

CURRICULUM VITAE
MATT JONES
(28 February 2023)

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Positions Held

7/22 – Visiting Faculty Researcher, Brain Team, Google Research

8/21 – Professor, Department of Psychology & Neuroscience, University of Colorado

7/15 – 7/21 Associate Professor, Department of Psychology & Neuroscience, University of Colorado

1/10 – Faculty Fellow, Institute of Cognitive Science, University of Colorado

1/08 – 6/15 Assistant Professor, Department of Psychology & Neuroscience, 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

External Grants and Awards (Post-PhD)

- 2022 Outstanding Paper Award, “Impossibility theorem for extending contextuality to disturbing systems”, *5th workshop Quantum Contextuality in Quantum Mechanics and Beyond* (senior author).
- 2022-27 *Leveraging latent factors and machine learning to forecast internalizing psychopathology in emerging adulthood*. NIMH R01. Role: Co-I (Rosalinde Kaiser PI).
- 2020-23 *CompCog: Bridging Levels of Analysis: Characterizing Algorithmic Models by Extreme Bayesian Priors*. NSF PAC. Role: PI. \$491,532 total costs.
- 2019-23 *Improving Construction Work Performance through Human-Centered Augmented Reality*. NSF FW-HTF. Role: Co-PI (Paul Goodrum PI). \$1,137,869 total costs.
- 2019-22 *A Computational Approach to Defining Extinction and Habituation in Treatment of Affective Disorders*. NIMH R21. Role: Co-PI (Joel Stoddard PI). My component: \$233,650.
- 2018-23 *Estimating the genetic and environmental architecture of psychiatric disorders*. NIMH R01. Role: Co-investigator (Matthew Keller PI). My component: \$75,702.
- 2017-21 *Neurocognitive targets of hostile interpretation bias training to treat irritability*. NIMH K23. Role: Co-Mentor (Joel Stoddard PI).
- 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.
- 2013 *Workshop on Computational Cognition*. NSF. Role: PI. \$42,423 total costs.
- 2013-17 *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: Co-PI (Jun Zhang PI). My component: \$50,400.
- 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.
- 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.)

Internal Funding and Awards

- 2020-22 *Associative Threat Learning: Measuring Mechanisms for Treating Threat-based Psychopathologies*. University of Colorado AB Nexus. Role: MPI. My component: \$24,868.
- 2020 Neuroscience Best Thesis Award for my Honors student Ryan Sullivan, *Spontaneous Backstory Creation*.
- 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.
- 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.

Peer-Reviewed Journal Publications

^P = Post-doc; ^G = Graduate student; ^U = Undergrad or post-bacc student; *Senior author

1. Botvinik-Nezer, R., Jones, M., & Wager, T. D. (in press). Fraud beliefs following the 2020 U.S. Presidential election: A belief systems analysis. *Nature Human Behavior*. <https://psyarxiv.com/yzcm7/>
2. ^GPaskewitz, S., & *Jones, M. (2023). A statistical foundation for derived attention. *Journal of Mathematical Psychology*, 112, 102728. <https://www.sciencedirect.com/science/article/pii/S0022249622000669>
3. ^GPaskewitz, S., Stoddard, J., & *Jones, M. (2022). Explaining the return of fear with revised Rescorla-Wagner models. *Computational Psychiatry*, 6, 213-237.

4. ^GCorral, D., Healy, A., & *Jones, M. (2022). The effects of testing the relationships among relational concepts. *Cognitive Research: Principles and Applications*, 7, article 47. doi: 10.1186/s41235-022-00398-2
5. Naim, R., Haller, S. P., Linke, J., Jaffe, A., Stoddard, J., Jones, M., Harrewijn, A., Kircanski, K., Bar-Haim, Y., & Brotman, M. A. (2022). Context-dependent amygdala–prefrontal connectivity during the dot-probe task varies by irritability and attention bias to angry faces. *Neuropsychopharmacology*, 47, 2283-2291. doi: 10.1038/s41386-022-01307-3
6. ^GBorder, R., O'Rourke, S., de Candia, T., Goddard, M. E., Visscher, P. M., Yengo, L., *Jones, M., & *Keller, M. C. (2022). Assortative mating biases marker-based heritability estimators. *Nature Communications*, 13, 660. <https://www.nature.com/articles/s41467-022-28294-9>
7. Bobadilla-Suarez, S., Jones, M., & Love, B. C. (2022). Robust priors for regularized regression. *Cognitive Psychology*, 132, 101444. doi: 10.1016/j.cogpsych.2021.101444
8. Haller, S. P., Stoddard, J., Pagliaccio, D., Bui, H., MacGillivray, C., Jones, M., & Brotman, M. A. (2021). Computational modeling of attentional impairments in disruptive mood dysregulation and attention deficit/hyperactivity disorder. *Journal of the American Academy of Child and Adolescent Psychiatry*, 60, 637-645. doi: 10.1016/j.jaac.2020.08.468
9. Hallowell, M., Quashne, M., Salas, R., Jones, M., MacLean, B., & Quinn, E. (2021). The statistical invalidity of TRIR as a measure of safety performance. *Professional Safety*, 66(4), 28-34. <https://www.proquest.com/docview/2509360489/fulltextPDF>
10. Weissman, D. H., Grant, L. D., & Jones, M. (2020). The congruency sequence effect indexes response-general control. *Journal of Experimental Psychology: Human Perception and Performance*, 46, 1387-1396. doi: 10.1037/xhp0000790
11. ^GPaskewitz, S., & *Jones, M. (2020). Dissecting EXIT. *Journal of Mathematical Psychology*, 97, 102371. doi: 10.1016/j.jmp.2020.102371
12. Lohse, K. R., Miller, M. W., Daou, M., Valerius, W., & Jones, M. (2020). Dissociating the contributions of reward-prediction errors to trial-level adaptation and long-term learning. *Biological Psychology*, 149, 107775. doi: 10.1016/j.biopsycho.2019.107775
13. ^GCorral, D., Healy, A. F., ^URozbruch, E. V., & *Jones, M. (2019). Building a testing-based training paradigm from cognitive psychology principles. *Scholarship of Teaching and Learning in Psychology*, 5, 189-208. doi: 10.1037/stl0000146
14. ^PFairley, K., ^UPareman, J. M., Jones, M., & Carter, R. M. (2019). Risky health choices and the balloon economic risk protocol. *Journal of Economic Psychology*, 73, 15-33. doi: 10.1016/j.joep.2019.04.005

