

CURRICULUM VITAE
MATT JONES
(13 February 2017)

Contact

Address Department of Psychology and Neuroscience
University of Colorado
Muenzinger D244
345 UCB
Boulder, CO 80309-0345
(303) 735-1351
(303) 492-2967 (fax)

e-mail mcj@colorado.edu

Website <http://matt.colorado.edu>

Positions Held

7/15 – Associate Professor, Department of Psychology, University of Colorado
1/10 – Faculty Fellow, Institute of Cognitive Science, University of Colorado
1/08 – 6/15 Assistant Professor, Department of Psychology, University of Colorado
2/04 – 12/07 NIH Post-doctoral fellow, Department of Psychology, University of Texas at Austin
9/05 – 3/07 Senior Scientist, Klein Associates Division, Applied Research Associates
8/03 – 12/03 Lecturer, Department of Psychology, University of Texas at Austin

Education

2003 Ph.D. in Cognitive Psychology, University of Michigan, Ann Arbor
2002 Graduate Certificate, Complex Systems, University of Michigan, Ann Arbor
2001 M.A. in Statistics, University of Michigan, Ann Arbor
1998 B.S., with Highest Honors, University of California, Santa Barbara, with emphases in Mathematics and Psychology [all Mathematics coursework completed at graduate level]

RESEARCH

Grants, Fellowships, and Awards (Post-PhD)

2014-18 *Parametric Assumptions and Model Falsifiability*. Air Force Office of Scientific Research. Role: PI. \$627,692 total costs.

- 2014-17 *Models of information search: A theoretical and empirical synthesis.* Deutsche Forschungsgemeinschaft (German Research Foundation). Role: Consultant (Jonathan Nelson PI). My component: annual travel to meet with collaborators in Berlin.
- 2014 Summer research grant, Institute of Cognitive Science, University of Colorado. Awarded to my graduate student James Foster for a project with me and Albert Kim. \$5000.
- 2013 *Workshop on Computational Cognition.* NSF. Role: PI. \$42,423 total costs.
- 2013-18 *Estimating the frequencies and population specificities of risk alleles.* NIMH R01. Role: Co-investigator (Matthew Keller PI). My component: \$181,620.
- 2013-17 *Similarity and Features in Categorization: A Unified Machine Learning Framework.* Air Force Office of Scientific Research. Role: Consultant (Jun Zhang PI; proposal was written with me as Co-PI, but AFOSR limits individuals to be PI/Co-PI on one grant at a time). My component: \$48,000.
- 2012-16 *Experimental and Theoretical Analysis of Cognitive Processes Underlying Clicker Use in STEM Education.* NSF REESE. Role: Co-PI (Alice Healy PI). \$1,274,164 total costs.
- 2010 Advisor and co-author for *Best Student Poster, Annual Summer Interdisciplinary Conference*, awarded to Shaw Ketels. \$250.
- 2010-13 *Learning Effective Representations for Dynamic Tasks.* Air Force Office of Scientific Research. Role: PI. \$390,000 total costs.
- 2009-10 *iCALM: A Biofeedback Mechanism that will Revolutionize the Lives of Children with Sensory Processing Disorders.* Undergraduate Research Opportunities Program, University of Colorado. Role: Faculty sponsor for Holland Adinoff and M. Alex Bidwell. \$2400.
- 2008 *Neural correlates of sequential dependencies: Generalization on the time scale of seconds.* NSF Science of Learning Center catalyst grant from Institute of Cognitive Science, University of Colorado. Role: PI. \$6,500.
- 2005-06 *Robot Decision Learning.* Internal research and development grant, Applied Research Associates. Role: PI. \$9,815.
- 2004-07 National Research Service Award (NRSA F32) from National Institutes of Health to train with W. Todd Maddox and Bradley C. Love at The University of Texas at Austin. (Received highest rating in the Cognition and Perception Study Section – priority score 108.)
- 2003 Offered NRSA F32 from NIH to train with John Kruschke at Indiana University. (Declined for family reasons.)

Peer-Reviewed Journal Publications

^P = Post-doctoral student; ^G = Graduate student; ^U = Undergraduate or post-bacc student

*Senior author: Papers written by a student under my supervision (not all use “last author” convention)

1. Healy, A. F., Jones, M., ^GLalchandani, L., & ^GTack, L. A. (in press). Timing of quizzes during learning: Effects on motivation and retention. *Journal of Experimental Psychology: Applied*.
2. ^GBjelland, D. W., ^PLingala, U., Patel, P. S., Jones, M., & Keller, M. C. (in press). A fast and accurate method for detection of IBD shared haplotypes in genome-wide SNP data. *European Journal of Human Genetics*.
3. Dzhafarov, E., Kujala, J., ^GCervantes, V., ^GZhang, R., & Jones, M. (2016). On contextuality in behavioral data. *Philosophical Transactions of the Royal Society A*, 374, 20150234.
4. Jones, M., & Dzhafarov, E. N. (2014). Analyzability, ad hoc restrictions, and excessive flexibility of evidence-accumulation models: Reply to two critical comments. *Psychological Review*, 121, 689-695.
5. ^GCorral, D., & *Jones, M. (2014). The effects of higher-order structure on relational learning. *Cognition*, 132, 280-300.
6. ^PJepma, M., Jones, M., & Wager, T. (2014). The dynamics of pain: Evidence for simultaneous peripheral habituation and central sensitization in thermal pain. *Journal of Pain*, 15, 734-746.
7. Jones, M., & Dzhafarov, E. N. (2014). Unfalsifiability and mutual translatability of major modeling schemes for choice reaction time. *Psychological Review*, 121, 1-32.
8. ^GLohse, K. R., *Jones, M., Healy, A. F., & Sherwood, D. E. (2014). Attention as a control parameter in the regulation of human movement. *Journal of Experimental Psychology: General*, 143, 930-948.
9. Jones, M., Curran, T., Mozer, M. C., & ^GWilder, M. H. (2013). Sequential effects in response time reveal learning mechanisms and event representations. *Psychological Review*, 120, 628-666.
10. Jones, M. & Goldstone, R. L. (2013). The structure of integral dimensions: Contrasting topological and Cartesian accounts. *Journal of Experimental Psychology: Human Perception and Performance*, 39, 111-132.
11. ^GWilder, M. H., Jones, M., Ahmed, A., Curran, T., & Mozer, M. C. (2013). The persistent impact of incidental experience. *Psychonomic Bulletin & Review*, 20, 1221-1231.
12. Jones, M., & Love, B.C. (2011). Bayesian Fundamentalism or Enlightenment? On the explanatory status and theoretical contributions of Bayesian models of cognition. *Behavioral and Brain Sciences*, 34, 169-188.

