

**Curriculum Vitae**  
**Robert L. Goldstone**  
**April 2022**

**Current Position**

Distinguished Professor  
Department of Psychological and Brain Sciences/Program in Cognitive Science  
Indiana University

**Contact Information**

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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**

Distinguished Professor, 2017-present  
Class of 1969 Chancellor's Professor, 2006-2016  
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

Executive Editor, *Current Directions in Psychological Science*, 2019-2021.

American Psychological Association, selection committee for the Distinguished Scientific Award for Early Career Contribution to Psychology in the area of Cognition and Human Learning, 2021.

Chair of IU Psychological and Brain Sciences ad hoc committee for the use of Student Evaluations of Teaching for Merit Review Committee deliberations, 2021.

Executive Editor Search Committee, *Cognitive Science*, 2019-2020.

External Review Committee for the Cognitive Science Program at Rensselaer Polytechnic Institute, 2019.

Co-organizer (with Charley Wu, Natalia Vélez, and Mark Ho) of the “Cognition, collectives, and human culture” workshop. 42<sup>nd</sup> Annual Meeting of the Cognitive Science Society. Toronto, CA. 2020.

Co-organizer (with Franco Pestilli) of the 2018 Midwestern Cognitive Science Conference. Bloomington, Indiana.

Co-organizer (with Franco Pestilli) of the 2018 Workshop on Human and Machine Learning. Bloomington, Indiana.

External Review Committee for the Cognitive Science Program at Carleton University, Ottawa, Canada. 2018

Member of the Board on Behavioral, Cognitive, and Sensory Sciences, National Research Council, National Academy of Sciences. 2014-2018

Member of National Research Council Committee for “How People Learn II: The Science and Practice of Learning.” 2015-2018

Program Committee for Spatial Cognition Conference, University of Latvia. Riga, Latvia. 2019-2021.

Chair of the symposium “Discovering psychological principles by mining large, real-world datasets.” 48<sup>th</sup> Annual Meeting of the Society for Mathematical Psychology. 2015. Newport Beach, California.

- Co-organizer (with Kylie Peppler, Jennifer Rowsell, and Anna Keune) of Posthumanist Perspective on Learning workshop at the International Conference on Computer Supported Collaborative Learning. Lyon, France, June 2019.
- External Review Committee for the Department of Psychology at University of California, Berkeley. 2016
- American Psychological Association's editor search committee for Psychological Review, 2013-2014
- Advisory Board for the Institute for Intelligent Systems, University of Memphis, 2015-2016
- Advisory Board for "vObjects - Understanding their Utility to Enhance Learning of Abstract and Complex Engineering Concepts," National Science Foundation IUSE grant (PI: Diana Bairaktarova), 2017-2019
- Advisory Board for "Bayesian Optimization for Exploratory Experimentation in the Behavioral Sciences," National Science Foundation Methodology, Measurement, and Statistics (PI: Michael Mozer), 2016-2019
- Advisory Board for "Investigating Motivation and Transfer in Physical Science through Preparation for Future Learning Instruction," National Science Foundation CORE grant (PI: Timothy Nokes Malach), 2016-2019
- Advisory Board for "The cognitive science of explanation," National Science Foundation Career grant (PI: Tania Lombrozo), 2011-2016.
- Advisory Board for the Generalized Intelligent Framework for Tutoring (GIFT), University of Memphis and Army Research Laboratory, 2014-2016
- Co-organizer (with Gary Lupyan) of the Symposium on Big Data and Naturally Occurring Data in Psychology. Psychonomics Society Meeting. Vancouver, Canada, 2017
- Co-organizer (with Gary Lupyan) of the two-day Leading Edge Workshop on Big Data and Naturally Occurring Data in Psychology. Madison, Wisconsin, 2017.
- Director of the Indiana University Cognitive Science Program, 2006-2011
- Founding Chair of the Glushko Prize for Outstanding Doctoral Dissertations in Cognitive Science, 2010-2013
- Organizing Committee of the Workshop on Collective Intelligence. MIT, Boston, Massachusetts. 2010-2013
- Co-organizer (with Kirk Ludwig) of the Workshop on Collective Intentionality IX. Indiana University, Bloomington, Indiana, 2014.
- Chair of the symposium "Psychonomics without experiments? Discovering psychological principles by mining large data sets." 53<sup>rd</sup> Meeting of the Psychonomics Society. 2012. Minneapolis, Minnesota.
- Organizing Committee for the Symposium on Cognitive Modeling of Perception and Memory in honor of Richard Shiffrin. Bloomington, IN. 2012

Rumelhart Prize Selection Committee, 2007-2011 (Chair: 2009-2011)

Board of Consulting Reviewers for Open Mind: Discoveries in Cognitive Science. 2017-2019

Board of Consulting Reviewers for Psychological Review, 2015-2019

Associate Editor of Cognitive Psychology, 2007-2017

Executive Editor of Cognitive Science, 2001-2005; Board of Reviewers, 2006-2014

Senior Editor of Topics in Cognitive Science, 2007-2019

Member of the Fellows Committee for the Cognitive Science Society, 2010-2011

BioSim Advisory Committee, 2013-2018. Bloomington, Indiana.