15. Jones, M. (2019). Relating causal and probabilistic approaches to contextuality. *Philosophical Transactions of the Royal Society A*, 377, 20190133. doi: 10.1098/rsta.2019.0133
16. Meder, B., Nelson, J. D., Jones, M., & Ruggeri, A. (2019). Stepwise versus globally optimal search in children and adults. *Cognition*, 191, 103965. doi: 10.1016/j.cognition.2019.05.002
17. Stoddard, J., & Jones, M. (2019). Computational modeling in pediatric mental health. *Journal of the American Academy of Child and Adolescent Psychiatry*, 58, 471-473. doi: 10.1016/j.jaac.2018.12.009
18. ^GYoung, A. P., Healy, A. F., Jones, M., & Bourne, L. E. (2019). Verbal and spatial acquisition as a function of distributed practice and code-specific interference. *Memory & Cognition*, 47, 779-791. doi: 10.3758/s13421-019-00892-x
19. ^GCorral, D., Kurtz, K. J., & *Jones, M. (2018). Learning relational concepts from within- vs. between-category comparisons. *Journal of Experimental Psychology: General*, 147, 1571-1596. doi: 10.1037/xge0000517
20. Evans, L. M., Tahmasbi, R., Jones, M., Vrieze, S. I., Abecasis, G. R., Das, S., Bjelland, D. W., deCandia, T. R., Haplotype Reference Consortium, Yang, J., Goddard, M. E., Visscher, P. E., & Keller, M. C. (2018). Narrow-sense heritability estimation of complex traits using identity-by-descent information. *Heredity*, 121, 616-630. doi: 10.1038/s41437-018-0067-0
21. Jepma, M., Koban, L., van Doorn, J., Jones, M., & Wager, T. D. (2018). Behavioural and neural evidence for self-reinforcing expectancy effects on pain. *Nature Human Behaviour*, 2, 838-855. doi: 10.1038/s41562-018-0455-8
22. ^GParpart, P., Jones, M., & Love, B. C. (2018). Heuristics as Bayesian inference under extreme priors. *Cognitive Psychology*, 102, 127-144. doi: 10.1016/j.cogpsych.2017.11.006
23. Healy, A. F., Jones, M., ^GLalchandani, L., & ^GTack, L. A. (2017). Timing of quizzes during learning: Effects on motivation and retention. *Journal of Experimental Psychology: Applied*, 23, 128-137. doi: 10.1037/xap0000123
24. ^GBjelland, D. W., ^PLingala, U., Patel, P. S., Jones, M., & Keller, M. C. (2017). A fast and accurate method for detection of IBD shared haplotypes in genome-wide SNP data. *European Journal of Human Genetics*, 25, 617-624. doi: 10.1038/ejhg.2017.6
25. Dzhafarov, E., Kujala, J., ^GCervantes, V., ^GZhang, R., & Jones, M. (2016). On contextuality in behavioural data. *Philosophical Transactions of the Royal Society A*, 374, 20150234. doi: 10.1098/rsta.2015.0234
26. 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. doi: 10.1037/a0037701
27. ^GCorral, D., & *Jones, M. (2014). The effects of relational structure on analogical learning. *Cognition*, 132, 280-300. doi: 10.1016/j.cognition.2014.04.007

28. ^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. doi: 10.1016/j.jpain.2014.02.010
29. Jones, M., & Dzhafarov, E. N. (2014). Unfalsifiability and mutual translatability of major modeling schemes for choice reaction time. *Psychological Review, 121*, 1-32. doi: 10.1037/a0034190
30. ^GLohse, K. R., *Jones, M., Healy, A. F., & Sherwood, D. E. (2014). The role of attention in motor control. *Journal of Experimental Psychology: General, 143*, 930-948. doi: 10.1037/a0032817
31. 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. doi: 10.1037/a0033180
32. 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. doi: 10.1037/a0029059
33. ^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. doi: 10.3758/s13423-013-0406-3
34. 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. doi: 10.1017/S0140525X10003134
- 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)
35. ^GSakamoto, Y., Jones, M., & Love, B.C. (2008). Putting the psychology back into psychological models: Mechanistic vs. rational approaches. *Memory & Cognition, 36*, 1057-1065. doi: 10.3758/MC.36.6.1057
36. Jones, M., & Love, B. C. (2007). Beyond common features: The role of roles in determining similarity. *Cognitive Psychology, 55*, 196-231. doi: 10.1016/j.cogpsych.2006.09.004
37. 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. doi: 10.1037/0278-7393.32.3.316
38. 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. doi: 10.1016/j.jmp.2004.08.003