- 12b. Jones, M., & Love, B.C. (2011). Pinning down the theoretical commitments of Bayesian cognitive models. *Behavioral and Brain Sciences*, 34, 215-231. (Response to commentaries on previous entry)
13. ^GSakamoto, Y., Jones, M., & Love, B.C. (2008). Putting the psychology back into psychological models: Mechanistic vs. rational approaches. *Memory & Cognition*, 36, 1057-1065.
14. Jones, M., & Love, B. C. (2007). Beyond common features: The role of roles in determining similarity. *Cognitive Psychology*, 55, 196-231.
15. Jones, M., Love, B. C., & Maddox, W. T. (2006). Recency effects as a window to generalization: Separating decisional and perceptual sequential effects in category learning. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, 32, 316-332.
16. Jones, M. & Zhang, J. (2004). Rationality and bounded information in repeated games, with application to the iterated Prisoner's Dilemma. *Journal of Mathematical Psychology*, 48, 334-354.
17. Jones, M. & Sieck, W. R. (2003). Learning myopia: An adaptive recency effect in category learning. *Journal of Experimental Psychology: Learning, Memory, & Cognition*, 29, 626-640.
18. Jones, M., Zhang, J., & ^GSimpson, G. (2003). Aggregation of utility and social choice: A topological framework. *Journal of Mathematical Psychology*, 47, 545-556.
19. Jones, M. & Polk, T. A. (2002). An attractor network model of serial recall. *Cognitive Systems Research*, 3, 45-55.
20. Jones, M. & Scharlemann, M. (2001). How a strongly irreducible Heegaard splitting intersects a handlebody. *Topology and its Applications* 110, 289-301.

Peer-Reviewed Conference Publications

1. ^GFoster, J. M., & *Jones, M. (2013). Analogical reinforcement learning. *Proceedings of the 35th Annual Meeting of the Cognitive Science Society*, 448-453.
2. ^GCorral, D., & *Jones, M. (2012). Learning of relational categories as a function of higher-order structure. *Proceedings of the 34th Annual Meeting of the Cognitive Science Society*, 1434-1439.
3. ^GFoster, J. M., ^GCañas, F., & *Jones, M. (2012). Learning conceptual hierarchies by iterated relational consolidation. *Proceedings of the 34th Annual Meeting of the Cognitive Science Society*, 324-329.
4. Mozer, M. C., Pashler, H., ^GWilder, M. H., ^GLindsey, R., Jones, M., & Jones, M. N. (2010). Decontaminating human judgments by removing sequential dependencies. *Advances in Neural Information Processing Systems* 23, 1705-1713
5. ^GCañas, F., & *Jones, M. (2010). Attention and reinforcement learning: Constructing representations from indirect feedback. *Proceedings of the 32nd Annual Meeting of the Cognitive Science Society*, 1264-1269.

6. Jones, M., & ^GCañas, F. (2010). Integrating reinforcement learning with models of representation learning. *Proceedings of the 32nd Annual Meeting of the Cognitive Science Society*, 1258-1263.
7. Jones, M. (2009). A reinforcement-and-generalization model of sequential effects in identification learning. *Proceedings of the 31st Annual Meeting of the Cognitive Science Society*, 1180-1185.
8. ^GWilder, M. H., Jones, M., & Mozer, M. C. (2009). Sequential effects reflect parallel learning of multiple environmental regularities. *Advances in Neural Information Processing Systems 22*, 2053-2061.
9. Love, B. C., Jones, M., ^GTomlinson, M. T., & ^GHowe, M. (2009). Learning to predict information needs: Context-aware display as a cognitive aid and an assessment tool. *Proceedings of The ACM SIGCHI Conference on Human Factors in Computing Systems (CHI 2009)*, 1351-1360.
10. Jones, M., Mozer, M., & Kinoshita, S. (2008). Optimal response initiation: Why recent experience matters. *Advances in Neural Information Processing Systems 21*, 788-795.
11. Love, B. C., Jones, M., ^GTomlinson, M. T., & ^GHowe, M. (2008). Predicting information needs: Adaptive display in dynamic environments. *Proceedings of the 30th Annual Meeting of the Cognitive Science Society*, 875-890.
12. Mueller, S. T., Jones, M., Minnery, B. S., & Hiland, J. M. H. (2007). The BICA Cognitive Decathlon: A test suite for biologically-inspired cognitive agents. *Behavior Representation in Modeling and Simulation (BRIMS) Conference*, 418-429.
13. Jones, M., Maddox, W. T., & Love, B. C. (2006). The role of similarity in generalization. *Proceedings of the 28th Annual Meeting of the Cognitive Science Society*, 405-410.
14. Love, B. C., & Jones, M. (2006). The emergence of multiple learning systems. *Proceedings of the 28th Annual Meeting of the Cognitive Science Society*, 507-512.
15. ^GSakamoto, Y., Love, B. C., & Jones, M. (2006). Tracking variability in learning: contrasting statistical and similarity-based accounts. *Proceedings of the 28th Annual Meeting of the Cognitive Science Society*, 2093-2098.
16. Jones, M., Maddox, W. T., & Love, B. C. (2005). Stimulus generalization in category learning. *Proceedings of the 27th Annual Meeting of the Cognitive Science Society*, 1066-1071.
17. Jones, M. & Polk, T. A. (2002). Recurrent networks as models of short term memory. *Proceedings of the 6th Joint Conference on Information Sciences*, 557-560.
18. Jones, M. & Polk, T. A. (2001). An attractor network model of serial recall. *Proceedings of the 4th International Conference on Cognitive Modeling*, 121-126.