Selection Committee for the American Psychological Association Early Career Award, 2011

Scientific advisor for the Network for Sensory Research (Mohan Matthen, PI), 2011-2018

Editorial Board of Oxford University Press' Series on Cognitive Models and Architectures, 2010-2019

Editorial Board of Journal of Problem Solving, 2009-2017

Governing Board of the Indiana University Institute for Advanced Study, 2008-2011

Organizer of the Symposium on Transfer of Learning. Bloomington, IN. 2009

Member of National Science Foundation, special emphasis grant review panel on Computation and Cognition. 2017.

Member of Department of Education, Institute of Education Sciences, Postdoctoral Research Training Proposals grant review panel, 2010

Member of Department of Education, Institute of Education Sciences, Basic Cognitive Processes, permanent grant review panel (review panel meetings twice per year), 2009-2011

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, 2002-2013 (prize selection committees: 2006, 2007, 2008)

Member of Advisory Board of GlassLabs Games, SRI, 2013-2015.

Member of Advisory Board for Fostering Interdisciplinary Research on Education, NSF grant, Purdue University, 2010-2012

Member of Advisory Board on the PhET Middle School DRK12 project, Department of Education, University of Colorado, 2010-2016

Programme Committee for EuroCogSci, 2011

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 Lab for Conceptual and Cognitive Sciences, Riga, Latvia. 2016-2018.

Advisory board member for UCSD's NSF Science of Learning Center on "Temporal Dynamics of Learning," 2006-2010

Advisory board member for the Pittsburgh NSF Science of Learner Center, 2007-2015 (Chair: 2009-2015)

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, 2005-2016

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 Institute of Health, Computational Models of Social Behavior, 2015-2016

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), 2005-2016

Advisory Board for the Child Guidance Clinic, Sahyadri Specialty Hospital. Pune, India, 2010-2015

Member of the Alliance of Distinguished and Titled Professors, 2006-2021

Steering committee for the Indiana Science, Technology, Engineering, and Mathematics Education Center, 2006-2010

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, 2006-2010

Member of the College of Arts and Science Tenure Advisory Committee at Indiana University, 2016-2018.

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, 2014-2018), cognitive (1992-1994, 2001), clinical (1993-1995), learning science (2011-2013 – chair), computational neuroscience (2013-2014)

Cognitive Science faculty search committees at Indiana University: director (2004), cognitive linguistics (2004), philosophy of mind (1998-1999, 2013-2015, 2017-2018), 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, 2000-2014, Chair: 2012-2018

Faculty Awards Committee, Department of Psychological and Brain Sciences, 2013-2021

Subject pool committee, 1992-1997, 2001-2002, 2006-2021

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, 2016-2019

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

Outstanding Graduate Mentor Award, Indiana University Cognitive Science Program, 2021

Bicentennial Medal, Indiana University, 2021

Fellow of the Center for Interdisciplinary Research, Cognitive Behavior of Humans, Animals, and Machines. Universität Bielefeld, Germany, 2019

Robert Blumberg Distinguished Lecture in Cognitive Science. University of Latvia, 2018

Elected Fellow of the American Academy of Arts and Sciences, 2016

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 Efficacy of From Here to There: A Dynamic Technology for Improving Algebraic Understanding”, Department of Education, Institute of Education Sciences, \$1,300,000, (Co-PI, PI: Erin Ottmar), 2018-2022.



- “Understanding Teacher Change and Teachers as Learners in K-12 Classrooms,” James McDonnell Foundation, \$2,499,999, (Co-I, PI: Joshua Danish), 2018-2022.
- Estes Fund Workshop for advanced training in mathematical and computational modeling for psychological science. Association for Psychological Science and the Psychonomics Society, \$20,000. (Co-PI, PI: Franco Pestilli), 2017-2018.
- “Learning: Machines, Brains & Children,” Emerging Area of Research Award, Indiana University, \$2,456,489, (Co-PI, PI: Linda Smith), 2016-2020.
- “Early understanding of multi-digit numbers through statistical learning paves the way for formal training of place value concepts,” National Institute of Child Health, \$115,732, (Co-I, PI: David Crandall), 2017-2019.
- “Beyond the lab: using big data to discover principles of cognition”, Workshop (Co-PI with Gary Lupyan), Psychonomics Society, \$40,000. 2016-2017.
- “Improving Student Motivation with Social Norm Messaging,” Association of Psychological Science (PI: Ben Motz), \$11,000. 2016-2018.
- “Speech Perception and Spoken Word Recognition,” National Institute on Deafness and other Communication Disorders Training Grant (PI: David Pisoni), \$3,163,588. 2011-2018.
- "Teaching the visual structure of algebra through dynamic interactions with notation" (R305A1100060), Department of Education, Institute of Education Sciences, (PI: David Landy, University of Richmond; Indiana University sub-contract PI: Robert Goldstone), \$1,092,484 (\$683,492 to Indiana University), May 2011-April 2015.
- “Towards Effectively Quantifying Programming Language Abstraction,” Indiana University Collaborative Research Grant (PIs: Goldstone and Andrew Lumsdaine), \$48,556, April 2011-March 2012.
- “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 2014.
- “Transfer of perceptually grounded principles,” National Science Foundation, Research and Evaluation on Education in Science and Engineering (DRL-0910218), (PI: Goldstone), \$1,073,000, September 2009-August 2014.
- “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***

Lupyan, G., & Goldstone, R. L. (2019). Guest editors of the “Big Data in Psychology” issue of Behavior Research Methods.

