cognition through Learning of Object-action Complexes (PACO-PLUS) Summer School. Ohlstadt, Germany.
- Goldstone, R. L. (2008). The Hive Mind. College colloquium. Hampden-Sydney College. Farmville: Virginia.
- Goldstone, R. L. (2008). Experiments and models of collective behavior. Cognitive Colloquium presentation, University of Virginia.
- Goldstone, R. L. (2008). Concept translation, conceptual webs, and external grounding. Invited speaker at the Workshop on the Philosophy and Psychology of Concepts (organizers: Tania Lombrozo and James Genone). Berkeley, California.
- Goldstone, R. L. (2008). Perceptual learning and adaptation. Colloquium presentation in the Change, Plasticity, and Development Program, University of California – Berkeley.
- Goldstone, R. L. (2008). Experiments and Models of Human Collective Behavior. Colloquium presentation in the Program on Networked Government. John F. Kennedy School of Government, Harvard University.
- Goldstone, R. L. (2008). The division of cognitive labor in a group coordination task. Presentation at the Society for Experimental Psychologists. Bloomington, Indiana.
- Goldstone, R. L. (2008). The role of perception for a well grounded education in science and mathematics. PIER (Program in Interdisciplinary Education Research) Colloquium talk. Carnegie Mellon University. Pittsburgh, PA.
- Goldstone, R. L. (2008) When, why, and how to contextualize information to achieve transferable knowledge. PIER (Program in Interdisciplinary Education Research) Brownbag talk. Carnegie Mellon University. Pittsburgh, PA.
- Goldstone, R. L. (2008). Learning to perceive to learn. Philosophy, Neuroscience, and Psychology (PNP) Colloquium, Washington University. St. Louis, MO.
- Goldstone, R. L. (2008). Adapting ABSURDIST to Ontology Translation. Presentation at the DARPA Workshop on Data Integration and Exploitation Systems that Learn (DIESEL). Clearwater, Florida.
- Goldstone, R. L. (2007). Discussant at the 2007 Configural Processing Consortium. Long Beach, CA.
- Goldstone, R. L. (2007). Learning Constraints and Constrained Learning. Invited discussant at Symposium “Mechanisms of Cognitive Development: Domain-General Learning or Domain-Specific Constraints?” (organizer: Vladimir Sloutsky) at the 48<sup>th</sup> Annual Meeting of the Psychonomics Society. Long Beach, CA.
- Goldstone, R. L. (2007). Learning to Perceive to Learn. Keynote speaker at the Fifth Biennial Meeting of the Cognitive Development Society. Santa Fe, New Mexico.
- Goldstone, R. L. (2007). The role of perception in mathematical reasoning. Invited workshop on “High-level perception and low-level vision: Bridging the semantic gap” (Organizers: Melanie Mitchell and Garrett Kenyon). Santa Fe, NM: Santa Fe Institute.

- Goldstone, R. L. (2007). Learning and transfer in context. Invited panelist at the symposium on “Fostering Transfer of Knowledge in Education Settings” (Organizer: Elizabeth Albro). Twenty-ninth Annual Conference of the Cognitive Science Society. Nashville, TN: Cognitive Science Society.
- Goldstone, R. L. (2007). Learning to see complex systems. Invited panelist at the symposium on “Complex Systems and the Cognitive Sciences: Potential for Pervasive Theoretical and Research Implications?” (Organizer: Michael Jacobson). Twenty-ninth Annual Conference of the Cognitive Science Society. Nashville, TN: Cognitive Science Society.
- Goldstone, R. L. (2007). Measures and models of connections in science. Invited panelist at the symposium on “Making Extra- and Intra-Disciplinary Collaboration Work” (Organizer: Thomas Palmeri). Twenty-ninth Annual Conference of the Cognitive Science Society. Nashville, TN: Cognitive Science Society.
- Goldstone, R. L. (2007). The transfer of complex systems principles. Invited panelist at the symposium on “What Conditions Support Transfer of Knowledge? New Research in Mathematics and Science Education” (Organizer: Elizabeth Albro). American Educational Research Association. Chicago, Illinois.
- Goldstone, R. L. (2007). Group coordination. Invited colloquium at the Workshop in Political Theory and Policy Analysis. Bloomington, Indiana.
- Goldstone, R. L. (2007). Experiments and models of group behavior. Colloquium presentation to University of Illinois, Urbana-Champaign Psychology Department.