Other Publications

1. Jones, M., Shiffrin, R. M., Tenenbaum, J. B., Yuille, A. L., Zhang, J., Mozer, M. C., Love, B. C., Zhu, X., Griffiths, T. L., Kemp, C., LeCun, Y., Lu, H., McAllester, D. A., Salakhutdinov, R., Schölkopf, B., Singh, S., Thomas, R. D., & Yu, A. J. (2013). *Report from the NSF Workshop on Integrating Approaches to Computational Cognition*.
2. Jones, M., Bourne, L. E., Jr., & Healy, A. F. (2012). A compact mathematical model for predicting the effectiveness of training. In A. F. Healy & L. E. Bourne, Jr. (Eds.), *Training cognition: Optimizing efficiency, durability, and generalizability* (pp. 247-266). New York: Psychology Press.
3. Love, B. C., & Jones, M. (2012). Bayesian learning. In N. Seel (Ed.), *Encyclopedia of the Sciences of Learning* (pp. 415-417). New York: Springer.
4. Jones, M. & Zhang, J. (2003). Which is to blame: Instrumental rationality, or common knowledge? *Behavioral and Brain Sciences*, 26, 166-167. (Invited commentary)

Manuscripts Under Review or Revision

1. ^GCorral, D., & *Jones, M. *Learning relational concepts through unitary versus compositional representations*. Under review.
2. ^GFoster, J. M., & *Jones, M. *Learning conceptual hierarchies by iterated relational consolidation*. Under revision.
3. Jones, M. *Flexibility of evidence-accumulation models under practical constraints*. Under revision.
4. Jones, M. *The diffusion model of speeded choice, from a rational perspective*. To appear in the New Handbook of Mathematical Psychology.
5. Nelson, J. D., Meder, B., & Jones, M. *Optimal experimental design, heuristics, and sequential search*. Under revision.
6. ^GParpart, P., Jones, M., & Love, B. C. *Heuristics as Bayesian inference*. Under revision.
7. ^PPauli, W. M., & *Jones, M. *Changepoint detection versus reinforcement learning: Separable neural substrates approximate different forms of Bayesian inference*. Under revision.

Work in Progress

1. *Duality of similarity- and feature-based learning via kernel methods, with application to selective attention*. Working manuscript, with Jun Zhang. My role: lead author.
2. *Sequential learning effects as a theory of between-trial variability in the diffusion model*. Complete modeling results and partially written manuscript. Sole author.

3. *Between- and within-category comparison in category learning*. Results from 4 experiments and nearly complete manuscript. Collaboration with Daniel Corral (my graduate student) and Kenneth Kurtz (Binghamton University). My role: senior author.

Invited Talks and Symposia

1. Modeling sequential effects via incremental learning in diffusion models. *Winer Memorial Lecture, Purdue University*, Apr 2016.
2. Enhancing Education through Cognitive Psychology. *Symposium, 56th Annual Meeting of the Psychonomic Society*, Nov 2015.
3. Generative and Discriminative Models in Cognitive Science. *Symposium, 37th Annual Meeting of the Cognitive Science Society*, Jul 2015.
4. Discussant. *Consumer Financial Decision Making Conference*, Jun 2015.
5. Learning and Representation. *University of Sydney*, Feb 2015.
6. Modeling Sequential Effects via Incremental Learning in Diffusion Models. *Workshop on Sequential Sampling Models for Cognitive and Perceptual Decision Making, 36th Annual Meeting of the Cognitive Science Society*, Jul 2014.
7. Sequential Effects in Response Time Reveal Learning Mechanisms and Event Representations. *University College London*, Jun 2013.
8. Classification and Generalization. *NSF Workshop on Integrating Approaches to Computational Cognition*, May 2013.
9. Separable Neural Substrates for Different Forms of Bayesian Inference. *Max Planck Institute for Human Development*, Jun 2012.
10. Debate on Bayesian Models of Cognition. *Northwestern University*. Feb 2012.
11. Constructing New Representations through Reinforcement Learning. *Johns Hopkins University*, Jan 2012.
12. Grow your own representations: Computational constructivism. *Symposium, 33rd Annual Meeting of the Cognitive Science Society*, Jul 2011.
13. Constructing New Representations through Reinforcement Learning. *Purdue University*, Apr 2011.
14. Sequential Effects in Learning: Implications for Attention, Knowledge Representation, and Decision Processes. *Colorado State University*, Sep 2008.
- 15-22. Job talks (8) at Stanford University, SUNY Buffalo, University of Alberta, University of California Irvine, University of California Los Angeles, University of Colorado, University of Warwick (declined due to time pressure), University of Western Ontario, Dec 2006 – Feb 2007.
23. Sequential Effects in Categorization: Implications for Category Representation, Attention, and Similarity-based Generalization. *Indiana University*, Sep 2006.

24. Designing the Cognitive Decathlon: Integrating Experimental and Naturalistic Cognitive Research. *DARPA/NIST Workshop on Cognitive Evaluation*, Jan 2006.

Conference Presentations

(Presented by first author unless noted otherwise)

1. ^GCorral, D., & Jones, M. (2016 Nov). Representational primacy: Effects of early classification training on rule-contingent learning. *Poster presented at the 57th Annual Meeting of the Psychonomic Society*, Boston, MA.
2. Nelson, J. D., Meder, B., & Jones, M. (2016 Sep). On the fine line between “heuristic” and “optimal” sequential question strategies. *Talk presented at the 50th Conference of the German Society for Psychology*, Leipzig, Germany.
3. ^GTack, L. A., Healy, A. F., Jones, M., & Curran, T. (2016 Aug). Isolating the effects of individual accuracy, group accuracy, and task feedback on learning. *Poster presented at the “Memory dynamics and the optimization of instruction revisited” symposium, Annual Convention of the American Psychological Association*, Denver, CO.
4. ^GYoung, A. P., Healy, A. F., Jones, M., & Bourne, L. E., Jr. (2016 Aug). On the relative benefits of spacing and massing practice for learning cognitive and motor associations. *Poster presented at the Annual Convention of the American Psychological Association*, Denver, CO.
5. Jones, M. (2016 Jul). Logical incoherence of game-theoretic rationality. *Talk presented at the 15th Annual Summer Interdisciplinary Conference*, Selva, Italy.
6. ^GYoung, A. P., Healy, A. F., Jones, M., & Curran, T. (2016 Apr). Comparative experience is not enough: Challenges for eliciting awareness of the testing effect. *Poster presented at the Annual Convention of the Rocky Mountain Psychological Association*, Denver, CO.
7. Jones, M. (2016 Feb). Flexibility of evidence-accumulation models under practical constraints. *Talk presented at the Australian Mathematical Psychology Conference*, Hobart, Australia.
8. Meder, B., Nelson, J. D., & Jones, M. (2016 Feb). Entropy, heuristics, and human behavior in sequential search. *Talk presented at Workshop on entropy, Ludwigsburg University of Education*, Ludwigsburg, Germany.
9. ^GCorral, D., Healy, A. F., & Jones, M. (2015 Nov). The effects of training the relationships between academic concepts. *Poster presented at the 56th Annual Meeting of the Psychonomic Society*, Chicago, IL.
10. ^GFoster, J., Jones, M., & Kim, A. (2015 Nov). Metaphor’s new career: A shift from structured to attributive representations. *Poster presented at the 56th Annual Meeting of the Psychonomic Society*, Chicago, IL.