Committee member on National Academies of Sciences, Engineering, and Medicine (2018). *How People Learn II: Learners, Contexts, and Cultures*. Washington, DC: National Academies Press.

Goldstone, R. L., & Lupyan, G. (2016). Guest editors of the “Discovering principles of cognition by mining large, real-world data sets” issue of Topics in Cognitive Science.

Raaijmakers, J.G.W., Criss, A.H., Goldstone, R. L., Nosofsky, R. M., & Steyvers, M. (2015). (Eds.). *Cognitive Modeling in Perception and Memory: A Festschrift for Richard M. Shiffrin*. New York: Taylor & Francis.

Goldstone, R. L., & Day, S. B. (2012). Guest editors of the “New Conceptualization of Transfer of Learning” issue of Educational Psychologist

Goldstone, R. L., & Pizlo, Z. (2009). Guest editors of the “New Perspectives on Human Problem Solving” issue of Journal of Problem Solving.

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**

- Carvalho, P. F., & Goldstone, R. L. (2022). A computational model of context-dependent encodings during category learning, Cognitive Science, *46*, 1-42, e13128.
- Campbell, C., Izquierdo, E. & Goldstone, R. L. (in press). Partial copying and the role of diversity in social learning performance. Collective Intelligence.
- Dubova, M., & Goldstone, R. L. (2022). Categorical perception meets El Greco: categories unequally influence color perception of simultaneously present objects. Cognition, *223*, 1-14. 105025.
- Goldstone, R. L. (2022). The well measured life: Performance, well-being, motivation, and identity in an age of abundant data. Current Directions in Psychological Science, *31* (1), 1-9. <https://doi.org/10.1177/09637214211053834>
- Setzler, M., & Goldstone, R. L. (2022). Tonal Emergence: An Agent-Based Model of Tonal Coordination. Cognition, *221*, 1-19. 104968.
- Andrade-Lotero, E., & Goldstone, R. L. (2021). Self-organized division of cognitive labor. PLoS ONE, *16*(7): e0254532. <https://doi.org/10.1371/journal.pone.0254532>
- Avery, J. E., Goldstone, R. L., & Jones, M. N. (2021). Reconstructing Maps from Text. Cognitive Systems Research. doi: <https://doi.org/10.1016/j.cogsys.2021.07.007>
- Carvalho, P. F., & Goldstone, R. L. (2021). The most efficient sequence of study depends on the type of test. Applied Cognitive Psychology, *35*, 82-97.
- Dubova, M., & Goldstone, R. L. (2021). The Influences of Category Learning on Perceptual Reconstructions. Cognitive Science, *45*, e12981, 1-24.
- Fyfe, E., de Leeuw, J. R., Carvalho, P. F., Goldstone, R., Sherman, J., ... Motz, B. (2021). ManyClasses 1: Assessing the generalizable effect of immediate versus delayed feedback across many college classes. Advances in Methods and Practices in Psychological Science, *4*, 1-24. <https://doi.org/10.31234/osf.io/4mvyh>
- Motz, B. A., Goldstone, R. L., Busey, T. A., & Prather, R. W. (2021). Visual search asymmetry due to the relative magnitude represented by number symbols. Vision, *5*, 42. <https://doi.org/10.3390/vision5030042>

- Sloman, S. J., Goldstone, R. L., & Gonzalez, C. (2021). A Social Interpolation model of group problem-solving. *Cognitive Science*, *45*, 1-30. E13066
- Setzler, M., & Goldstone, R. L. (2020). Coordination and Consonance Between Interacting, Improvising Musicians. *Open Mind: Discoveries in Cognitive Science*, *4*, 88–101. [https://doi.org/10.1162/opmi\\_a\\_00036](https://doi.org/10.1162/opmi_a_00036)
- Plancher, G., & Goldstone, R. L. (2020). How do people code information in working memory when items share features? *Experimental Psychology*, *67*(3), 169-177. <https://doi.org/10.1027/1618-3169/a000480>.
- Tullis, J. G., & Goldstone, R. L. (2020). Why does peer instruction benefit student learning? *Cognitive Research: Principles and Implications*, *5*:15, 1-12. <https://doi.org/10.1186/s41235-020-00218-5>
- Sang, K., Todd, P. M., Goldstone, R. L., & Hills, T. T. (2020). Simple threshold rules solve explore/exploit tradeoffs in a resource accumulation search task. *Cognitive Science*, *44*, e12817. <https://doi.org/10.1111/cogs.12817>
- Goldstone, R. L. (2019). Becoming cognitive science. *Topics in Cognitive Science*, 1-12.
- Best, R. M., & Goldstone, R. L. (2019). Bias to (and away from) the extreme: Comparing two models of categorical perception effects. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, *45*(7), 1166-1176.
- Lara-Dammer, F., Hofstadter, D. R., & Goldstone, R. L. (2019). A computational model of scientific discovery in a very simple world, aiming at psychological realism. *Journal of Experimental & Theoretical Artificial Intelligence*, 637-658. [10.1080/0952813X.2019.1592234](https://doi.org/10.1080/0952813X.2019.1592234)
- Lupyan, G., & Goldstone, R. L. (2019). Introduction to special issue. Beyond the lab: Using big data to discover principles of cognition. *Behavioral Research Methods*, *51*, 1473-1476.
- Hawkins, R. X. D., Goodman, N. D., & Goldstone, R. L. (2019). The emergence of social norms and conventions. *Trends in Cognitive Science*, *23*, 158-169.
- Frey, S., & Goldstone, R. L. (2018). Cognitive mechanisms for human flocking dynamics. *Journal of Computational Social Science*, *1*, 349-375.
- Motz, B. A., Carvalho, P. F., de Leeuw, J. R., & Goldstone, R. L. (2018). Embedding experiments: staking causal inference in authentic educational contexts. *Journal of Learning Analytics*, *5*, 47-59. doi: 10.18608/jla.2018.52.4
- Börner, K., Simpson, A. H., Bueckle, A., & Goldstone, R. L. (2018). Science map metaphors: a comparison of network versus hexmap-based visualizations. *Scientometrics*, *114*, 409-426.
- Carvalho, P. F., & Goldstone, R. L. (2017). The sequence of study changes what information is attended to, encoded and remembered during category learning. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, *43*, 1699-1719.