39. 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. doi: 10.1037/0278-7393.29.4.626
40. Jones, M., Zhang, J., & ^GSimpson, G. (2003). Aggregation of utility and social choice: A topological characterization. *Journal of Mathematical Psychology*, 47, 545-556. doi: 10.1016/j.jmp.2003.08.003
41. Jones, M. & Polk, T. A. (2002). An attractor network model of serial recall. *Cognitive Systems Research*, 3, 45-55. doi: 10.1016/S1389-0417(01)00043-2
42. Jones, M. & Scharlemann, M. (2001). How a strongly irreducible Heegaard splitting intersects a handlebody. *Topology and its Applications* 110, 289-301. doi: 10.1016/S0166-8641(99)00183-2

Peer-Reviewed Conference Publications

All available at <http://matt.colorado.edu/papers.htm>

1. Jones, M., Scott, T. R., Ren, M., Elsayed, G. F., Hermann, K., Mayo, D., & Mozer, M. C. (2023). Learning in temporally structured environments. *International Conference on Learning Representations (ICLR23)*. https://openreview.net/pdf?id=z0_V5O9cmNw
2. Chang, P. G., Jones, M., & Murphy, K. (2022). On diagonal approximations to the extended Kalman filter for online training of Bayesian neural networks. *Continual Lifelong Learning Workshop, Asian Conference on Machine Learning (ACML22)*. <https://openreview.net/pdf?id=asgeEt25kk>
3. Jones, M. (2022). Learning at multiple timescales. *MemARI Workshop, Advances in Neural Information Processing (NeurIPS22)*. <https://openreview.net/pdf?id=hDwsgV5olu4>
4. Jones, M., Scott, T. R., Elsayed, G. F., Ren, M., Hermann, K., Mayo, D., & Mozer, M. C. (2022). Neural network online training with sensitivity to multiscale temporal structure. *MemARI Workshop, Advances in Neural Information Processing (NeurIPS22)*. <https://openreview.net/pdf?id=j78KgxdSw>
5. ^GCorral, D., & *Jones, M. (2017). Learning relational concepts through unitary versus compositional representations. *Proceedings of the 39th Annual Meeting of the Cognitive Science Society*, 1830-1835.
6. ^GFoster, J. M., & *Jones, M. (2013). Analogical reinforcement learning. *Proceedings of the 35th Annual Meeting of the Cognitive Science Society*, 448-453.
7. ^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.
8. ^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.

9. 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
10. ^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.
11. 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.
12. 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.
13. ^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.
14. 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.
15. Jones, M., Mozer, M., & Kinoshita, S. (2008). Optimal response initiation: Why recent experience matters. *Advances in Neural Information Processing Systems 21*, 788-795.
16. 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.
17. 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.
18. 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.
19. 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.
20. ^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.
21. 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.

22. 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.
23. 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. (2018). The diffusion model of speeded choice, from a rational perspective. In W. Batchelder et al. (Eds.), *New Handbook of Mathematical Psychology, Vol. 2* (pp. 71-103). Cambridge University Press.
2. Nelson, J. D., Meder, B., & Jones, M. (2018). Towards a theory of heuristic and optimal planning for sequential information search. <https://psyarxiv.com/bxdf4/>
3. Foster, J. M., & Jones, M. (2017). Reinforcement learning with analogical similarity to guide schema induction and attention. <https://arxiv.org/abs/1712.10070>
4. Jones, M. (2016). Flexibility of evidence-accumulation models under practical constraints. <https://psyarxiv.com/gja3u>
5. Pauli, W. M., & Jones, M. (2015). Change-point detection versus reinforcement learning: Separable neural substrates approximate different forms of Bayesian inference. <https://www.biorxiv.org/content/10.1101/591818v1>
6. 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*. https://www.nsf.gov/funding/pgm_summ.jsp?pims_id=5686
7. 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.
8. Love, B. C., & Jones, M. (2012). Bayesian learning. In N. Seel (Ed.), *Encyclopedia of the Sciences of Learning* (pp. 415-417). New York: Springer.
9. Jones, M. & Zhang, J. (2003). Which is to blame: Instrumental rationality, or common knowledge? *Behavioral and Brain Sciences*, 26, 166-167. (Invited commentary)

Submitted Manuscripts

Abstracts at <http://matt.colorado.edu/papers.htm>

1. Haller, S. P., Stoddard, J. S., Cardenas, S. I., Dombek, K., MacGillivray, C., Zapp, C., Bui, H., Stavish, C. M., Kircanski, K., Jones, M., & Brotman, M. A. *Differentiating neural sensitivity and bias during face-emotion processing in youth: A computational approach*.