11. ^PKetels, S. L., Healy, A. F., Jones, M., Sasnett-Martichuski, D. K., ^GLalchandani, L., & ^UGuhl, M. J., (2015 Nov). How should clickers be used in classrooms? It depends on which students you most want to help. *Poster presented at the 56th Annual Meeting of the Psychonomic Society*, Chicago, IL.
12. ^GYoung, A. P., Healy, A. F., Jones, M., & Curran, T. (2015 Nov). Discovery and adoption of the testing effect: Challenges of eliciting self-testing behavior in students. *Poster presented at the 56th Annual Meeting of the Psychonomic Society*, Chicago, IL.
13. ^UPareiman, J. M., ^GFoster, J. M., ^PFairley, K., ^PHakimi, S., Jones, M., & Carter, R. M. (2015 Sep). Social balloon analogue risk task: competitive and cooperative rule effects on social decision making. *Poster presented at the Society for Neuroeconomics Annual Meeting*, Miami, FL.
14. Jones, M., & Zhang, J. (2015 Jul). Duality of similarity- and feature-based learning via kernel methods, with application to selective attention. *Talk presented at 47th Annual Meeting of the Society for Mathematical Psychology*, Newport Beach, CA.
15. Jones, M., & Zhang, J. (2015 Jul). Duality of similarity- and feature-based learning via kernel methods. *Talk presented at the 14th Annual Summer Interdisciplinary Conference*, Mammoth Lakes, CA.
16. ^PKetels, S. L., Healy, A. F., Jones, M., Sasnett-Martichuski, D. K., ^GLalchandani, L., & ^UGuhl, M. J. (2015 Jul). Expertise reversal effects from variation in the use of classroom response systems. *Talk presented at the 14th Annual Summer Interdisciplinary Conference*, Mammoth Lakes, CA.
17. ^PSawaya, S., Jones, M., Stallings, M., Keller, M. (2015 Apr). Missing heritability can be caused by hyper-mutation. *Poster presented at The Epigenomics conference*, Keystone CO.
18. Jones, M., & Zhang, J. (2015 Feb). Duality of similarity- and feature-based learning via kernel methods, with application to selective attention. *Talk presented at the 2015 Australian Mathematical Psychology Conference*, Shoal Bay, NSW, Australia.
19. ^PKetels, S. L., Healy, A. F., Jones, M., ^GLalchandani, L., & Sasnett-Martichuski, D. K. (2015 Feb). Testing two pedagogical prescriptions in the use of classroom response systems. *Talk presented at the Thirty-Ninth Annual Interdisciplinary Conference (AIC)*, Jackson, WY.
20. ^GCorral, D., ^URozbruch, E. V., Healy, A. F., & *Jones, M. (2014 Nov). Predicting memory retention from an initial quiz. *Poster presented at the 55th Annual Meeting of the Psychonomic Society*, Long Beach, CA.
21. ^GFoster, J. M., & *Jones, M. (2014 Nov). Analogical reinforcement learning with two-stage memory retrieval. *Poster presented at the 55th Annual Meeting of the Psychonomic Society*, Long Beach, CA.

22. Healy, A. F., Jones, M., ^ULalchandani, L., & ^GAnderson, L. (2014 Nov). A cognitive antidote to boredom: motivational effects of interspersing quizzes during fact learning. *Talk presented at the 55th Annual Meeting of the Psychonomic Society*, Long Beach, CA.
23. ^GParpart, P., Jones, M., & Love, B. C. (2014 Sep). Bayesian inference models include heuristics as a special case. *Talk presented at Decision Making Bristol (DMB-2014)*, Bristol, UK.
24. Jones, M. (2014 Jul). A theory of between-trial variability in diffusion models. *Talk presented at the 47th Annual Meeting of the Society for Mathematical Psychology*, Quebec City, CA.
25. ^GParpart, P., Jones, M., & Love, B. C. (2014 Jul). Heuristics as special cases of Bayesian inference. *Talk presented at the 47th Annual Meeting of the Society for Mathematical Psychology*, Quebec City, CA.
26. Jones, M. (2014 Jun). A theory of between-trial variability in diffusion models. *Talk presented at the 13th Annual Summer Interdisciplinary Conference (ASIC)*, Moab, UT.
27. ^PKetels, S. L., Healy, A. F., Jones, M., ^ULalchandani, L., & Martichuski, D. K. (2014 Jun). Testing two pedagogical prescriptions in the use of classroom response systems. *Talk presented at the 13th Annual Summer Interdisciplinary Conference (ASIC)*, Moab, UT.
28. ^URozbruch, E. V., Healy, A. F., Jones, M., & ^GAnderson, L. S. (2014 May). Relative benefits of immediate vs. delayed testing in the classroom. *Poster presented at Stanford Undergraduate Research Conference*, Palo Alto, CA.
29. ^URozbruch, E. V., Healy, A. F., Jones, M., & ^GCorral, D. (2014 Apr). Optimizing clicker use: Effects of response type in a laboratory model of the classroom. *Poster presented at Undergraduate Research Day, Department of Psychology and Neuroscience, University of Colorado*, Boulder, CO.
30. ^GAnderson, L. S., Healy, A. F., Jones, M., & ^URozbruch, E. V. (2013 Nov). Relative benefits of immediate vs. delayed testing for predicting knowledge retention. *Poster presented at the 54th Annual Meeting of the Psychonomic Society*, Toronto, ON.
31. ^GCorral, D., Kurtz, K. J., & *Jones, M. (2013 Nov). Learning relational and feature-based categories from matched or contrasting comparisons. *Poster presented at the 54th Annual Meeting of the Psychonomic Society*, Toronto, ON.
32. ^GFoster, J. M., & *Jones, M. (2013 Nov). Analogical reinforcement learning. *Poster presented at the 54th Annual Meeting of the Psychonomic Society*, Toronto, ON.
33. ^PKetels, S. L., *Jones, M., Healy, A. F., & Martichuski, D. K. (2013 Nov). When should clicker questions be presented during a lecture? Effects on exam performance. *Poster presented at the 54th Annual Meeting of the Psychonomic Society*, Toronto, ON.