- Hills, T. T., Todd, P. M., & Goldstone, R. L. (2007). Implications for human cognition from the evolution of animal foraging. 19<sup>th</sup> Annual Meeting of the Human Behavior and Evolution Society. William and Mary College: Virginia. **[Winner of the 2007 award for best postdoctoral paper]**
- Goldstone, R. L. (2006). Learning with and about constraints: Discussion for statistical learning symposium. Psychonomics Society meeting. Houston, Texas.
- Landy, D., & Goldstone, R. L., presented by R. Goldstone (2006). Perceptual grouping in mathematical reasoning. Psychonomics Society meeting. Houston, Texas.
- Goldstone, R. L. (2006). (work with D. Landy and J. Y. Son). Teaching complex systems. Invited panelist on the symposium “Complex systems in education: Conceptual principles, methodologies, and implications for research in the learning sciences” (Organizer: Michael Jacobson) International Conference on the Learning Sciences. Bloomington, IN.
- Goldstone, R. L. (2006). Remarks on teaching cognitive science. Invited presentation at the 2006 Workshop on Teaching Cognitive Science. Bloomington, IN.
- Goldstone, R. L. (2006). How labels change contents. Invited panelist at workshop “Beyond Whorf: How language affects thought” (Organizer: Gary Lupyan). Twenty-eighth Annual Meeting of the Cognitive Science Society.
- Goldstone, R. L. (2006). Learning to perceive to learn. Invited presentation at the Workshop on the new cognitive sciences. Konrad Lorenz Institute. Vienna, Austria.

- Roberts, M., & Goldstone, R. L. (2006). Human Trail Formation. Workshop on Niche Construction (organizer: Peter Todd) at Artificial Life X Conference. Bloomington, Indiana.
- Son, J. Y., & Goldstone, R. L. (2006). How are ants like “lids”? Concrete labels help learners in the face of perceptual dissimilarity. Midwest Psychological Association, Chicago, Illinois.
- Goldstone, R. L. (2006). Grounded idealizations for learning about science. Invited symposium on “Concrete and abstract: Perspectives from psychology and education” (Organizer: David Uttal). Midwest Psychological Association, Chicago, Illinois.
- Goldstone, R. L. (2006). Computational Models of Collective Behavior. Psychology Department Colloquium, University of Cardiff.
- Goldstone, R. L. (2006). Computational Models of Collective Behavior. Invited Colloquium, University of Warwick.
- Goldstone, R. L. (2006). The diffusion of innovations in groups of people. Presentation at the Society of Experimental Psychologists. San Diego, CA.
- Goldstone, R. L. (2006). Collective behavior and innovation diffusion. Invited speaker at the Workshop on Decision Modeling & Behavior in Uncertain and Complex Environments. (Organizers: Cole Smith, Young Jun Son, and Terrence Connolly). Tucson, AZ.
- Mason, W., Jones, A., & Goldstone, R. L. (2006). Social networks and Information Diffusion. Annual Conference of the Society of Personality and Social Psychology. Palm Springs, CA.
- Goldstone, R. L. (2005). A well-grounded education: The role of perception in science and mathematics. Invited speaker at the Workshop “Symbols, embodiment, and meaning: A debate.” (Organizers: Arthur Glenberg, Arthur Graesser, and Manolo De Vega). Garachico, Tenerife.
- Goldstone, R. L. (2005). Computational Models of Perceptual and Conceptual Learning. Psychology Department Colloquium, Duke University.
- Goldstone, R. L., Mason, W., & Jones, A. (2005). The propagation of innovations in a social network. Psychonomics Society meeting. Toronto, Canada.
- Goldstone, R. L. (2005). Connecting concepts to the world and each other. Invited speaker in the symposium on conceptual grounding in cognitive processes (organizer: Katja Wiemer-Hastings). 27<sup>th</sup> Annual Conference of the Cognitive Science Society. Stresa, Italy.
- Goldstone, R. L. (2005). A week-long course in complex adaptive systems analyses of individual and group behavior. 12<sup>th</sup> International Summer School in Cognitive Science. Sofia, Bulgaria, New Bulgarian University.
- Goldstone, R. L. (2005). Neural Networks for Categorization and Perception. Summer school on neural network models of perception, action, and embodied knowledge. Bologna, Italy. (Organizers: Anna Borghi & Stefano Ghirlanda).

