



# Neil Robert Bramley

## Curriculum Vitae

### Academic experience

- 2024–present **Reader in Cognitive Psychology (US Associate Professor equiv.)**, *Department of Psychology, School of Philosophy, Psychology and Language Sciences, University of Edinburgh, Scotland.*
- 2019–2024 **Lecturer in Cognitive Psychology (US Assistant Professor equiv.)**, *Department of Psychology, School of Philosophy, Psychology and Language Sciences, University of Edinburgh, Scotland.*
- 2017–2018 **Moore-Sloan Postdoctoral Associate**, *Psychology Department & Center for Data Science, New York University, New York, NY, USA.*
- 2015 **Visiting Researcher**, *CoCoSci Lab, Department of Psychology, University of California, Berkeley, USA.*
- 2011–2012 **Research Assistant**, *Biological and Experimental Psychology, Queen Mary, University of London, England.*

### Education

- 2013–2017 **PhD, Experimental Psychology**, *UCL, London.*  
Title: Constructing the world: Active causal learning in cognition  
Supervisors: Prof David Lagnado & Prof Peter Dayan  
*Winner 2017 BPS Award for Outstanding Doctoral Research*
- 2012–2013 **MRes, Computer Science**, *UCL, London.*
- 2010–2011 **MSc, Cognitive & Decision Sciences**, *UCL, London.*
- 2005–2009 **MA (Hons), Philosophy**, *University of Glasgow, Glasgow.*

### Publications

Peer reviewed articles

1. Gong, T. and N. R. **Bramley** (2024). Evidence from the future. *Journal of Experimental Psychology: General*.
2. **Bramley**, N. R. and F. Xu (2023). Active inductive inference in children and adults: A constructivist perspective. *Cognition* **238**(105471).
3. **Bramley**, N. R., B. Zhao, T. Quillien, and C. G. Lucas (2023). Local search and the evolution of world models. *Topics in Cognitive Science*.
4. Btesh, V., D. A. Lagnado, M. Speekenbrink, and N. R. **Bramley** (2023). Swipe and hold: Composing interventions in continuous time causal learning. In: *Proceedings of the 45<sup>th</sup> Annual Meeting of the Cognitive Science Society*. Austin, TX.