34. ^GParpart, P., Jones, M., & Love, B. C. (2013 Aug). Reconciling irrational and adaptive views of heuristics. *Talk presented at 24th Subjective Probability, Utility, and Decision Making Conference (SPUDM24)*, Barcelona, Spain.
35. ^GFoster, J. M., & *Jones, M. (2013 Aug). Are some schemas stronger than others? The reinforcement of relational concepts. *Poster presented at the Third International Conference on Analogy*, Dijon, France.
36. ^GFoster, J. M., & *Jones, M. (2013 Jul). Analogical reinforcement learning. *Talk presented at the 35th Annual Meeting of the Cognitive Science Society*, Berlin, Germany.
37. ^GFoster, J. M., & *Jones, M. (2013 Jul). Analogical reinforcement learning. *Talk presented at the 12th Annual Summer Interdisciplinary Conference (ASIC)*, Cortina, Italy.
38. Jones, M., Curran, T., Mozer, M. C., & ^GWilder, M. H. (2013 Jul). Sequential effects in response time reveal learning mechanisms and event representations. *Talk presented at the 12th Annual Summer Interdisciplinary Conference (ASIC)*, Cortina, Italy.
39. ^GAnderson, L. S., *Jones, M. (presenter), Healy, A. F., & Bourne, L. E. (2013 Jun). Representation and processing of response distribution feedback in group learning. *Talk presented at the Conference of the Society for Applied Research in Memory and Cognition (SARMAC X)*, Rotterdam, Netherlands.
40. ^GAnderson, L. S., Healy, A. F., Jones, M., & Bourne, L. E. (2012 Nov). The impact of providing feedback on response distributions in group learning. *Poster presented at the 53rd Annual Meeting of the Psychonomic Society*, Minneapolis, MN.
41. ^GCorral, D., & *Jones, M. (2012 Nov). Acquiring higher-order relations through schema elaboration. *Poster presented at the 53rd Annual Meeting of the Psychonomic Society*, Minneapolis, MN.
42. Jones, M. (2012 Nov). A form of strong selective attention with integral dimensions. *Talk presented at the 53rd Annual Meeting of the Psychonomic Society*, Minneapolis, MN.
43. ^GCorral, D., & *Jones, M. (2012 Aug). Learning of relational categories as a function of higher-order structure. *Poster presented at the 34th Annual Meeting of the Cognitive Science Society*, Sapporo, Japan.
44. ^GFoster, J. M., ^GCañas, F., & *Jones, M. (2012 Aug). Learning conceptual hierarchies by iterated relational consolidation. *Talk presented at the 34th Annual Meeting of the Cognitive Science Society*, Sapporo, Japan.
45. Jones, M., & Dzhafarov, E. N. (2012 Jul). On the (un)falsifiability of models of choice RT. *Talk presented at the 45th Annual Meeting of the Society for Mathematical Psychology*, Columbus, OH.

46. Jones, M., & Dzhafarov, E. N. (2012 Jun). The role of variability in models of choice RT. *Talk presented at 11th Annual Summer Interdisciplinary Conference (ASIC)*, Cala Gonone, Italy.
47. ^UMartis, S., *Jones, M., & Healy, A. F. (2012 Apr). The influence of prior knowledge on memory. *Poster presented at Undergraduate Research Day, Department of Psychology and Neuroscience, University of Colorado, Boulder, CO.*
48. ^PPauli, W. M., & *Jones, M. (2012 Jan). Changepoint detection versus reinforcement learning. *Talk presented at Annual Interdisciplinary Conference (AIC)*, Jackson Hole, WY.
49. ^GFoster, J. M., ^GCañas, F., & *Jones, M. (2011 Nov). Constructing representations through iterated relational learning. *Poster presented at the 52nd Annual Meeting of the Psychonomic Society*, Seattle, WA.
50. ^PPauli, W. M., & *Jones, M. (2011 Nov). Changepoint detection versus reinforcement learning: Separable neural substrates for different forms of Bayesian inference. *Poster presented at the 52nd Annual Meeting of the Psychonomic Society*, Seattle, WA.
51. Jones, M., ^GLohse, K., Healy, A., Sherwood, D. (2011 Jun). The role of attention in motor control. *Talk presented at 10th Annual Summer Interdisciplinary Conference*, Caldes de Boi, Spain.
52. ^GLohse, K. R., *Jones, M. C., Healy, A. F. & Sherwood, D. E. (2011 Jun). Attention as a control parameter in the regulation of human movement. *Talk presented at the North American Society for the Psychology of Sport and Physical Activity*, Burlington, VT.
53. ^GLohse, K. R., *Jones, M. C., Healy, A. F. & Sherwood, D. E. (2011 Apr). Attention as a control parameter in the regulation of human movement. *Poster presented at the Regional Meeting of the American Society for Biomechanics*, Estes Park, CO.
54. Jones, M., Curran, T., Mozer, M. C. (presenter), & ^GWilder, M. H. (2011 Feb). Sequential dependencies and the representation of temporal structure: Toward primitive mechanisms of learning, memory, and generalization. *Poster presented at Computational and Systems Neuroscience (COSYNE)*, Salt Lake City, UT.
55. Mozer, M. C., Pashler, H., ^GWilder, M. H., ^GLindsey, R., Jones, M., & Jones, M. N. (2010 Dec). Decontaminating human judgments by removing sequential dependencies. *Spotlight presentation at Advances in Neural Information Processing Systems (NIPS)*, Vancouver, BC.
56. ^GCañas, F., & *Jones, M. (2010 Aug). Attention and reinforcement learning: Constructing representations from indirect feedback. *Talk presented at the 32nd Annual Meeting of the Cognitive Science Society*, Portland, OR.
57. Jones, M., & ^GCañas, F. (2010 Aug). Integrating reinforcement learning with models of representation learning. *Talk presented at the 32nd Annual Meeting of the Cognitive Science Society*, Portland, OR.