2. Mayo, D., Scott, T. R., Ren, M., Elsayed, G. F., Hermann, K., Jones, M., & Mozer, M. C. *Multitask learning via interleaving: A neural network investigation.*
3. Stoddard, J., Haller, S. P., Costa, V., Brotman, M. A., & *Jones, M. *Anxiety and irritability modulate category learning of ambiguous face emotion.*
4. ^GTezzin, A., Wolfe, E., Amaral, B., & *Jones, M. *Impossibility theorem for extending contextuality to disturbing systems.* Invited submission to special issue of *Philosophical Transactions of the Royal Society A.*
<https://arxiv.org/pdf/2212.06976.pdf>
5. Weissman, D. H., Jones, M., Smith, K. A., & Erb, C. D. *Conflict adaptation is independent of conflict.*

Invited Talks and Symposia

1. Leveraging human inductive biases for learning and decision making. *Google Brain*, Mar 2022.
2. Causal-model approach to contextuality for disturbing systems. *Quantum Contextuality in Quantum Mechanics and Beyond Colloquium*, Nov 2021.
3. Bridging levels of analysis: Characterizing algorithmic models of cognition by extreme Bayesian priors. *Purdue University*, Sep 2021.
4. Bridging algorithmic and rational models of cognition. *University of Illinois*, Oct 2020.
5. A unified model of learning and decision making. *University of Barcelona*, Jun 2019.
6. A unified model of learning and decision making. *University of Michigan*, Oct 2018.
7. Modeling sequential effects via incremental learning in diffusion models. *Winer Memorial Lecture, Purdue University*, Apr 2016.
8. Enhancing education through cognitive psychology. *Symposium, 56th Annual Meeting of the Psychonomic Society*, Nov 2015.
9. Generative and discriminative models in cognitive science. *Symposium, 37th Annual Meeting of the Cognitive Science Society*, Jul 2015.
10. Discussant. *Consumer Financial Decision Making Conference*, Jun 2015.
11. Learning and representation. *University of Sydney*, Feb 2015.
12. 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.
13. Sequential effects in response time reveal learning mechanisms and event representations. *University College London*, Jun 2013.
14. Classification and generalization. *NSF Workshop on Integrating Approaches to Computational Cognition*, May 2013.

15. Separable neural substrates for different forms of Bayesian inference. *Max Planck Institute for Human Development*, Jun 2012.
16. Debate on Bayesian models of cognition. *Northwestern University*. Feb 2012.
17. Constructing new representations through reinforcement learning. *Johns Hopkins University*, Jan 2012.
18. Grow your own representations: Computational constructivism. *Symposium, 33rd Annual Meeting of the Cognitive Science Society*, Jul 2011.
19. Constructing new representations through reinforcement learning. *Purdue University*, Apr 2011.
20. Sequential effects in learning: Implications for attention, knowledge representation, and decision processes. *Colorado State University*, Sep 2008.
- 21-28. 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.
29. Sequential effects in categorization: Implications for category representation, attention, and similarity-based generalization. *Indiana University*, Sep 2006.
30. 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. ^GTezzin, A., Wolfe, E., Amaral, B., & Jones, M. (2022 Dec). Impossibility theorem for extending contextuality to disturbing systems. *Talk presented at 5th workshop Quantum Contextuality in Quantum Mechanics and Beyond*, Prague, CZ.
2. Jones, M. (2022 Dec). Characterizing algorithmic models of cognition by extreme Bayesian priors. *Talk presented at the 22nd Annual Summer Interdisciplinary Conference (ASIC)*, Queenstown, NZ.
3. Botvinik-Nezer, R., Jones, M., & Wager, T. D. (2022 May). A belief systems analysis of fraud beliefs following the 2020 U.S. election. *Talk presented at APS Annual Convention*, Chicago, IL.
4. ^GElizabeth, C., & Jones, M. (2021 Oct). Kalman filter model of rats' reversal learning under LSD. *Talk presented at the Society for Mathematical Psychology Symposium at the 58th Annual Meeting of the Psychonomic Society*, virtual.
5. Jones, M. (2021 May). Causal graphs and extended contextuality. *Talk presented at Quantum Contextuality in Quantum Mechanics and Beyond (QCQMB)*, virtual.
6. ^GPaskewitz, S., & Jones, M. (2021 Feb). A statistical foundation for derived attention. *Talk presented at the Australasian Mathematical Psychology Conference*, Newcastle, Australia (remote).