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5. Btesh, V. J., N. R. Bramley, J.-P. Fränken, M. Speekenbrink, and D. A. Lagnado (2023). Modeling infant object perception as program induction. In: *Proceedings of the Computational Cognitive Neuroscience Meeting, 2023*.
6. Cheyette, S. J., F. Callaway, N. R. **Bramley**, J. D. Nelson, and J. B. Tenenbaum (2023). Limits on information-processing governs active learning in humans. In: *Proceedings of the 45<sup>th</sup> Annual Meeting of the Cognitive Science Society*. Austin, TX.
7. Fränken, J.-P., C. G. Lucas, N. R. Bramley, and S. T. Piantadosi (2023). Modeling infant object perception as program induction. In: *Proceedings of the Computational Cognitive Neuroscience Meeting, 2023*.
8. Fränken, J.-P., S. Valentin, C. G. Lucas, and N. R. **Bramley** (2023). Naïve information aggregation in human social learning. *Cognition* **242**(105633).
9. Gong, T. and N. R. **Bramley** (2023). Continuous time causal structure induction with prevention and generation. *Cognition* **240**(105530).
10. Gong, T., T. Gerstenberg, R. Mayrhofer, and N. R. **Bramley** (2023). Active Causal Structure Learning in Continuous Time. *Cognitive Psychology* **140**(101542).
11. Quillien, T., A. Szollosi, N. R. **Bramley**, and C. G. Lucas (2023). Causal inference shapes counterfactual plausibility. In: *Proceedings of the 45<sup>th</sup> Annual Meeting of the Cognitive Science Society*. Austin, TX.
12. Szollosi, A., V. Grigoras, Q. Tadeq, C. G. Lucas, and N. R. **Bramley** (2023). How do instructions, examples, and testing shape task representations? In: *Proceedings of the 45<sup>th</sup> Annual Meeting of the Cognitive Science Society*. Austin, TX.
13. Valentin, S., S. Kleinegesse, N. R. **Bramley**, P. Seriès, M. U. Gutmann, and C. G. Lucas (2023). Designing Optimal Behavioral Experiments Using Machine Learning. *eLife* **13**:e86224.
14. Zhao, B., C. G. Lucas, and N. R. **Bramley** (2023). A model of conceptual bootstrapping in human cognition. *Nature Human Behaviour* **8**(1).
15. Zhao, B., C. G. Lucas, and N. R. Bramley (2023). Modeling infant object perception as program induction. In: *Proceedings of the Computational Cognitive Neuroscience Meeting, 2023*.
16. **Bramley**, N. R., A. Jones, T. M. Gureckis, and A. Ruggeri (2022). Children's failure to control variables may reflect adaptive decision making. *Psychonomic Bulletin & Review*.
17. **Bramley**, N. R. and A. Ruggeri (2022). Children's active physical learning is as effective and goal-targeted as adults'. *Developmental Psychology*.
18. Droop, S. and N. R. **Bramley** (2022). Inferring epistemic intention in simulated physical microworlds. In: *Proceedings of the 44<sup>th</sup> Annual Meeting of the Cognitive Science Society*. Austin, TX.
19. Fränken, J.-P., N. C. Theodoropoulos, and N. R. **Bramley** (2022). Algorithms of Adaptation in Inductive Inference. *Cognitive Psychology* **137**(101506).
20. Gong, T. and N. R. **Bramley** (2022). Intuitions and Perceptual Constraints on Causal Learning from Dynamics. In: *Proceedings of the 44<sup>th</sup> Annual Meeting of the Cognitive Science Society*. Austin, TX.
21. Marchant, N., B. Zhao, N. R. **Bramley**, D. Morales, and S. E. Chaigneau (2022). Categorizing perceived causal events. In: *Proceedings of the 44<sup>th</sup> Annual Meeting of the Cognitive Science Society*. Austin, TX: Cognitive Science Society.
22. Rehder, R. E., Z. J. Davis, and N. R. **Bramley** (2022). The paradox of time in dynamic causal systems. *Entropy* **24**(7), 863.
23. Valentin, S., N. R. **Bramley**, and C. G. Lucas (2022). Discovering Common Hidden Causes in Sequences of Events. *Computational Brain & Behavior*.
24. Zhao, B., N. R. **Bramley**, and C. G. Lucas (2022). Powering up causal generalization: A model of human conceptual bootstrapping with adaptor grammars. In: *Proceedings of the 44<sup>th</sup> Annual Meeting of the Cognitive Science Society*. Austin, TX.