- Carvalho, P. F., & Goldstone, R. L. (2017). Zebras and antelopes: category sparsity as the result of the relations between objects and within categories. Language, Cognition, and Neuroscience, 2327, 3798-3801. DOI: 10.1080/23273798.2016.1236978.
- Goldstone, R. L., Marghetis, T., Weitnauer, E., Ottmar, E. R., & Landy, D. (2017). Adapting perception, action, and technology for mathematical reasoning. Current Directions in Psychological Science, 1-8. DOI: d1o0i.1or1g7/170.01197673/70926134712717410747808488
- Goldstone, R. L. & Theiner, G. (2017). The multiple, interacting levels of cognitive systems (MILCS) perspective on group cognition, Philosophical Psychology, 30:3, 334-368, DOI: 10.1080/09515089.2017.1295635 (part of a special issue on "is "Collective Intentionality and Socially Extended Minds" guest edited by M. Galotti and B. Huebner).
- Lara-Dammer, F., Hofstadter, D. R., & Goldstone, R. L. (2017). A computer model of context dependent perception in a very simple world. Journal of Experimental & Theoretical Artificial Intelligence, 29:6, 1247-1282. DOI: 10.1080/0952813X.2017.1328463
- Meagher, B. J., Carvalho, P. F., Goldstone, R. L., & Nosofsky, R. M. (2017). Organized simultaneous displays facilitate learning of complex natural science categories. Psychonomic Bulletin & Review, DOI 10.3758/s13423-017-1251-6.
- Motz, B.A., de Leeuw, J.R., Carvalho, P.F., Liang, K.L., Goldstone, R.L. (2017). A dissociation between engagement and learning: Enthusiastic instructions fail to reliably improve performance on a memory task. PLoS ONE, 12(7): e0181775. doi: 10.1371/journal.pone.0181775
- Tullis, J. G., & Goldstone, R. L. (2017). Instruction in computer modeling can support broad application of complex systems knowledge. Frontiers in Education, 2:4, 1-18. doi: 10.3389/educ.2017.00004
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- 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.
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- 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***

- de Leeuw, J. R., Motz, B. A., Fyfe, E. R., Carvalho, P. F., & Goldstone, R. L. (2022). Generalizability, transferability, and the practice-to-practice gap [a commentary on T. Yarkoni]. Behavioral and Brain Sciences, 45, e11.
- Goldstone, R. L. (2016). Carving nature at its joints or cutting its effective loops? On the dangers of trying to disentangle intertwined mental processes. [a commentary on C. Firestone and B. Scholl]. Behavioral and Brain Sciences, 39, 33-34.
- 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. (2022). Learning as hacking our own mind. Keynote speaker, Integrating Psychology and STEM Education Research to Promote Innovative Teaching. Center for Integrative Research on Cognition, Learning, and Education. Washington University.
- Goldstone, R. L. (2022). Mutual dependencies between perceptual and concept learning. Invited colloquium, Center for Cognitive Science, University of Kaiserslautern. Germany.
- Goldstone, R. L. (2021). Training perception and action to do the right thing. Keynote speaker at the conference "Speaking Bodies: Embodied Cognition at the Crossroads of Philosophy, Linguistics, Psychology and Artificial Intelligence." Babeş-Bolyai University. Cluj-Napoca, Romania.
- Goldstone, R. L. (2021). Context and Comparison During Open-Ended Induction. Virtual colloquium in the "Analogical Minds" talk series. Organized by Dr. Matt Slocombe.
- Goldstone, R. L. (2020). Changes of perceptual encoding due to labeling. Invited presentation at the "Language and learning" workshop. University of Wisconsin. Madison, WI.
- Goldstone, R. L. (2020). The emergence of group coordination. Invited presentation at the "Cognition, Collectives, and Human Culture" workshop. 42<sup>nd</sup> Annual Meeting of the Cognitive Science Society. Toronto, CA.
- Goldstone, R. L. (2020). What makes or would make cognitive science successful? Invited presentation at the "Where is cognitive science now?" workshop. 42<sup>nd</sup> Annual Meeting of the Cognitive Science Society. Toronto, CA.
- Goldstone, R. L. (2020). Training Perception and Action to Do the Right Thing. Invited colloquium, Ruhr-Universität Bochum.
- Goldstone, R. L. (2020). Perception-action routines for mathematics. Invited colloquium, Cognitive Behavior of Humans, Animals, and Machines (COBHAM). Center for Interdisciplinary Research (ZiF), University of Bielefeld, Germany.
- Goldstone, R. L. (2020). Using context to constrain the construction of new descriptions during open-ended induction. Invited presentation at the ZiF Research Group Workshop on Cognitive Behavior of Humans, Animals, and Machine: Situation model perspectives. Bielefeld, Germany.