- Goldstone, R. L. (2005). Applying agent-based models to group behavior. Invited presentation at the Summer School for agent-based modeling. Indiana University (organizer: Marco Janssen).
- Goldstone, R. L. (2005). Group path formation. Invited talk at "Understanding Complex Systems" conference. University of Illinois, Urbana-Champaign.
- Goldstone, R. L. (2005). Group behavior as a complex adaptive system. Invited School of Business colloquium, University of Texas at Austin.
- Goldstone, R. L. (2005). Distinguished Alumnus Talk. Psychology Department, Oberlin College.
- Goldstone, R. L. (2005). Unitization, Differentiation, and Perceptual Learning. Psychology department colloquium, University of Louisville.
- Needham, A., & Goldstone, R. L. (2005). Perceptual Learning in Infancy. Society for Research in Child Development. Atlanta, Georgia.
- Son, J.Y., & Goldstone, R.L. (2005). What do you learn through experience? Talk presented at the 75th Annual Meeting of the Midwestern Psychological Association, Chicago, IL.
- Goldstone, R. L. (2004). Keynote address at CogFest 2004, Ohio State University.
- Goldstone, R. L. (2004). The emergence of collective behavior. Invited Psychology Department Colloquium. University of Arizona.
- Goldstone, R. L. (2004). Translating Between Conceptual Systems. Master Lecture in Cognitive Science. University of Arizona.
- Goldstone, R. L. (2004). Invited presentation on Concept Formation. Parmenides Center for Thinking. Elba, Italy.
- Goldstone, R. L., Jones, A., & Roberts, M. E. (2004). Group path formation. Third Annual Summer Interdisciplinary Conference. Cavalese, Italy.
- Goldstone, R. L. (2004). Invited guest speaker at Perceptual Expertise Network (PEN 8). Vanderbilt University.
- Goldstone, R. L. (2004). Perceptual and Conceptual Learning. Invited Cognitive Science Colloquium speaker at University of Arizona, Tuscon.
- Roberts, M.E. & Goldstone, R.L. (2004). Modeling complex foraging behavior. Talk presented at the 2004 International Conference on Complex Systems, Boston, MA.
- Son, J.Y., & Goldstone, R.L. (2004). What transfers? How analogies are influenced by spatial consistency and perceptual concreteness. Talk presented at the 76th Annual Meeting of the Midwestern Psychological Association, Chicago, IL.
- Goldstone, R. L., Son, J. Y., & Patton, Z. (2003). The transfer of scientific principles using concrete and idealized simulations. Talk presented at the 44<sup>st</sup> Annual Meeting of the Psychonomic Society, Vancouver, Canada.

- Goldstone, R. L. (2003). Learning Abstract Scientific Concepts by Using Concrete Simulations. Invited presentation at "Categorization inside and outside of the lab: A Festschrift in honor of Dr. Douglas Medin."
- Goldstone, R. L. (2003). Category Learning. Invited presentation at the Summer Institute in Categorization. Universite du Quebec a Montreal.
- Goldstone, R. L. (2003). Neural Networks for Perceptual Learning. Invited Colloquium at University of Rochester.
- Son, J.Y., & Goldstone, R.L. (2003). The influence of concrete pictures on analogical mapping. Talk presented at Hoosier Mental Life 2003, West Lafayette, IN.
- Son, J., & Goldstone, R. L. (2003). The Role of Perceptual Concreteness in Analogical Mapping and Transfer. Poster presentation at the Twenty-fifth Annual Conference of the Cognitive Science Society. Boston, MA.
- Goldstone, R. L. (2002). Learning to perceive while perceiving to learn. Invited colloquium at Northwestern University.
- Goldstone, R. L. (2002). Four lectures on human adaptation. Jangiellonian University, Krakow, Poland.
- Goldstone, R. L. (2002). Influences of experience on perceptual organization. Invited speaker at the symposium on "Perceptual Organization in Infancy: Bottom-up and Top-down Processes" (organized by Amy Needham). 13<sup>th</sup> International Conference on Infant Studies. Toronto, Canada.
- Goldstone, R. L. (2002). Creating perceptual representations that recreate the world. Invited speaker at the symposium on "Statistical Learning Across Cognition." (Organized by Morten Christiansen). Cornell University.