7. Trujillo, T., Stoddard, J., Haller, S., Brotman, M. & Jones, M. (2021 Jan). Learning types during interpretation bias training to treat irritability. *Talk presented at Western Medical Research Conference*, virtual.
8. Stoddard, J., Haller, S., Costa, V., Brotman, M., & Jones, M. (2020 Dec). Distinctive learning styles during cognitive training against threat interpretations. *Poster presented at the 59th Annual Meeting of the American College of Neuropsychopharmacology (ACNP)*, virtual.
9. Elliotte, E., Paskewitz, S., Jones, M., & Stoddard, J. (2020 May). Attention learning in anxiety and irritability. *Poster presented at the 75th Annual Meeting of the Society of Biological Psychiatry (SOBP)*, virtual.
10. Haller, S., Stoddard, J., Jones, M., Kircanski, K., & Brotman, M. (2019 Dec). Leveraging computational modeling and fMRI to study the mechanisms of interpretation bias training in chronic irritability. *Poster presented at the 58th Annual Meeting of the American College of Neuropsychopharmacology (ACNP)*, Orlando, FL.
11. Jones, M. (2019 Jun). Causal and probabilistic approaches to contextuality. *Talk presented at the 19th Annual Summer Interdisciplinary Conference (ASIC)*, Seefeld, Austria.
12. Jones, M. (2019 May). Causal model-based contextuality. *Talk presented at Quantum Contextuality in Quantum Mechanics and Beyond (QCQMB)*, Prague, Czech Republic.
13. ^GPaskewitz, S., & Jones, M. (2019 May). A model of attention learning and its implications for anxious disorders. *Talk presented at the 74th Annual Meeting of the Society of Biological Psychiatry (SOBP)*, Chicago, IL.
14. Haller, S., Jones, M., Pine, D., Leibenluft, E., Brotman, M. A., & Stoddard, J. (2019 May). A computational model to measure mechanisms of interpretation bias training for treating disruptive mood dysregulation disorder. *Talk presented at the 74th Annual Meeting of the Society of Biological Psychiatry (SOBP)*, Chicago, IL.
15. Jones, M. (2018 Nov). EPR with people. *Talk presented at Purdue Winer Memorial Lectures on Probability and Contextuality*, West Lafayette, IN.
16. Lohse, K. R., Daou, M., Valerius, W., Jones, M., & Miller, M. W. (2018 Oct). Exploring engagement in trial and error category learning: Comparing aggregate and single-trial event-related potentials. *Talk presented at the 58th Annual Meeting of the Society for Psychophysiological Research (SPR)*, Quebec City, Canada.
17. Jones, M. (2018 Jul). The diffusion model remains unidentifiable under additional proposed constraints. *Talk presented at 50th Annual Meeting of the Society for Mathematical Psychology*, Madison, WI.
18. ^GPaskewitz, S., & Jones, M. (2018 Jul). “Pearce-Hall” effects as learned inattention after blocking. *Talk presented at 50th Annual Meeting of the Society for Mathematical Psychology*, Madison, WI.

19. ^PZhang, R., & Jones, M. (2018 Jul). Testing a unified model of learning and decision making. *Talk presented at 50th Annual Meeting of the Society for Mathematical Psychology*, Madison, WI.
20. ^GCorral, D., & Jones, M. (2017 Nov). Leveraging different types of comparisons and representations to improve relational category learning. *Poster presented at the 58th Annual Meeting of the Psychonomic Society*, Vancouver, British Columbia, Canada.
21. ^GYoung, A. P., Healy, A. F., Jones, M., & Curran, T. (2017 Nov). Facilitating voluntary self-testing through an automated question-generation educational application. *Poster presented at the 58th Annual Meeting of the Psychonomic Society*, Vancouver, British Columbia, Canada.
22. Keller, M., de Candia, T., Jones, M., Tahmasbi, R., Evans, L., Evans, D., Eaves, L., Yang, J., Visscher, P., Goddard, M. (2017 Oct). Effects of assortative mating on estimates of SNP heritability. *Talk presented at the XXVth World Congress of Psychiatric Genetics (WCPG)*, Orlando, FL.
23. Stoddard, J., Jones, M., Haller, S., Towbin, T., Pine, D. S., Brotman, M. A., Leibenluft, E. (2017 Oct). Identifying the mechanisms of interpretation bias in irritability. *Talk presented at the 64th Annual Meeting of the American Academy of Child & Adolescent Psychiatry (AACAP)*, Washington, DC.
24. ^GCorral, D., & Jones, M. (2017 Jul). Learning relational concepts through unitary versus compositional representations. *Poster presented at the 39th Annual Meeting of the Cognitive Science Society*, London, UK.
25. ^GYoung, A. P., Healy, A. F., Jones, M., & Bourne, L. E. (2017 May). Spacing benefits the acquisition of motoric but not verbal learning. *Poster presented at the 29th Annual Convention of the Association for Psychological Science (APS)*, Boston, MA.
26. ^PKetels, S. L., Healy, A. F., Jones, M., ^UGuhl, M., & Sasnett-Martichuski, D. K. (2017 Feb). Peer learning can impede student understanding. *Talk presented at the First Mini-Annual Interdisciplinary Conference (ASIC)*, Jackson, WY.
27. ^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.
28. 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.
29. ^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.

30. ^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.*
31. Jones, M. (2016 Jul). Logical incoherence of game-theoretic rationality. *Talk presented at the 15th Annual Summer Interdisciplinary Conference (ASIC), Selva, Italy.*
32. ^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.*
33. Jones, M. (2016 Feb). Flexibility of evidence-accumulation models under practical constraints. *Talk presented at the Australian Mathematical Psychology Conference, Hobart, Australia.*
34. 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.*
35. ^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.*
36. ^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.*
37. ^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.*
38. ^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.*
39. ^UPareman, 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.*
40. 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.*
41. 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 (ASIC), Mammoth Lakes, CA.*

42. ^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 (ASIC)*, Mammoth Lakes, CA.
43. ^Gde Candia, T., ^PTahmasbi, R., Carey, G., Eaves, L., Jones, M., Evans, D., & Keller, M. (2015 Jun). Biases in genetic variance estimates induced by assortative mating. *Talk presented at 45th Annual Meeting of the Behavior Genetics Association (BGA)*, San Diego, CA.
44. ^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.
45. 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.
46. ^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.
47. ^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.
48. ^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.
49. 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.
50. ^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.
51. 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.
52. ^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.
53. 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.