- Goldstone, R. L. (2019). Panelist on the “How People Learn: Learners, Contexts, and Cultures” symposium. American Psychological Association Presidential Symposium. Chicago, IL.
- Goldstone, R. L. (2019). Panelist on the invited “How People Learn: Learners, Contexts, and Cultures” symposium. Association for Psychological Science. Washington, D.C.
- Goldstone, R. L. (2019). Panelist on the “How People Learn: A New Look” symposium. American Association for the Advancement of Science. Washington, D.C.
- Goldstone, R. L. (2019). The acquisition and representation of useful concepts. Harvard University workshop on behavior economics. Cambridge, MA.
- Goldstone, R. L. (2019). Learning new representations. Invited Colloquium, Department of Psychology, University of Buffalo. Buffalo, NY.
- Goldstone, R. L. (2019). What is life? Panelist on a discussion appearing on Swedish Public Television. Royal Swedish Academy of Sciences. Stockholm, Sweden.
- Goldstone, R. L. (2019). Why does peer instruction benefit student learning? Annual Summer Interdisciplinary Conference. Seefeld, Austria.
- Goldstone, R. L. (2019). The psychology of computer programming. Dagstuhl Workshop on Notional Machines in Computer Science. Dagstuhl, Germany.
- Goldstone, R. L. (2018). Computational Models of Mental Models of Computational Models of the World. Robert Blumberg Distinguished Lecture in Cognitive Science, Symposium on Events and Objects in Perception, Cognition, and Language. University of Latvia. Riga, Latvia.
- Goldstone, R. L. (2018). Patterns of imitation and innovation in collective behavior. Department of Psychology, University of Otago. Dunedin, New Zealand.
- Goldstone, R. L. (2018). A new look at how people learn. Center for Research on Learning and Teaching (CRLT) and Jacobs Chair Lecture. Department of Education, Indiana University. Bloomington, Indiana.
- Goldstone, R. L. (2018). Training Perception and Action to Do the Right Thing. Department of Psychology, University of Oregon. Eugene, Oregon.
- Goldstone, R. L. (2018). Patterns of imitation and innovation in collective behavior. Invited Colloquium in Department of Social and Decision Sciences, Carnegie Mellon University. Pittsburgh, Pennsylvania.
- Goldstone, R. L. (2018). Experiential grounding of statistics concepts. Conference on Cognitive Science and Discipline-Based Education Research. Center for Integrative Research on Cognition, Learning, and Education, University of Washington. St. Louis, Missouri.
- Goldstone, R. L. (2018). Five lectures on the acquisition and representation of concepts. Summer School on Concepts in Action: Representation, Learning, and Application. Universität Osnabrück. Osnabrück, Germany.

- Goldstone, R. L. (2018). A computational model of human scientific discovery. Invited panelist at the “Models of scientific discovery” workshop at the 40th Annual Meeting of the Cognitive Science Society. Madison, Wisconsin: Cognitive Science Society.
- Goldstone, R. L. (2018). Visual flexibility in arithmetic expressions. Invited panelist at the “Data visualization as a domain to research areas in cognitive science” workshop at the 40th Annual Meeting of the Cognitive Science Society. Madison, Wisconsin: Cognitive Science Society.
- Goldstone, R. L. (2018). An open science of education research. Workshop on Open Education, Centre de Recherches Interdisciplinaires. Paris, France.
- Goldstone, R. L. (2018). Computational Models of Mental Models of Computational Models of the World. Invited Colloquium, Wisconsin Center for Education Research. University of Wisconsin. Madison, Wisconsin.
- Goldstone, R. L. (2018). Learning from others. Workshop on Social Learning. Santa Fe Institute. Santa Fe, New Mexico.
- Goldstone, R. L. (2018). Baseball Umpire Calls as a Naturally Occurring Data Source for Revealing Principles of Bias and Learning in Perceptual Judgments. MIDAS Seminar Colloquium, University of Michigan.
- Goldstone, R. L. (2018). Computational Models of Mental Models of Computational Models of the World. Cognitive Colloquium, University of Michigan.
- Goldstone, R. L. (2017). Discussant for the Leading Edge Workshop on Big Data and Naturally Occurring Data in Psychology. Annual Meeting of the Psychonomics Society. Vancouver, Canada.
- Goldstone, R. L. (2017). Human Collective Behavior. Keynote presentation at the Summit on Computational Social Science. Central China Normal University.
- Goldstone, R. L. (2017). Computational Models of Perceptual Illusions. Invited Colloquium. Central China Normal University.
- Goldstone, R. L. (2017). Grounding mathematical education in perception and action. Invited Colloquium. Central China Normal University.
- Goldstone, R. L. (2017). Bias and expertise in baseball umpire judgments. Annual Summer Interdisciplinary Conference. Interlaken, Switzerland.
- Goldstone, R. L. (2017). The emergence of norms in human groups. Invited participant at the Workshop on Distributed Agents. King’s College, the Shard, London.
- Goldstone, R. L. (2017). Computational models of mental models of computational models of the world. Invited Cognitive Science Colloquium. University of New South Wales, Australia.
- Goldstone, R. L. (2017). Mathematical reasoning as a literally physical symbol system. Keynote address at the 2017 Annual Centre for Elite Performance, Expertise, and Training Workshop, Macquarie University, Australia.