25. Donkin, C., A. Szollosi, and N. R. **Bramley** (2021). Observing effects in various contexts won't give us general psychological theories. *Behavioral and Brain Sciences*.
26. Gong, T. and N. R. **Bramley** (2021). Learning preventative and generative causal structures from point events in continuous time. In: *Causal Inference & Machine Learning: Why now? – Workshop at Neural Information Processing Systems*. Ed. by E. Bareinboim, B. Scholkopf, T. Sejnowski, Y. Bengio, and J. Pearl.
27. Li, Z., N. R. **Bramley**, and T. M. Gureckis (2021). Expectations about future learning influence moment-to-moment feelings of suspense. *Cognition & Emotion* **35**(6), 1099–1120.
28. Ludwin-Peery, E. J., N. R. **Bramley**, E. Davis, and T. M. Gureckis (2021). Limits on Simulation Approaches in Intuitive Physics. *Cognitive Psychology* **127**(101396).
29. Valentin, S., S. Kleinegese, N. R. **Bramley**, M. U. Gutmann, and C. G. Lucas (2021). Bayesian Optimal Experimental Design for Simulator Models of Cognition. In: *AI for Science: Mind the Gaps – Workshop at Neural Information Processing Systems*. Ed. by M. Tegmark, A. Weller, M. Welling, and M. Zitnik.
30. Zhao, B., C. G. Lucas, and N. R. **Bramley** (2021a). Building Object-based Causal Programs for Human-like Generalization. In: *Causal Inference & Machine Learning: Why now? – Workshop at Neural Information Processing Systems*. Ed. by E. Bareinboim, B. Scholkopf, T. Sejnowski, Y. Bengio, and J. Pearl.
31. Zhao, B., C. G. Lucas, and N. R. **Bramley** (2021b). How do people generalize causal relations over objects? A non-parametric Bayesian account. *Computational Brain & Behavior* **5**, 22–44.
32. Davis, Z. J., N. R. **Bramley**, and R. E. Rehder (2020a). Causal structure learning in continuous systems. *Frontiers in Psychology* **11**(244).
33. Davis, Z. J., N. R. **Bramley**, and R. E. Rehder (2020b). The paradox of time in dynamic causal systems. In: *Proceedings of the 42<sup>nd</sup> Annual Meeting of the Cognitive Science Society*. Austin, TX: Cognitive Science Society.
34. Davis, Z. J., T. M. Gureckis, R. E. Rehder, and N. R. **Bramley** (2020). Human dynamic control under changing goals. In: *Causal learning for decision making workshop*. ICLR 2020.
35. Fränken, J.-P., N. Theodoropoulos, A. B. Moore, and N. R. **Bramley** (2020). Belief revision in a micro-social network: Modeling sensitivity to statistical dependencies in social learning. In: *Proceedings of the 42<sup>nd</sup> Annual Meeting of the Cognitive Science Society*. Austin, TX: Cognitive Science Society.
36. Gong, T. and N. R. **Bramley** (2020). What you didn't see: Prevention and generation in continuous time causal induction. In: *Proceedings of the 42<sup>nd</sup> Annual Meeting of the Cognitive Science Society*. Austin, TX: Cognitive Science Society.
37. Ludwin-Peery, E. J., N. R. **Bramley**, E. Davis, and T. M. Gureckis (2020b). Broken Physics: A conjunction fallacy effect in intuitive physical reasoning. *Psychological Science* **31**(12), 1602–1611.
38. Valentin, S., N. R. **Bramley**, and C. G. Lucas (2020). Learning hidden causal structure from temporal data. In: *Proceedings of the 42<sup>nd</sup> Annual Meeting of the Cognitive Science Society*. Austin, TX: Cognitive Science Society.
39. **Bramley**, N. R., T. Gerstenberg, R. Mayrhofer, and D. A. Lagnado (2019). Intervening in time. In: *Time and Causality in the Sciences (edited volume)*. Ed. by S. Kleinberg. Cambridge University Press.
40. Coenen, A., A. Ruggeri, N. R. **Bramley**, and T. M. Gureckis (2019). Testing one or multiple: How Beliefs about sparsity affect causal experimentation. *Journal of Experimental Psychology: Learning, Memory & Cognition* **45**(11), 1923–1941.
41. Li, S., Y. Sun, S. Liu, T. Wang, T. M. Gureckis, and N. R. **Bramley** (2019). Active physical inference via reinforcement learning. In: *Proceedings of the 41<sup>st</sup> Annual Meeting of the Cognitive Science Society*. Ed. by A. Goel, C. Seifert, and C. Freksa. Austin, TX: Cognitive Science Society.