54. ^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.
55. ^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.
56. ^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.
57. ^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.
58. ^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.
59. ^GFoster, J. M., & *Jones, M. (2013 Nov). Analogical reinforcement learning. *Poster presented at the 54th Annual Meeting of the Psychonomic Society*, Toronto, ON.
60. ^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.
61. ^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.
62. ^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.
63. ^GFoster, J. M., & *Jones, M. (2013 Jul). Analogical reinforcement learning. *Talk presented at the 35th Annual Meeting of the Cognitive Science Society*, Berlin, Germany.
64. ^GFoster, J. M., & *Jones, M. (2013 Jul). Analogical reinforcement learning. *Talk presented at the 12th Annual Summer Interdisciplinary Conference (ASIC)*, Cortina, Italy.
65. 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.

66. ^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.
67. ^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.
68. ^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.
69. 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.
70. ^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.
71. ^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.
72. 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.
73. 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.
74. ^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.
75. ^PPauli, W. M., & *Jones, M. (2012 Jan). Changepoint detection versus reinforcement learning. *Talk presented at Annual Interdisciplinary Conference (AIC)*, Jackson Hole, WY.
76. ^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.
77. ^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.

78. 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 (ASIC)*, Caldes de Boi, Spain.
79. ^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 Annual Conference of the North American Society for the Psychology of Sport and Physical Activity (NASPSPA)*, Burlington, VT.
80. ^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.
81. 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.
82. 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 (NeurIPS)*, Vancouver, BC.
83. ^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.
84. 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.
85. 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.
86. ^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.
87. 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.
88. ^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 (NeurIPS)*, Vancouver, ON.
89. ^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.

90. 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.
91. 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.
92. 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.
93. Jones, M. & ^GCañas, F. (2009 Jul). Selective attention in reinforcement learning. *Talk presented at 8th Annual Summer Interdisciplinary Conference (ASIC)*, Val d'Aosta, Italy.
94. 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.
95. Jones, M. (2008 Nov). Generalization and sequential effects in identification learning. *Talk presented at the 49th Annual Meeting of the Psychonomic Society*, Chicago, IL.
96. 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.
97. 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.
98. 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.
99. 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.
100. 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.
101. 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.
102. 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.

103. ^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.
104. 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.
105. 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)*, Briançon, France.
106. 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.
107. 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.
108. 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.
109. 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.
110. 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.
111. 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.
112. 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.
113. 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.
114. Jones, M. & Sieck, W. (2002 Apr). Recency effects in category learning are dynamic and adaptive. *Talk presented at Buckeye Mental Life*, Columbus, OH.
115. 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 (JCIS)*, Research Triangle Park, NC.

116. 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.
117. Jones, M. & Polk, T. A. (2001 Jul). An attractor network model of serial recall. *Talk presented at the 4th International Conference on Cognitive Modeling (ICCM)*, Fairfax, VA.
118. 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.
119. 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.
120. 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.
121. 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 2021	Thinking (graduate seminar), University of Colorado
Fall 2021	Statistics (undergraduate), University of Colorado
Spr 2021	Cognitive Research Update (graduate seminar), University of Colorado
Fall 2020	Cognitive Research Update (graduate seminar), University of Colorado
Fall 2020	Statistics (undergraduate), University of Colorado
Spr 2020	Thinking (graduate seminar), University of Colorado
Fall 2019	Statistics (undergraduate), University of Colorado
Spr 2019	Statistics (undergraduate), University of Colorado
Fall 2017	Mathematical Modeling of Cognition (graduate seminar), University of Colorado
Fall 2017	Thinking (graduate seminar), University of Colorado
Fall 2016	Statistics (undergraduate), University of Colorado
Fall 2016	Statistics (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

Other teaching

Sum 2022 Mentor for CU Science Discovery's STEM Research Experience high school internship program

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, 2016-18
2. Shaw Ketels, 2013-16

Doctoral advisor

1. Clara Baker, 2020-present
2. Landon Rabern, 2020
3. Samuel Paskewitz, PhD 2021
4. James Foster, PhD 2019
5. Daniel Corral, PhD 2017
6. Matthew Wilder (Computer Science; co-advisor with Michael Mozer), PhD 2013

Master's advisor

1. Samuel Paskewitz, M.A. 2017
2. James Foster, M.A. 2014
3. Daniel Corral, M.A. 2013
4. Fabián Cañas, M.A. 2011

Undergraduate honors advisor

1. Zachary Mayer, B.A. cum laude 2020
2. Ryan Sullivan, B.A. summa cum laude 2020
3. Ashley Sowers, B.A. magna cum laude 2018
4. Robert Thomas, B.A. summa cum laude 2017
5. Bernadette Barton, B.A. magna cum laude 2017
6. Kelilani Johnson, B.A. cum laude 2016
7. John White, B.A. cum laude 2014

Undergraduate and postgraduate research supervision

1. Gabriella Cerza, 2023-present
2. Grace Tucker 2022- present
3. James Miles 2022- present
4. Dakota Blue 2022- present
5. Shiva Ganesh 2022- present
6. Melina Kehtar 2022- present
7. Jasmine Vassef, 2022-present
8. Ferial Felfli, 2022-present
9. Sean Ash, 2022
10. Kaila Dierke, 2022
11. James Flanagan, 2022
12. Lili Geel, 2022
13. Itzhak Nevati, 2022
14. Sara Dunn, 2021-present
15. Ashton Garland, 2021-2022
16. Harmony Prescott, 2021-2022
17. James Anderson, 2021
18. Justice Gearhard, 2021
19. Henry Cleavinger, 2021
20. James (Wylie) Stewart, 2020-2021
21. Lauren Immink, 2020-21
22. Austin Morel, 2020-21