- Goldstone, R. L. (2002). A neural network model of perceptual and conceptual learning. Invited speaker at the symposium on "The Cognitive Neuroscience of Categorization." (Organized by Stevan Harnad). 13<sup>th</sup> TENNET conference on Theoretical and Experimental Neuropsychology. Montreal, CA.
- Goldstone, R. L. & Ashpole, B. C. (2002). The distribution of agents to resources in a networked multi-player environment. International Conference on Complex Systems. Nashua, NH.
- Goldstone, R. L., & Rogosky, B. J. (2002). The role of roles in translating across conceptual systems. The First Annual Summer Interdisciplinary Conference. Squamish, B.C.
- Goldstone, R. L., & Rogosky, B. J. (2002). Translating across conceptual systems. Invited speaker for the special track of "Categorization and concept representations models, and their implications" (Organized by Colette Faucher). 15<sup>th</sup> International FLAIRS (Florida Artificial Intelligence Research) Conference. Pensacola, Florida.
- Goldstone, R. L., & Rogosky, B. J. (2001). Adaptation of perceptual and conceptual features. Keynote address at the 2<sup>nd</sup> Annual Language and Space Workshop: Defining Functional and Spatial Features. University of Notre Dame, Indiana.

- Goldstone, R. L. (2001). A computational model of interrelated and isolated concepts. Invited Colloquium at University of Chicago.
- Goldstone, R. L. (2001). A week-long course in human learning and adaptive systems. 8<sup>th</sup> International Summer School in Cognitive Science. Sofia, Bulgaria, New Bulgarian University.
- Goldstone, R. L. (2000). Interactions between perception and conception. Invited Colloquium at University of Texas - Austin.
- Goldstone, R. L. (2000). The transfer of abstract concepts learned from concrete simulations. Talk presented at the 41<sup>st</sup> Annual Meeting of the Psychonomic Society, New Orleans, LO.
- Goldstone, R. L. (2000). Learning to perceive while perceiving to learn. Invited speaker at the 31<sup>st</sup> Carnegie Symposium on Cognition: Perceptual Organization in Vision: Behavioral and Neural Perspectives (Organized by Marlene Behrmann, Rutie Kimchi, & Carl Olson).
- Goldstone, R. L. (2000). Learning to perceive while perceiving to learn. Invited Colloquium at University of Chicago.
- Lippa, Y., & Goldstone, R. L. (1999, November). The acquisition of automatic response biases through stimulus-response mapping and categorization. Poster presented at the 40<sup>th</sup> Annual Meeting of the Psychonomic Society, Los Angeles, CA, USA.
- Goldstone, R. L. (1999). Perceptual learning in humans and neural networks. Invited address at the 10<sup>th</sup> Midwest Artificial Intelligence and Cognitive Science Conference. Bloomington, Indiana.
- Goldstone, R. L. (1998). Categorization and segmentation: Grouping together and breaking apart. Mind and Computation colloquium, Department of Computer Science, Indiana University.
- Goldstone, R. L. (1998). A Neural Network Model of Isolated and Interrelated Concepts. Invited speaker at the Workshop on Natural Categories, organized by Gert Storms. University of Leuven, Belgium.
- Goldstone, R. L. (1998). Dimensionalization during category learning. Meeting of the English Psychological Society. Cambridge, England.
- Goldstone, R. L., & Steyvers, M. (1998). Dimensionalization during category learning. 39<sup>th</sup> Meeting of the Psychonomic Society, Dallas, TX.
- Goldstone, R. L. (1997-1998). Interactions between Perceptual and Conceptual Learning. Invited Colloquia at: University of California, Los Angeles; University of California, Irvine; University of Chicago; University College London, England; University of Cambridge, England; University of Illinois at Urbana-Champaign; University of Southampton, England; University of Surrey, England; University of Sussex, England; University of Wales in Cardiff, Wales; University of Warwick, England; Universite de Provence, Aix-en-Provence, France; Max Planck Institute, Munich, Germany.
- Goldstone, R. L. (1997). Isolated and Interrelated Concepts. Invited Colloquium. University of Bielefeld, Germany.

- Goldstone, R. L. (1997). Unitization During Category Learning. Invited speaker at the Workshop on Concepts and Categories, organized by Koen Lamberts. Birmingham, England.
- Goldstone, R. L. (1997). Reuniting Concepts and Percepts. Keynote address for the Workshop on Similarity and Categorization. Edinburgh, Scotland.