42. Li, Z., N. R. **Bramley**, and T. M. Gureckis (2019). The critical moment is coming: Modeling the dynamics of suspense. In: *Proceedings of the 41<sup>st</sup> Annual Meeting of the Cognitive Science Society*. Ed. by A. Goel, C. Seifert, and C. Freksa. Austin, TX: Cognitive Science Society.
43. Ludwin-Peery, E. J., N. R. **Bramley**, E. Davis, and T. M. Gureckis (2019). Limits on the Use of Simulation in Physical Reasoning. In: *Proceedings of the 41<sup>st</sup> Annual Meeting of the Cognitive Science Society*. Ed. by A. Goel, C. Seifert, and C. Freksa. Austin, TX: Cognitive Science Society.
44. **Bramley**, N. R., T. Gerstenberg, R. Mayrhofer, and D. A. Lagnado (2018). Time in causal structure learning. *Journal of Experimental Psychology: Learning, Memory & Cognition* **44**(2), 1880–1910.
45. **Bramley**, N. R., T. Gerstenberg, J. B. Tenenbaum, and T. M. Gureckis (2018). Intuitive experimentation in the physical world. *Cognitive Psychology* **195**, 9–38.
46. **Bramley**, N. R., A. Rothe, J. B. Tenenbaum, F. Xu, and T. M. Gureckis (2018). Grounding compositional hypothesis generation in specific instances. In: *Proceedings of the 40<sup>th</sup> Annual Meeting of the Cognitive Science Society*. Austin, TX: Cognitive Science Society.
47. Davis, Z. J., N. R. **Bramley**, and R. E. Rehder (2018). Causal structure learning with continuous variables in continuous time. In: *Proceedings of the 40<sup>th</sup> Annual Meeting of the Cognitive Science Society*. Austin, TX: Cognitive Science Society.
48. Davis, Z. J., N. R. **Bramley**, R. E. Rehder, and T. M. Gureckis (2018). A causal model approach to dynamic control. In: *Proceedings of the 40<sup>th</sup> Annual Meeting of the Cognitive Science Society*. Austin, TX: Cognitive Science Society.
49. Meng, Y., N. R. **Bramley**, and F. Xu (2018). Children’s causal interventions combine discrimination and confirmation. In: *Proceedings of the 40<sup>th</sup> Annual Meeting of the Cognitive Science Society*. Austin, TX: Cognitive Science Society.
50. **Bramley**, N. R., P. Dayan, T. L. Griffiths, and D. A. Lagnado (2017). Formalizing Neurath’s ship: Approximate algorithms for online causal learning. *Psychological Review* **124**(3), 301–338.
51. **Bramley**, N. R., R. Mayrhofer, T. Gerstenberg, and D. A. Lagnado (2017). Causal learning from interventions and dynamics in continuous time. In: *Proceedings of the 39<sup>th</sup> Annual Meeting of the Cognitive Science Society*. Austin, TX: Cognitive Science Society.
52. Coenen, A., N. R. **Bramley**, A. Ruggeri, and T. M. Gureckis (2017). Beliefs about sparsity affect causal experimentation. In: *Proceedings of the 39<sup>th</sup> Annual Meeting of the Cognitive Science Society*. Austin, TX: Cognitive Science Society.
53. Schulz, E., E. D. Klenske, N. R. **Bramley**, and M. Speekenbrink (2017). Strategic exploration in human adaptive control. In: *Proceedings of the 39<sup>th</sup> Annual Meeting of the Cognitive Science Society*. Austin, TX: Cognitive Science Society.
54. **Bramley**, N. R., T. Gerstenberg, and J. B. Tenenbaum (2016). Natural science: Active learning in dynamic physical microworlds. In: *Proceedings of the 38<sup>th</sup> Annual Meeting of the Cognitive Science Society*. Austin, TX: Cognitive Science Society, pp.2567–2573.
55. McCormack, T., N. R. **Bramley**, C. Frosch, F. Patrick, and D. A. Lagnado (2016). Children’s Use of Interventions to Learn Causal Structure. *Journal of Experimental Child Psychology* **141**, 1–22.
56. **Bramley**, N. R., P. Dayan, and D. A. Lagnado (2015). Staying afloat on Neurath’s boat: Heuristics for sequential causal learning. In: *Proceedings of the 37<sup>th</sup> Annual Meeting of the Cognitive Science Society*. Austin, TX: Cognitive Science Society, pp.262–267.
57. **Bramley**, N. R., D. A. Lagnado, and M. Speekenbrink (2015). Conservative forgetful scholars: How people learn causal structure through interventions. *Journal of Experimental Psychology: Learning, Memory & Cognition* **41**(3), 708–731.
58. **Bramley**, N. R., T. Gerstenberg, and D. A. Lagnado (2014). The order of things: Inferring causal structure from temporal patterns. In: *Proceedings of the 36<sup>th</sup> Annual Meeting of the Cognitive Science Society*. Austin, TX: Cognitive Science Society, pp.236–242.