58. Jones, M., Worthy, D. A., ^GKetels, S. L., & ^GOtto, A. R. (2010 Aug). The phenomenology of multiple learning systems. *Talk presented at 9th Annual Summer Interdisciplinary Conference (ASIC)*, Bend, OR.
59. ^GKetels, S. L., & *Jones, M. (2010 Aug). Language is not always helpful: Labels do not facilitate the learning of information-integration category structures. *Poster presented at 9th Annual Summer Interdisciplinary Conference (ASIC)*, Bend, OR.
60. Merkle, E., Jones, M., & Sieck, W. R. (2010 Aug). A multivariate hierarchical Bayesian model of confidence and accuracy in probabilistic category learning. *Talk given at the 43rd Annual Meeting of the Society for Mathematical Psychology*, Portland, OR.
61. ^GWilder, M. H., Jones, M., & Mozer, M. C. (2009 Dec). Sequential effects reflect parallel learning of multiple environmental regularities. *Poster presented at Advances in Neural Information Processing Systems (NIPS)*, Vancouver, ON.
62. ^GCañas, F., & *Jones, M. (2009 Nov). Applying principles of attention learning from categorization to reinforcement learning. *Poster presented at the 50th Annual Meeting of the Psychonomic Society*, Boston, MA.
63. Jones, M., Curran, T., Mozer, M.C., & ^GWilder, M.H. (2009 Nov). Sequential dependencies and the representation of temporal structure. *Talk presented at the 50th Annual Meeting of the Psychonomic Society*, Boston, MA.
64. Jones, M., & Mozer, M. (2009 Aug). Optimal response initiation in diffusion decision models. *Talk presented at the 42nd Annual Meeting of the Society for Mathematical Psychology*, Amsterdam, Netherlands.
65. Jones, M. (2009 Jul). A reinforcement-and-generalization model of sequential effects in identification learning. *Talk presented at the 31st Annual Meeting of the Cognitive Science Society*, Amsterdam, Netherlands.
66. Jones, M. & ^GCañas, F. (2009 Jul). Selective attention in reinforcement learning. *Talk presented at 8th Annual Summer Interdisciplinary Conference (ASIC)*, Val d'Aosta, Italy.
67. Jones, M., Mozer, M., & Kinoshita, S. (2008 Dec). Optimal response initiation: Why recent experience matters. *Spotlight presentation at Advances in Neural Information Processing Systems (NIPS)*, Vancouver, BC.
68. Jones, M. (2008 Nov). Generalization and sequential effects in identification learning. *Talk presented at the 49th Annual Meeting of the Psychonomic Society*, Chicago, IL.
69. Love, B. C., Jones, M., ^GTomlinson, M. T., & ^GHowe, M. (2008 Jul). Predicting information needs: Adaptive display in dynamic environments. *Talk presented at the 30th Annual Meeting of the Cognitive Science Society*, Washington, DC.
70. Jones, M. (2007 Nov). Identifying category representations through sequential effects in learning. *Talk presented at the 48th Annual Meeting of the Psychonomic Society*, Long Beach, CA.

71. Love, B. C., Jones, M., & ^GSakamoto, Y. (2007 Nov). Putting the psychology back into psychological models: Mechanistic vs. rational approaches. *Talk presented at the 48th Annual Meeting of the Psychonomic Society*, Long Beach, CA.
72. Jones, M., Maddox, W. T., & Love, B. C. (2006 Nov). Stimulus generalization in category learning: Implications for selective attention, similarity, and category representation. *Poster presented at the 47th Annual Meeting of the Psychonomic Society*, Houston, TX.
73. Jones, M., & Goldstone, R. L. (2006 Jul). The structure of integral dimensions. *Poster presented at the 28th Annual Meeting of the Cognitive Science Society*, Vancouver, BC.
74. Jones, M., Maddox, W. T., & Love, B. C. (2006 Jul). The role of similarity in generalization. *Paper presented at the 28th Annual Meeting of the Cognitive Science Society*, Vancouver, BC.
75. Love, B. C., & Jones, M. (2006 Jul). The emergence of multiple learning systems. *Paper presented at the 28th Annual Meeting of the Cognitive Science Society*, Vancouver, BC.
76. ^GSakamoto, Y., Love, B. C., & Jones, M. (2006 Jul). Tracking variability in learning: contrasting statistical and similarity-based accounts. *Poster presented at the 28th Annual Meeting of the Cognitive Science Society*, Vancouver, BC.
77. Jones, M., Love, B. C., & Maddox, W. T. (2005 Aug). Stimulus generalization, perceptual representation, and selective attention in category learning. *Paper presented at the 38th Annual Meeting of the Society for Mathematical Psychology*, Memphis, TN.
78. Jones, M., Maddox, W. T., & Love, B. C. (2005 Jul). Stimulus generalization in category learning. *Talk presented at the 4th Annual Summer Interdisciplinary Conference (ASIC)*, Briancon, France.
79. Jones, M., Maddox, W. T., & Love, B. C. (2005 Jul). Stimulus generalization in category learning. *Talk presented at the 27th Annual Meeting of the Cognitive Science Society*, Stresa, Italy.
80. Jones, M. & Love, B. C. (2004 Nov). Beyond common features: The role of roles in determining similarity. *Poster presented at the 45th Annual Meeting of the Psychonomic Society*, Minneapolis, MN.
81. Jones, M. & Love, B. C. (2004 Aug). Beyond common features: The role of roles in determining similarity. *Poster presented at the 26th Annual Meeting of the Cognitive Science Society*, Chicago, IL.
82. Jones, M., & Zhang, J. (2004 Jul). Computational complexity in repeated games: Implications for bounded rationality and the emergence of symbolic representations. *Talk presented at the 37th Annual Meeting of the Society for Mathematical Psychology*, Ann Arbor, MI.