- Shyi, G., Goldstone, R. L., & Hummel, J. (1997). The Dynamics of Binding in Object Recognition. Object Perception and Memory Workshop. Philadelphia, Pennsylvania.
- Goldstone, R. L. (1996). Isolated and Interrelated Concepts. 37th Meeting of the Psychonomic Society, Chicago, IL.
- Goldstone, R. L. (1996). Interactions Between Conceptual and Perceptual Learning. Chase Memorial Award Colloquium, Carnegie Mellon University.
- Goldstone, R. L. (1996). Building Concepts and Percepts Concurrently. Invited talk, International Conference on Memory. Padova, Italy.
- Kersten, A.W., Goldstone, R. L., & Shaffert, A. (1996). The segmentation of events into features during category learning. Poster presented at the 37th Meeting of the Psychonomic Society, Chicago, IL.
- Kersten, A., Goldstone, R. L. & Shaffert, A. (1996). Learning event features in a novel verb learning task. Hoosier Mental Life. Evanston, Illinois.
- Steyvers, M., & Goldstone, R. L. (1996). Categorical Perception of Novel Dimensions. Hoosier Mental Life. Evanston, Illinois.
- Goldstone, R. L. (1995). Build your perceptual vocabulary in 90 minutes or less. Invited talk at the 66<sup>th</sup> annual meeting of the Midwestern Psychological Association. Chicago, Illinois.
- Goldstone, R. L. (1995). Effects of categorization on color perception. Invited participant in Douglas Wedell's symposium "The role of context and categorization in paired comparison." 66<sup>th</sup> annual meeting of the Midwestern Psychological Association. Chicago, Illinois.
- Goldstone, R. L. (1995). Perceptions, Conceptions, and their Interrelations. Invited colloquium speaker, University of Montreal.
- Goldstone, R. L. (1994). Alignment-based nonmonotonicities in similarity judgments. 35<sup>th</sup> annual meeting of the Psychonomic Society, St. Louis.
- Goldstone, R. L. (1994). Perceptions, Conceptions, and their Interrelations. Invited colloquium speaker, Miami University.
- Goldstone, R. L. (1994). Comparison-dependent processes in similarity. Invited speaker, Northwestern University.
- Goldstone, R. L., & Schyns, P. (1994). Organizers of the "Learning Features of Representation" symposium at The Sixteenth Annual Conference of the Cognitive Science Society, Atlanta, Georgia.

- Goldstone, R. L. (1993). Influences of categorization on perceptual discriminations. Presentation given at the 34<sup>th</sup> annual meeting of the Psychonomic Society, Washington D.C.
- Goldstone, R. L. (1993). Violating Some Assumptions: Comparison-dependent processes in similarity. Invited cognitive colloquium speaker, Purdue University.
- Goldstone, R. L. (1993). Interactions between categorization and perception. Invited speaker, Workshop on Psychological Models of Categorization (organized by James Hampton, Iven Van Mechelen, & Paul De Boeck), Leuven, Belgium.
- Goldstone, R. L. (1993). Positively and Negatively Defined Concepts. Invited speaker, Northwestern University.
- Goldstone, R. L. (1993). Perceptions, Conceptions, and their Interrelations. Invited cognitive science colloquium speaker, Indiana University.
- Levine, G., Halberstadt, J., & Goldstone, R. L. (1993). The effect of reasons on liking. Presentation given at the annual meeting of the Judgment and Decision Making Society, Washington D. C.
- Goldstone, R. L. (1992). The Effects of Feature Distribution on Estimation. Presentation given at the annual meeting of the Psychonomic Society, St. Louis.
- Goldstone, R.L. (1992). Seeing as: Analogy as perceptual interpretation. Invited syposium on analogy and perception at the Fourteenth Annual Conference of the Cognitive Science Society. Bloomington, Indiana.
- Aha, D. W., and Goldstone, R. L. (1991). Instance-specific weighting for concept learning. Invited address at the Annual Mathematical Psychology Meetings. Indiana University.
- Medin, D.L., Goldstone, R.L., & Gentner, D. (1988). Evidence that similarity and difference judgments are not inverses. Presentation given at the annual meeting of the Psychonomic Society, Chicago.
- Goldstone, R.L., Medin, D.L., & Gentner, D. (1987). The non-independence of relations and attributes in similarity judgments. Presentation given at the annual meeting of the Midwest Psychological Association, Chicago.