## Book chapters

59. **Bramley**, N. R., T. Gerstenberg, R. Mayrhofer, and D. A. Lagnado (2019). Intervening in time. In: *Time and Causality in the Sciences (edited volume)*. Ed. by S. Kleinberg. Cambridge University Press.

## Theses

60. **Bramley**, N. R. (Feb. 2017). "Constructing the world: Active causal learning in cognition". PhD thesis. UCL.
61. **Bramley**, N. R. (July 2013). "Algorithms for active causal learning". MRes thesis, UCL.
62. **Bramley**, N. R. (July 2011). "Mechanisms of active causal learning". MSc thesis, UCL.

## Posters

63. **Bramley**, N. R., J. D. Nelson, M. Speekenbrink, V. Crupi, and D. A. Lagnado (n.d.). *What should causal learners value?* Poster presented at the Annual Meeting of the Psychonomic Society.
64. **Bramley**, N. R., M. Speekenbrink, and D. A. Lagnado (n.d.). *Mechanisms of active causal learning*. Poster presented at the 35<sup>th</sup> Annual Meeting of the Cognitive Science Society.
65. Droop, S. and N. R. **Bramley** (2023). *Extending counterfactual reasoning models to capture unconstrained social explanations*. Poster presented at the 45<sup>th</sup> Annual Meeting of the Cognitive Science Society.
66. Fränken, J.-P., S. Valentin, C. G. Lucas, and N. R. **Bramley** (2021). *Know your network: Sensitivity to structure in social learning*. Poster presented at the 43<sup>rd</sup> Annual Meeting of the Cognitive Science Society. Austin, TX.
67. Ludwin-Peery, E. J., N. R. **Bramley**, E. Davis, and T. M. Gureckis (2020a). *A Generalization Test of Conjunction Errors in Physical Reasoning*. Poster presented at the 42<sup>nd</sup> Annual Meeting of the Cognitive Science Society. Austin, TX.
68. Otero Mediero, H. and N. R. **Bramley** (2020). *Contrasting RNN-based and simulation-based models of human physical parameter inference*. Poster presented at the 42<sup>nd</sup> Annual Meeting of the Cognitive Science Society. Austin, TX.
69. Zhao, B. and N. R. **Bramley** (2020). *Order effects in one-shot causal generalization*. Poster presented at the 42<sup>nd</sup> Annual Meeting of the Cognitive Science Society. Austin, TX.

## Miscellaneous

70. Davis, Z. J., T. M. Gureckis, R. E. Rehder, and N. R. **Bramley** (2020). Human dynamic control under changing goals. In: *Causal learning for decision making workshop*. ICLR 2020.
71. **Bramley**, N. R. (2014). *Book Review: Future-Minded: The Psychology of Agency and Control by Magda Osman*. In: *The London School of Economics Review of Books*.

## Supervision

- PhD Supervision
- Jan-Philipp Franken (primary supervisor, 2022, now postdoc at Stanford)
  - Bonan Zhao (primary supervisor, 2023, now postdoc at Princeton)
  - Tianwei Gong (primary supervisor, 2023, now postdoc at Edinburgh)
  - Stephanie Droop (primary supervisor, expected 2025)
  - Nicolas Navarre (primary supervisor, expected 2027)
  - Fahd Yasin (secondary supervisor, expected 2024)
  - Simon Valentin (secondary supervisor, expected 2024)
  - Ella Markham (secondary supervisor, expected 2026)
  - Ruaridh Mon-Williams (secondary supervisor, expected 2027) Susanne Haridi (advisory panel, MPI Biological Cybernetics, Tübingen, expected 2026)
  - Yuan Meng (dissertation committee, Berkeley, CA, USA, 2022)
  - Naomi Steer (tertiary supervisor/AI consultant, Glasgow University, expected 2025)