83. Jones, M. & Sieck, W. (2002 Aug). Recency effects in category learning are dynamic and adaptive. *Poster presented at the 24th Annual Meeting of the Cognitive Science Society*, Fairfax, VA.
84. Jones, M., Zhang, J., & ^GSimpson, G. (2002 Jul). Social choice and aggregation of utility: A topological characterization. *Talk presented at the 35th Annual Meeting of the Society for Mathematical Psychology*, Oxford, OH.
85. Jones, M. & Sieck, W. (2002 May). Recency effects in category learning are dynamic and adaptive. *Talk presented at the May Conference of the Decision Consortium, University of Michigan*, Ann Arbor, MI.
86. Jones, M. & Polk, T. A. (2002 Apr). An attractor network model of verbal working memory. *Poster presented at the Annual Meeting of the Cognitive Neuroscience Society*, San Francisco, CA.
87. Jones, M. & Sieck, W. (2002 Apr). Recency effects in category learning are dynamic and adaptive. *Talk presented at Buckeye Mental Life*, Columbus, OH.
88. Jones, M. & Polk, T. A. (2002 Mar). Recurrent networks as models of short term memory. *Talk presented at the 6th Joint Conference on Information Sciences*, Research Triangle Park, NC.
89. Polk, T. A. & Jones, M. (2001 Nov). An explicit model of verbal working memory in serial recall. *Poster presented at the Annual Meeting of the Society for Neuroscience*, San Diego, CA.
90. Jones, M. & Polk, T. A. (2001 Jul). An attractor network model of serial recall. *Talk presented at the 4th International Conference on Cognitive Modeling*, Fairfax, VA.
91. Jones, M. & Sieck, W. (2000 Nov). The advantage of bias towards reliance on recent events: Evidence from judgment in autocorrelated ecologies. *Poster presented at the Annual Meeting of the Society for Judgment and Decision Making*, New Orleans, LA.
92. Jones, M. & Zhang, J. (2000 Aug). Cooperative solutions in the iterated prisoner's dilemma game. *Talk presented at the 33rd Annual Meeting of the Society for Mathematical Psychology*, Kingston, ON.
93. Jones, M. & Zhang, J. (1999 Jul). Learning to cooperate in a prisoner's dilemma game under Markov framework. *Talk presented at the 32nd Annual Meeting of the Society for Mathematical Psychology*, Santa Cruz, CA.
94. Zhang, J. & Jones, M. (1999 Jul). Preference rank-order induced from pairwise comparisons. *Talk presented at the 32nd Annual Meeting of the Society for Mathematical Psychology*, Santa Cruz, CA.

TEACHING

Courses Taught

Fall 2016 Statistics and Research Methods (undergraduate), University of Colorado

Fall 2016 Statistics and Research Methods (undergraduate), University of Colorado (second section)

Fall 2015 Thinking (graduate seminar), University of Colorado

Fall 2014 Statistics and Research Methods (undergraduate), University of Colorado

Spr 2014 Thinking (graduate seminar), University of Colorado

Fall 2013 Statistics and Research Methods (undergraduate), University of Colorado

Fall 2012 Statistics and Research Methods (undergraduate), University of Colorado

Fall 2012 Statistics and Research Methods (undergraduate), University of Colorado (second section)

Spr 2012 Reinforcement Learning (graduate seminar), University of Colorado

Fall 2011 Higher-level Cognition (graduate seminar), University of Colorado

Fall 2011 Statistics and Research Methods (undergraduate), University of Colorado

Spr 2011 Statistics and Research Methods (undergraduate), University of Colorado

Fall 2010 Mathematical Modeling of Cognition (graduate seminar), University of Colorado

Spr 2010 Higher-level Cognition (graduate seminar), University of Colorado

Fall 2009 Statistics and Research Methods (undergraduate), University of Colorado

Fall 2008 Higher-level Cognition (graduate seminar), University of Colorado

Fall 2008 Categories and Concepts (graduate seminar), University of Colorado

Spr 2008 Cognitive Modeling (graduate seminar), University of Colorado

Fall 2003 Introductory Psychology, University of Texas at Austin

Fall 2003 Introductory Psychology, University of Texas at Austin (second section)

Spr 2002 Graduate Student Instructor, Advanced Statistical Methods II (graduate), University of Michigan

Fall 2001 Graduate Student Instructor, Advanced Statistical Methods I (graduate), University of Michigan

Spr 2001 Graduate Student Instructor, Introductory Cognitive Psychology, University of Michigan

Fall 2000 Graduate Student Instructor, Introductory Cognitive Psychology, University of Michigan

Non-credit seminar

12/2013 Experiments in Matlab using Psychtoolbox - Workshop conducted in the Computer Laboratory for Instruction in Psychological Research, University of Colorado

Student Supervision

Postdoctoral advisor

1. Ru Zhang, 2016-present
2. Shaw Ketels, 2013-2016

Doctoral advisor

1. Samuel Paskewitz, 2015-present
2. James Foster, 2012-present
3. Daniel Corral, 2011-present
4. Matthew Wilder (Computer Science; co-advisor with Michael Mozer), PhD 2013

Master's advisor

1. James Foster, M.A. 2014
2. Daniel Corral, M.A. 2013
3. Fabián Cañas, M.A. 2011

Undergraduate honors advisor

1. Robert Thomas, B.A. expected 2017
2. Bernadette Barton, B.A. expected 2017
3. Kelilani Johnson, B.A. cum laude 2016
4. John White, B.A. cum laude 2014

Undergraduate and postgraduate research supervision

1. Ashley Sowers, 2017
2. Joshua Roosin, 2016-17
3. Bernadette Barton, 2015-17
4. Robert Thomas, 2015-17
5. Zoe Judge, 2015-16
6. Kelilani Johnson, 2015-16
7. Ayman Maghrabi, 2014-16
8. Rachel Bochantin, 2014-15
9. Emily Graham, 2014
10. Mitchell Fenton, 2013-14
11. Shannon Harbison, 2013-14
12. Mary Roszel, 2013-14
13. John White, 2011-15
14. Samantha Rubeck, 2012-13
15. Alexandre Apfel, 2012-13
16. Shaina Martis, 2011-13
17. Alan Bromwell, 2012
18. Kristina Robotzek (University of Düsseldorf), 2012
19. Matthew Cahn, 2011-12
20. Alex Jardine, 2011
21. Jacob Kanner, 2011
22. Erik Von Polsdorfer, 2011
23. Michelle Cho, 2010-11
24. Cynthia Mendez, 2010-11
25. Maxine Brumer, 2010