- Goldstone, R. L. (2017). Perception and mathematical reasoning. Invited Psychology Colloquium, University of Newcastle, Australia
- Goldstone, R. L. (2017). Mathematical reasoning as trained perception and action routines. Invited Psychology Colloquium, University of Sydney, Australia.
- Goldstone, R. L. (2017). The emergence of norms during collective behavior. Symposium on Collective Behavior. International Conference on Psychology Science. Vienna, Austria.
- Goldstone, R. L. (2017). Reminding versus comparison as instructional strategies for promoting memory and transfer. Society for Experimental Psychologists. Nashville, TN.
- Goldstone, R. L. (2017). Invited Speaker on the Workshop on Perceptual Learning and Expertise. University of Pennsylvania.
- Goldstone, R. L. (2016). The division of cognitive labor during collective behavior. Invited panelist at the "Emergence of Social Norms" symposium at the Annual Meeting of the Cognitive Science Society (organizer: Robert Hawkins). Philadelphia, Pennsylvania.
- Goldstone, R. L., Carvalho, P. (2016). The encoding of characteristic and diagnostic properties during interleaved and blocked category learning. Annual Meeting of the Psychonomics Society. Boston, Massachusetts.
- Goldstone, R. L. (2016). Collective behavior. Presentation at the Indiana University Department of Psychological and Brain Sciences Alumni Recognition Day. Bloomington, IN.
- Goldstone, R. L. (2016). Presentation at workshop on Discipline-Based Research in Education and Cognitive Science, National Science Foundation. Arlington, D.C.
- Goldstone, R. L. (2016). Getting perception to do what we want. Invited Colloquium at the Perception and Cognition Talk Series, University of Wisconsin.
- Goldstone, R. L. (2016). Five Lectures on Collective Behavior. The International Max Planck Research School on Adapting Behavior in a Fundamentally Uncertain World. Jena, Germany.
- Goldstone, R. L. (2016). Going beyond big data. American Psychological Association symposium, Denver Colorado.
- Goldstone, R. L. (2016). Learning about learning about complex systems. Invited Colloquium at Purdue International Biology Education Research Group (PIBERG), Department of Biology, Purdue University.
- Goldstone, R. L., Thai, K. P., & Son, J. Y. (2016). The Simple Advantage in Perceptual and Categorical Generalization. Society for Experimental Psychologists. NYC, New York.
- Goldstone, R. L. (2015). Computational Models of Mental Models of Computational Models of the World. CITEC (Cognitive Interactive Technology Excellence Center) Colloquium. Bielefeld, Germany.
- Goldstone, R. L., Landy, D. H., Ottmar, E. R., Weitnauer, E., and Bailey, M. (2015). Invited speaker at the "Enhancing education through cognitive psychology" symposium. Annual Meeting of the Psychonomics Society. Chicago, Illinois.

- Goldstone, R. L., Carvalho, P., Braithwaite, D. (2015). The Right Sequence for the Right Learning: Blocked and Interleaved Study Differences in the Study of Mathematical Concepts. Annual Meeting of the Psychonomics Society. Chicago, Illinois.
- Goldstone, R. L. (2015). Mathematical reasoning as a literally physical symbol system. Invited Colloquium, Universidad Nacional del Comahue Psychology Department, Argentina.
- Goldstone, R. L. (2015). Organizer of "Harvesting naturally occurring data sets for psychology." Annual Meeting of the Society for Mathematical Psychology. Newport Beach, California.
- Goldstone, R. L. (2015). Patterns of imitation and innovation in collective behavior. Psychology Department Colloquium. Brooklyn College. Brooklyn, New York.
- Goldstone, R. L. (2015). Learning along with others. Departmental Colloquium. Universite de Nice Sophia Antipolis. Nice, France.
- Goldstone, R. L. (2014). Grounding mathematical reasoning in perception and action. Psychology Department Colloquium. Princeton University. Princeton, New Jersey.
- Goldstone, R. L. (2014). An algebraic sandbox: grounding symbolic math in perceptual-motor interaction. Cognitive Science Colloquium, Rensselaer Polytechnic Institute. Troy, New York.
- Goldstone, R. L. (2014). Transfer of complex systems principles. Plenary address at the PHeT Working Group Meeting. University of Colorado. Boulder, Colorado.
- Goldstone, R. L. (2014). Grounding mathematical reasoning. Psychology Department Colloquium. University of Colorado. Boulder, Colorado.
- Goldstone, R. L. (2014). A computational model of students' mental models of natural phenomena. Computational Models for Learning: From Basic Processes to Real-World Education. Symposium at the Association for Psychological Science Annual Meeting. San Francisco, CA.
- Goldstone, R. L. (2014). Being part of something bigger than us: The patterns that human groups spontaneously create. Psychology Department Colloquium. Illinois State University. Normal, Illinois.
- Goldstone, R. L. (2014). Learning along with others. Invited presentation at the Web Science and the Mind Summer School. Montreal, Canada.
- Goldstone, R. L. (2014). Harvesting data from naturally occurring sources. Invited presentation at the Data on the Mind workshop. University of California at Berkeley. Berkeley, CA.
- Goldstone, R. L., Carvalho, P. F., Weitnauer, E. (2014). Sequencing examples during concept learning. Thirteenth Annual Meeting of the Cognitive Science Association for Interdisciplinary Learning. Hood River, Oregon.
- Goldstone, R. L. (2014). A well grounded education: Perception and action in mathematical reasoning. Keynote address at the 2014 Show Me Mental State Conference. Washington University, St. Louis.