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- Masters dissertations Paulina Weiss, Edinburgh (2023)  
 Wenjia Zhang, Edinburgh (2023)  
 Maohua Nie, Edinburgh (2022)  
 Stephanie Droop, Edinburgh (2021)  
 Jonas Nagel, Edinburgh (2020)  
 Yuyan Zhang, Edinburgh (2020)  
 Tobias Thejll-Madsen (2020)  
 Tianwei Gong, Edinburgh (2020)  
 Hector Mediero, Edinburgh (2019)  
 Mingxuan Mei, Edinburgh (2019)  
 Yves Wang, Galen Li, Cecilia Sun & Scarlett Liu, NYU (2018)  
 Pablo León Villagr a, UCL (2015)  
 Alexandra Surdina, UCL (2014)  
 George Deane, UCL (2014)
- Undergraduate dissertations Sai Tamkevicius, Barnabas Both & Jack Grinstead (2023)  
 Janice Wong & Felix Scrivens (2022)  
 Jim MacKay & Rapha Redfern (2022)  
 Zach Million, Edinburgh (2021)  
 Archie Miles, Edinburgh (2021)  
 Rue Chaladauskaite & Ingrid Holmen (2019)  
 Emily Bowie (2019)

## Grants

- 2021-2024 **£799,324.51**, *Computational constructivism: The algorithmic basis of discovery*, UKRI EPSRC New Investigator Award.  
 Col: Christopher G. Lucas,  
 Advisory panel: Fei Xu, Josh Tenenbaum, Todd Gureckis, Subramanian Ramamoorthy
- 2023 **£3,000**, *Small Research Grant*, Small internal grants: Pilot work toward a Leverhulme Applicant.
- 2023 **Under review**, Toward a unified theory of conceptual diversity, Leverhulme Research Project Grant, (Requesting £316,804).
- 2023 **Rejected**, Foundations of the mind, *Leverhulme Doctoral Training Centre*, (Requested ≈£3M).  
 Col: Hugh Rabagliati, Jennifer Culbertson, Mazviita Chirimuuta

## Awards and Scholarships

- 2023 Computational Modeling Prize in Higher-level Cognition for “Limits on information-processing governs active learning in humans” at CogSci (\$1000)
- 2023 Student Partnership Agreement: Small internal grant for cohort building activities: Funding a reading group (£500)
- 2022 Turing Postdoc Award (to Aba Szollosi with Maarten Speekenbrink and myself) (£2000)
- 2021 Edinburgh Futures Institute Small Project Award to run Computational Cognitive Science Retreat (~£2500)
- 2021 Edinburgh University Students Association, Outstanding Course Nominee
- 2020 International Union of Psychological Science: Young Investigator Award for Basic Science
- 2017 British Psychological Society Award for Outstanding Doctoral Research Contributions to Psychology (£500)
- 2016 Experimental Psychology Society Grindley Award (£500)
- 2016 UCL School of Life & Medical Sciences, Graduate School Conference Awards (£1204)
- 2015 Robert J. Glushko and Pamela Samuelson Foundation Award for top 20 student papers at CogSci (\$500)

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- 2015 UCL School of Life & Medical Sciences, Graduate School Conference Awards (£1470)
- 2015 Bogue Research Fellowship from UCL funding 3 month visit to UC Berkeley and NYU in the USA (£3000)
- 2012 – 2016 London Centre for Financial Computing and Analytics 4-year EPSRC PhD scholarship (£79,600)
- 2011 Award for best performing student in MSc Cognitive Decision Sciences (£150)