26. Kathryn Keller, 2010
27. Kelly O'Neill, 2010
28. Darien Taie, 2010
29. Holland Adinoff, 2009-10
30. M. Alex Bidwell, 2009-10
31. Kyle McKelligott, 2009-10
32. Sam Blumenthal, 2009
33. Eliana Fuller (University of Texas), 2004
34. Brian Pomeroy (University of Texas), 2004
35. Elliot Saperstein (University of Texas), 2004

Student Committees (excluding my advisees)

Doctoral committee

1. Nicole Beckage (Computer Science), 2015-16
2. Jake Westfall, 2015
3. Katherine Phelps (Linguistics), 2014-16
4. Mark Travers, 2014-15
5. Lindsay Anderson, 2014
6. Robert Lindsey (Computer Science), 2013-14
7. Shaw Ketels, 2013
8. Matthew Simonson (Computer Science), 2013
9. Clare Sims, 2012-13
10. Kyle Davis, 2010-13
11. Daniel Howrigan, 2012
12. Keith Lohse, 2011-12
13. Wolfgang Pauli, 2010-11
14. Kyler Eastman (University of Texas), 2008

PhD Qualifying Exam Committee

1. Adam Young, 2016-17
2. Jessica Mollick, 2015
3. Leif Oines, 2015
4. Nicole Beckage (Computer Science), 2014
5. Shaw Ketels, 2010-12
6. Clare Sims, 2010-11
7. Keith Lohse, 2010

Master's committee

1. Lakshmi Lalchandani, 2015-16
2. Prescott Mackie, 2015
3. Adam Young, 2015
4. Karl Ridgeway (Computer Science), 2014
5. Jessica Mollick, 2012-13
6. Choong-Wan Woo, 2012-13
7. Brian Mingus, 2012
8. Lindsay Anderson, 2010
9. Owen Lewis (Computer Science), 2010

10. Dean Wyatte, 2010
11. Clare Sims, 2009
12. Lee Altamirano, 2008-9

First-year graduate committee

1. Lakshmi Lalchandani, 2015
2. Shannon McKnight, 2015
3. Marianne Reddan, 2014
4. Adam Young, 2014
5. Nicole Beckage, 2013
6. Jessica Mollick, 2012
7. Choong-Wan Woo, 2012
8. Brian Mingus, 2011
9. Miranda Rieter, 2010
10. Lindsay Anderson, 2009
11. Keith Lohse, 2008
12. Clare Sims, 2008

Undergraduate thesis committee

1. Kelsey Anderson (Computer Science), 2008
2. Erica Rozbruch, 2013-14

SERVICE

University Service

- 2016-18 Executive Committee, Psychology & Neuroscience, University of Colorado
- 2016 Reappointment Committee for Joseph Berta (chair), Psychology & Neuroscience, University of Colorado
- 2016 Reappointment Committee for Heidi Day (chair), Psychology & Neuroscience, University of Colorado
- 2016 Reappointment Committee for Tina Pittman-Wagers (chair), Psychology & Neuroscience, University of Colorado
- 2015-17 CLIPR Liaison, Psychology & Neuroscience, University of Colorado
- 2015-16 Executive Committee, Institute for Cognitive Science, University of Colorado
- 2015 Classroom software coordinator, Psychology & Neuroscience, University of Colorado
- 2015 Quantitative Mathematical Behavioral Sciences program, University of Colorado
- 2015 Salary Committee, Psychology & Neuroscience, University of Colorado
- 2015 Awards Committee, Psychology & Neuroscience, University of Colorado
- 2014-16 Faculty Search Committee, Institute for Cognitive Science, University of Colorado

- 2014-15 Faculty Search Committee, *Self, Belonging, and STEM*, Psychology & Neuroscience, University of Colorado
- 2009-14 Human Research Committee, Psychology & Neuroscience, University of Colorado
- 2008-17 Committee on Undergraduate Education, Psychology & Neuroscience, University of Colorado
- 2014-17 Graduate Recruitment Committee (co-chair), Cognitive Program, Psychology & Neuroscience, University of Colorado
- 2013 Graduate Recruitment Committee (sole member), Cognitive Program, Psychology & Neuroscience, University of Colorado
- 2012-13 Executive Committee (interim member), Institute for Cognitive Science, University of Colorado
- 2012-13 Faculty Search Committee, Institute of Cognitive Science, University of Colorado
- 2012 Helping Undergraduate Education Committee, Psychology & Neuroscience, University of Colorado
- 2009-12 Graduate Recruitment Committee (co-chair), Cognitive Program, Psychology & Neuroscience, University of Colorado
- 2011 Grade Dispute Committee, Psychology & Neuroscience, University of Colorado
- 2010 Reappointment Committee for Diane Martichuski, Psychology & Neuroscience, University of Colorado
- 2010 Reappointment Committee for Brett King (chair), Psychology & Neuroscience, University of Colorado
- 2009 Reappointment Committee for Joseph Berta, Psychology & Neuroscience, University of Colorado
- 2008-10 Faculty Meeting Recorder, Psychology & Neuroscience, University of Colorado
- 2007 Journal Committee (sole member), Psychology, University of Texas

Professional Service

Editorial board, *Cognition*, 2015-2017

Associate Editor, *Journal of Mathematical Psychology*, 2013-2018

Organizing Committee (chair), NSF Workshop on Integrating Approaches to Computational Cognition, 2013

Consulting Editor, *Journal of Mathematical Psychology*, 2010-2013

Program Committee, Annual Meeting of the Cognitive Science Society, 2008

External Grant Reviewing

Air Force Office of Scientific Research
National Science Foundation

Journal Reviewing

American Journal of Psychology
American Political Science Review
Applied Artificial Intelligence
Behavior Research Methods
Canadian Journal of Experimental Psychology
Cognition
Cognitive Processing
Cognitive Psychology
Cognitive Science
Decision
Journal of Experimental Psychology: General
Journal of Experimental Psychology: Learning, Memory, and Cognition
Journal of Mathematical Psychology
Memory & Cognition
Mind
Neuroimage
Perception & Psychophysics
Proceedings of the National Academy of Sciences
Psychological Bulletin
Psychological Review
Psychological Science
Psychonomic Bulletin & Review
Quarterly Journal of Experimental Psychology
Synthese

Conference Reviewing

Advances in Neural Information Processing Systems
Cognitive Science Society Annual Meeting

Other Reviewing

MIT Press