23. Katie Raitz, 2020-21
24. Shantiel Emory, 2019-present
25. Zachary Mayer, 2019-21
26. Wangkai (Brandon) Wei, 2019-21
27. Wyatt Smith, 2019-2020
28. Thomas Wray, 2018-20
29. Alexis Longo, 2018-19
30. Anthony Pidanick, 2018-19
31. Scott Uhler, 2018
32. Ryan Sullivan, 2017-20
33. Hayley Tomkiewicz, 2017-19
34. Ashley Sowers, 2017-18
35. Joshua Roosin, 2016-17
36. Bernadette Barton, 2015-17
37. Robert Thomas, 2015-17
38. Zoe Judge, 2015-16
39. Kelilani Johnson, 2015-16
40. Ayman Maghrabi, 2014-16
41. Rachel Bochantin, 2014-15
42. Emily Graham, 2014
43. Mitchell Fenton, 2013-14
44. Shannon Harbison, 2013-14
45. Mary Roszel, 2013-14
46. John White, 2011-15
47. Samantha Rubeck, 2012-13
48. Alexandre Apfel, 2012-13
49. Shaina Martis, 2011-13
50. Alan Bromwell, 2012
51. Kristina Robatzek (University of Düsseldorf), 2012
52. Matthew Cahn, 2011-12
53. Alex Jardine, 2011
54. Jacob Kanner, 2011
55. Erik Von Polsdorfer, 2011
56. Michelle Cho, 2010-11
57. Cynthia Mendez, 2010-11
58. Maxine Brumer, 2010
59. Kathryn Keller, 2010
60. Kelly O'Neill, 2010
61. Darien Taie, 2010
62. Holland Adinoff, 2009-10
63. M. Alex Bidwell, 2009-10
64. Kyle McKelligott, 2009-10
65. Sam Blumenthal, 2009
66. Eliana Fuller (University of Texas), 2004
67. Brian Pomeroy (University of Texas), 2004
68. Elliot Saperstein (University of Texas), 2004

High school mentoring

1. Eshaan Sharma, 2021-23
2. Allison Xin, 2022

Student Committees (excluding my advisees)

Doctoral committee

1. Shruthi Sukumar (Integrated Physiology), 2023
2. Michael Iuzzolino (Computer Science), 2022
3. Nicholas Barendregt (Applied Mathematics), 2021-22
4. Christopher Mellinger, 2019-20
5. Adam Young, 2017-18
6. Brett Roads (Computer Science), 2016-17
7. Leif Oines, 2016-17
8. Nicole Beckage (Computer Science), 2015-16
9. Jake Westfall, 2015
10. Katherine Phelps (Linguistics), 2014-16
11. Mark Travers, 2014-15
12. Lindsay Anderson, 2014
13. Robert Lindsey (Computer Science), 2013-14
14. Shaw Ketels, 2013
15. Matthew Simonson (Computer Science), 2013
16. Clare Sims, 2012-13
17. Kyle Davis, 2010-13
18. Daniel Howrigan, 2012
19. Keith Lohse, 2011-12
20. Wolfgang Pauli, 2010-11
21. Kyler Eastman (University of Texas), 2008

PhD Qualifying Exam Committee

1. Shruthi Sukumar (Integrated Physiology), 2022
2. Lakshmi Lalchandani, 2017
3. Adam Young, 2016-17
4. Jessica Mollick, 2015
5. Leif Oines, 2015
6. Nicole Beckage (Computer Science), 2014
7. Shaw Ketels, 2010-12
8. Clare Sims, 2010-11
9. Keith Lohse, 2010

Master's committee

1. Bogdan Petre, 2018-19
2. William Chapman, 2018
3. Lakshmi Lalchandani, 2015-16
4. Prescott Mackie, 2015
5. Adam Young, 2015
6. Karl Ridgeway (Computer Science), 2014
7. Jessica Mollick, 2012-13

8. Choong-Wan Woo, 2012-13
9. Brian Mingus, 2012
10. Lindsay Anderson, 2010
11. Owen Lewis (Computer Science), 2010
12. Dean Wyatte, 2010
13. Clare Sims, 2009
14. Lee Altamirano, 2008-9

First-year graduate committee

1. Jacob DeRosa, 2022
2. Elena Peterson, 2020
3. Jacob Russin, 2018
4. William Chapman, 2017
5. Bogdan Petre, 2017
6. Lakshmi Lalchandani, 2015
7. Shannon McKnight, 2015
8. Marianne Reddan, 2014
9. Adam Young, 2014
10. Nicole Beckage, 2013
11. Jessica Mollick, 2012
12. Choong-Wan Woo, 2012
13. Brian Mingus, 2011
14. Miranda Rieter, 2010
15. Lindsay Anderson, 2009
16. Keith Lohse, 2008
17. Clare Sims, 2008

Undergraduate thesis committee

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

SERVICE

University Service

P&N = Department of Psychology & Neuroscience; ICS = Institute for Cognitive Science