- Goldstone, R. L., & Braithwaite, D. W. (2013). Variability of exemplars fosters transfer? Twelfth Annual Summer Interdisciplinary Conference. Cortina D'Ampezzo, Italy.
- Goldstone, R. L., & Braithwaite, D. W. (2013). Example variability is beneficial if you're mathematically strong enough to take it. Third International Conference on Analogy. Dijon, France.
- Goldstone R. L. (2013). Hacking one's own perceptual system. Invited symposium panelist. The Thirty-Fifth Annual Conference of the Cognitive Science Society. Berlin, Germany.
- Goldstone, R. L. (2013). Hacking our own perceptual systems so that cognition improves. Invited plenary lecture at the 9<sup>th</sup> International Symposium of Cognition, Logic, and Communication: Perception and Concepts. University of Latvia. Riga, Latvia.
- Goldstone, R. L. (2013). The pers and cons of ceptual learning. Invited Public Lecture at the University of Latvia. Riga, Latvia.
- Goldstone R. L. (2013). Discussant at the invited symposium "Interdisciplinarity and Knowledge Diffusion in STEM Education Research Programs at the National Science Foundation" (organizer: Gregg Solomon). American Education Research Association. San Francisco, CA.
- Goldstone, R. L., Day, S., & Byrge, L. (2013). Invited presentation at the structured poster presentation on "The Transfer Showcase: Exciting Contemporary Advances About an Educationally Central Phenomenon." American Education Research Association. San Francisco, CA.
- Goldstone, R. L. (2013). Learning superficial abstraction and deep appearances. Cognitive Science Colloquium, Northwestern University. Evanston, IL.
- Goldstone, R. L. (2013). Fostering transfer of scientific concepts via computer simulations. Cognitive area speaker series. University of Illinois. Urbana-Champaign, IL.
- Goldstone, R. L. (2013). Perceptual and Conceptual Learning. Invited lecture at the Latin American School for Education, Cognitive and Neural Sciences. Comandatuba, Brazil.
- Goldstone, R. L. (2013). Narrative concreteness and the in-class transfer of statistical concepts. Annual Meeting of the Society of Experimental Psychologists. Brown University, Providence, RI.
- Goldstone, R. L., & Landy, D. (2012). Gestalt principles of perceptual organization in mathematical reasoning. Annual Meeting of the Configural Processing Consortium. University of Minnesota.
- Goldstone, R. L. (2012). Psychonomics without experiments? Discovering psychological principles by mining large data sets. Psychonomics Society meeting. Minneapolis, Minnesota.
- Goldstone, R. L., & Robert, M. E. (2012). Bidirectional Influences Between Perceptual and Conceptual Learning. Invited symposium speaker for the "Models of Learning and Prediction" symposium (Organizers: Simon Farrell and Chris Kent), Experimental Psychology Society. University of Bristol, England.