## Invited talks

- Apr 2024 UCL Computational Psychiatry Seminar (remote)
- Mar 2024 Discussant for David Lagando's Online Causal Inference Seminar (remote)
- Dec 2024 CAMRADES, Clinical & Brain Sciences, Edinburgh
- Sep 2023 Beliefs, Narratives & Memory, TUM, Munich
- May 2023 PPLS Research Day 2023, University of Edinburgh
- May 2023 London Judgment & Decision Making Seminar, UCL, England
- Feb 2022 CogSciCon, University of Edinburgh
- Oct 2021 Colloquium, Center for Cognitive Computation, Central European University (remote)
- Apr 2021 Colloquium, University of New South Wales, Sydney, Australia (remote)
- Jan 2021 Colloquium, University of Surrey, UK (remote)
- Apr 2020 Lab Meeting, Computational Principles of Intelligence Lab, Tübingen, Germany (remote)
- May 2020 Lab Meeting, Causality in Cognition Lab, Stanford (remote)
- Sep 2019 Psychology and Economics of Causal Reasoning, UCL, London
- Aug 2019 Interacting Minds, Egmont aan Zee, Holland
- May 2019 Task-Agnostic Reinforcement Learning Workshop, ICLR, New Orleans, USA
- Apr 2019 iSearch, Max Planck Institute, Berlin, Germany
- Mar 2019 Centre for Logic, Language & Cognition, Amsterdam, Netherlands
- Feb 2019 CDT Pizza & Data, University of Edinburgh, Scotland
- Feb 2019 Human Cognitive Neuroscience Seminar, University of Edinburgh, Scotland
- Aug 2018 Program induction workshop, CogSci2018, Madison, WI, USA
- Apr 2018 Neuroscience Showcase, Center for Data Science, NYU, New York, NY, USA
- Mar 2018 Center for Data Science lunchtime series, NYU, New York, NY, USA
- Mar 2018 Psychology colloquium, UC Berkeley, Berkeley, CA, USA
- Feb 2018 Psychology colloquium, UC Irvine, Costa Mesa, CA, USA
- Oct 2017 Tenenbaum Lab, MIT, Cambridge, MA, USA
- Aug 2017 ILCC series, Informatics Forum, University of Edinburgh, UK
- Mar 2017 ConCats, NYU, New York, NY
- Mar 2016 Summerfield lab, Experimental Psychology, University of Oxford, UK
- Oct 2015 London Judgment and Decision Making Group, UCL, London, UK
- Jul 2015 Decision Making Symposium, Birkbeck, London, UK
- Mar 2015 Computational Cognitive Science Lab, UC Berkeley, CA, USA
- Feb 2015 Centre for Logic, Language and Cognition, University of Turin, Italy
- May 2014 Max Planck Institute for Human Development, Berlin, Germany

## Conference & Workshop Presentations

- May 2023 Causality and Heuristics in the Sciences, UCL, England
- May 2019 Causal Cognition in Humans and Machines, Oxford, England

Oct 2018 Moore Sloane Data Science Summit, Park City, UT, USA  
 Oct 2017 Moore Sloane Data Science Summit, New Orleans, LA, USA  
 Jul 2017 CogSci2017, London, UK  
 May 2017 TaCitS, Hoboken, New Jersey  
 Feb 2017 Gureckis lab talk, NYU, New York, NY, USA  
 Aug 2016 CogSci2016, Philadelphia, PA, USA  
 Aug 2016 ICT16, Brown University, Providence, RI, USA  
 Aug 2015 CogSci2015, Pasadena, CA, USA  
 Jul 2014 Decision making Bristol, University of Bristol, UK  
 Jul 2013 SPUDM24, ISCE, Barcelona, Spain  
 Jul 2013 MathPsych, Potsdam, Germany  
 Mar 2012 TeaP (Conference on Experimental Psychology), Mannheim, Germany  
 Feb 2012 Causality Workshop, Causal Cognition Group, UCL, London, UK  
 Aug 2011 Causality Workshop, Causal Cognition Group, UCL, London, UK  
 Mar 2011 English Graduate Conference on Lies and Deception, UCL, London, UK