2022-23

(On leave at Google Brain)
 Director, Center for Research on Training
 Executive Committee (ex officio), ICS

2021-22

Director, Cognitive Graduate Program, P&N
 Director, Center for Research on Training
 Human Subjects Committee, P&N
 Executive Committee (ex officio), ICS

Cognitive Graduate Recruitment Committee (co-chair), P&N
Senior Faculty Search Committee, P&N+ICS
Faculty Senate, College of Arts and Sciences
Planning Committee, College of Arts and Sciences

2020-21

Director, Cognitive Graduate Program, P&N
Director, Center for Research on Training
Human Subjects Committee, P&N
Executive Committee (ex officio), ICS
Cognitive Graduate Recruitment Committee (co-chair), P&N
Review Panel, AB Nexus

2019-20

Director, Cognitive Graduate Program, P&N
Director, Center for Research on Training
Merit & Salary Review Committee, P&N
Cognitive Faculty Search Committee, P&N
Executive Committee (ex officio), ICS
Cognitive Graduate Recruitment Committee (co-chair), P&N
Senior Faculty Search Committee, P&N+ICS
Review Panel, NSF Research Traineeship internal competition

2018-19

Director, Cognitive Graduate Program, P&N
Director, Center for Research on Training
Merit & Salary Review Committee, P&N
Executive Committee (ex officio), ICS
Cognitive Graduate Recruitment Committee (co-chair), P&N
Space Committee (chair), P&N
Committee on Undergraduate Education, P&N

2017-18

Director, Center for Research on Training
Executive Committee, P&N
Cognitive Graduate Recruitment Committee (co-chair), P&N
CLIPR Liaison, P&N
Committee on Undergraduate Education, P&N

2016-17

Executive Committee, P&N
Cognitive Graduate Recruitment Committee (co-chair), P&N
Reappointment Committee for Joseph Berta (chair), P&N
Reappointment Committee for Heidi Day (chair), P&N
Reappointment Committee for Tina Pittman-Wagers (chair), P&N
CLIPR Liaison, P&N
Committee on Undergraduate Education, P&N

2015-16

Cognitive Graduate Recruitment Committee (co-chair), P&N

CLIPR Liaison, P&N
Executive Committee, ICS
Classroom software coordinator, P&N
Faculty Search Committee, ICS
Committee on Undergraduate Education, P&N

2014-15

Cognitive Graduate Recruitment Committee (co-chair), P&N
Planning committee, Quantitative Mathematical Behavioral Sciences program
Merit & Salary Review Committee, P&N
Awards Committee, P&N
Faculty Search Committee, ICS
Social Faculty Search Committee, P&N
Committee on Undergraduate Education, P&N

2013-14

Cognitive Graduate Recruitment Committee (co-chair), P&N
Human Research Committee, P&N
Committee on Undergraduate Education, P&N

2012-13

Cognitive Graduate Recruitment Committee (sole member), P&N
Human Research Committee, P&N
Committee on Undergraduate Education, P&N
Executive Committee, ICS
Faculty Search Committee, ICS
Helping Undergraduate Education Committee, P&N

2011-12

Cognitive Graduate Recruitment Committee (co-chair), P&N
Human Research Committee, P&N
Committee on Undergraduate Education, P&N
Grade Dispute Committee, P&N

2010-11

Cognitive Graduate Recruitment Committee (co-chair), P&N
Human Research Committee, P&N
Committee on Undergraduate Education, P&N
Reappointment Committee for Diane Martichuski, P&N
Reappointment Committee for Brett King (chair), P&N

2009-10

Cognitive Graduate Recruitment Committee (co-chair), P&N
Human Research Committee, P&N
Committee on Undergraduate Education, P&N
Reappointment Committee for Joseph Berta, P&N
Faculty Meeting Recorder, P&N

2008-9

Cognitive Graduate Recruitment Committee (co-chair), P&N

Committee on Undergraduate Education, P&N
Faculty Meeting Recorder, P&N

2007-8

Faculty Meeting Recorder, P&N

2006-7

Journal Committee (sole member), Psychology, University of Texas

Professional Service

Associate Editor, Cognitive Science, 2018-2022

Consulting Editor, Journal of Mathematical Psychology, 2018-present

Editorial board, Cognition, 2015-present

Associate Editor, Journal of Mathematical Psychology, 2013-2018

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

Tenure and Promotion Reviews

Texas Tech University

Grant Panels

National Science Foundation FW-HTF

Ad hoc Grant Reviewing

Air Force Office of Scientific Research

National Science Foundation MMS

National Science Foundation PAC

Journal Reviewing

American Journal of Psychology

American Political Science Review

Applied Artificial Intelligence

Behavior Research Methods

British Journal for the Philosophy of Science

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

Mind and Matter

Neuroimage
Perception & Psychophysics
Philosophical Transactions of the Royal Society A
PLOS Computational Biology
Proceedings of the National Academy of Sciences
Proceedings of the Royal Society A
Psychological Bulletin
Psychological Medicine
Psychological Review
Psychological Science
Psychonomic Bulletin & Review
Quantum
Quarterly Journal of Experimental Psychology
Scientific Reports
Synthese
Trends in Cognitive Sciences

Conference Reviewing

Advances in Neural Information Processing Systems
Cognitive Science Society Annual Meeting

Other Reviewing

Routledge
MIT Press