- Goldstone, R. L. (2012). Grounded algebraic reasoning. Invited colloquium at the Faculty of Education, University of Cambridge. Cambridge, England.
- Goldstone, R. L. (2012). Imitation and innovation in 130 years of baby naming. Invited Colloquium at the Center for the Study of Language and Society. University of Bern, Switzerland.
- Goldstone, R. L. (2012). Changing perception to do the right thing. Invited symposium speaker at Workshop on Perceptual Learning and Perceptual Recognition (Organizer: Mohan Matthen). University of Toronto, Canada.
- Goldstone, R. L. (2012). Perceptual learning to support the acquisition of both externally stipulated and internally generated categories. Invited symposium speaker for a Festschrift for Geoffrey Hall, Experimental Psychology Society. University of Hull, England.
- Goldstone, R. L. (2012). Mathematical reasoning and perception. Invited presentation at Warwick Business School. University of Warwick, England.
- Goldstone, R. L. (2012). Grounding mathematical reasoning in perception and action. Invited presentation. Erasmus University, Rotterdam, Netherlands.
- Goldstone, R. L. (2012). Grounding mathematical reasoning in perception and action. Invited LIBC Colloquium. University of Leiden, Netherlands.
- Goldstone, R. L. (2012). Applications of a grounded approach to mathematical reasoning. Invited speaker at the colloquium on "Cognitive Psychology and Its Application to Technology." Eidgenössische Technische Hochschule (ETH). Zürich, Switzerland.
- Goldstone, R. L. (2012). Grounding formal reasoning. Invited CSCA Colloquium. University of Amsterdam, Netherlands.
- Goldstone, R. L. (2012). Learning and transfer of scientific principles. Invited speaker at the Workshop on the "Development of Learning and Executive Function." University of Leiden, Netherlands.
- Goldstone, R. L., & Carvalho, P. F. (2011). Stimulus similarity relations modulate benefits for blocking and interleaving during category learning. Psychonomics Society meeting. Saint Louis, Missouri.
- Goldstone, R. L. (2011). Being Part of Something Bigger Than Us: The Patterns that Human Groups Spontaneously Create. Invited Crick Lecture, University of Evansville. Evansville, Indiana.
- Goldstone, R. L. (2011). The group consequences of imitation and innovation. Invited colloquium at University of Cincinnati. Cincinnati, Ohio.
- Goldstone, R. L. (2011). Patterns of innovation and imitation in human collective behavior. Invited Cognitive Science Colloquium. Cornell University. Ithaca, New York.
- Goldstone, R. L. (2011). The group consequences of imitation and innovation. Invited colloquium at Carnegie Mellon University. Pittsburgh, Pennsylvania.

- Goldstone, R. L. (2011). Innovation and Imitation in social search. Invited colloquium at the Max Planck Institute for Human Development. Berlin, Germany.
- Goldstone, R. L. (2011). Moderator for Search Environments, Representation, and Environments group of the Strüngmann Forum on Cognitive Search. Frankfurt, Germany.
- Goldstone, R. L. (2011). Collective exploration and exploitation. Invited colloquium at the Booth Business School, University of Chicago. Chicago, Illinois.
- Goldstone R. L. (2011). The role of perception in learning algebra. Invited colloquium at the Department of Cognitive, Linguistic, and Psychological Science, Brown University. Providence, Rhode Island.
- Goldstone, R. L. (2011). Collective decisions to imitate and innovate in search. Invited colloquium at the Department of Cognitive, Linguistic, and Psychological Science, Brown University. Providence, Rhode Island.
- Goldstone, R. L. (2011). Mechanisms of perceptual learning. Invited speaker at the Radcliffe Institute for Advanced Study seminar on “Predictions, Goals and Stereotypes in Conscious Perception” (organizers: Susanna Siegel and Moshe Bar). Harvard University, Massachusetts.
- Goldstone, R. L. (2011). An algebraic sandbox for learning about mathematics. Invited speaker at the CRESST workshop on Games and Education. UCLA, Los Angeles, California.
- Goldstone, R. L. (2011). Mathematical Reasoning as a Literally Physical Symbol System. Invited colloquium at the Pittsburgh Science of Learning Center, University of Pittsburgh, Pennsylvania.
- Goldstone, R. L. (2010). Perceiving and conceiving in mathematics and science. Invited colloquium speaker at the Kaput Center for Research and Innovation in STEM Education. University of Massachusetts, Dartmouth.
- Goldstone, R. L. (2010). Learning, transfer, and modeling. IU PartnerShare meeting of Indiana state superintendents. Bloomington, Indiana.
- Goldstone, R. L., & Wisdom, T. (2010). Strategies for imitation and innovation in networked groups. Psychonomics Society meeting. Saint Louis, Missouri.
- Goldstone, R. L. (2010). The education of perception. Ninth Annual Summer Interdisciplinary Conference. Bend, Oregon.
- Goldstone, R. L. (2010). The Group Consequences of Individual Strategies for Imitation and Innovation. Keynote speaker at the 20th Annual International Conference of the Society for Chaos Theory in Psychology & Life Sciences, Texas State University, San Marcos, Texas.
- Goldstone, R. L. (2010). Five Lectures on Learning. Summer School Lecturer: Babes-Bolyai University. Budapest, Romania.
- Goldstone, R. L. (2010). Sound symbolism: The reascendency of language. Discussant at the Emory Sound Symbolism Workshop. Emory University, Atlanta, GA.

- Goldstone, R. L. (2010). Transferable visualizations in science education. Symposium on visualization in education. REESE grantees meeting. Arlington, VA.
- Goldstone, R. L. (2010). A well-grounded education: The role of perception in science and mathematics. Colloquium in Michigan State University Cognitive Science Distinguished Speaker Series. East Lansing, MI.
- Goldstone, R. L. (2009). Strategies for imitation and innovation in a social network. Invited Colloquium at the Workshop for Political Theory. Bloomington, IN.
- Goldstone, R. L. (2009). Grounded yet transportable understandings of scientific systems. Presentation at the National Academy Of Sciences, Board of Science Education panel on "Committee on Learning Science: Computer Games, Simulations, and Education." Washington, DC.
- 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. Jagiellonian 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 40th 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.