## Summer schools, symposia & conferences organised

Jun 2022 “Edinburgh Computational Cognitive Science Summer Workshop”, Edinburgh, Scotland  
 Co-organisers: Zachary Horne  
 Sep 2021 “Cognition, Communication and Computation Workshop”, Firth, Scotland.  
 Jul 2021 “Symbolic and sub-symbolic systems in people and machines”, CogSci2021, Vienna (remote).  
 Co-organisers: Simon Valentin, Bonan Zhao, Chentian Jiang  
 Aug 2019 “Interacting Minds”, Joint research centre of University of Amsterdam and University of Edinburgh.  
 Co-organisers: Sonja Smets, Wendy Johnson, Jelle Zuidema, Raquel Fernández, Hannah Rohde, Ivan Titov, Leendert van Maanen  
 Aug 2018 “Learning as Program induction” CogSci018, Madison, Wisconsin  
 Discussants: Josh Tenenbaum, Fei Xu, Laura Schulz, Noah Goodman, Steven Piantadosi, Marie Almaric, Eric Schulz, Neil Bramley, Ishita Dasgupta, Josh Rule, Lucas Morales  
 Aug 2016 “Beyond Bayes nets” ICT16, Brown University  
 Discussants: James Woodward, Anna Coenen, Neil Bramley, Elias Bareinboim and Steven Sloman  
 Sep 2013 “Forecasting, monitoring, controlling: Dealing with a dynamic world”, UCL  
 One day conference featuring Brad Love, Magda Osman, Nigel Harvey, Stephan Lewandowsky, Stian Reimers and many others

## Teaching

University of Edinburgh, 2022/23  
 INFR11210 Seminar in Cognitive Modelling  
 University of Edinburgh, 2021/22  
 PPLS10160 Causal Cognition  
 PSYL10090 Psychology General Tutorial  
 University of Edinburgh, 2020/21  
 PPLS10160 Causal Cognition  
 PSYL10090 Psychology General Tutorial  
 PPLS08002 Introduction to Cognitive Science



University of Edinburgh, 2019/20

PPLS08002 Causal Cognition

PSYL10090 Psychology General Tutorial

PPLS08002 Introduction to Cognitive Science

University of Edinburgh, 2018/19

PSYL10090 Psychology General Tutorial

PSYL08012 Psychology 2B, Psychology of language lectures

## Professional service

2020–present **Editorial Board Member.**  
Psychological Science

2019–present **Editorial Board Member.**  
Cognitive Science Society

2012–present **Ad hoc reviewer.**  
*PNAS, Cognitive Psychology, Cognition, Psychological Science, JEP: General, JEP: Learning, Memory & Cognition, Memory & Cognition, Cognitive Science, Topics in Cognitive Science, Journal of Behavioral Decision Making, Experimental Psychology, Quarterly Journal of Experimental Psychology, Open Mind, PloS One, CogSci Conference Proceedings, Computational Brain & Behavior, Artificial Intelligence, Frontiers in Cognitive Science, Topics in Cognitive Science*

2017–2018 **Seminar series organizer, NYU, New York, NY.**  
ConCats (Concepts and categories)

2012–2016 **Seminar series organizer, UCL, London, UK.**  
LJDM (London Judgment and Decision Making)

## Computer skills

Modelling / statistics C, C#, Cogent, Lisp, Julia, Jupyter, Mathematica, MATLAB, Python, Pytorch, R, Scikit Learn, SPSS, Stan, Tensor Flow, WebPPL, WinBUGS

Web development AWS, ActionScript, Box2D, CSS, Flash, Flask, Flex, HTML5, Hugo, Git, Java, Javascript, Jekyll, Perl, PHP, PsiTurk, Ruby, SQL

Misc Illustrator, Microsoft Office, LaTeX, Sublime

## Languages

English **Native**

Spanish **Intermediate**

German **Basic**

## References

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