

COLIN KLEIN

CURRICULUM VITAE

School of Philosophy
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EMPLOYMENT & AFFILIATIONS

Australian National University

- Professor, School of Philosophy (2021-)
- Associate Professor, School of Philosophy (2018-2020)
- ARC Future Fellow (2014-2018)
- Research Fellow, School of Philosophy (2013)

Macquarie University

- Senior Lecturer, Department of Philosophy (2015–2018)
- Lecturer, Department of Philosophy (2014–2015)
- Associate Investigator, ARC Centre of Excellence in Cognition and its Disorders (CCD) (2014–2018)

University of Illinois at Chicago

- Associate Professor, Department of Philosophy (2011–2013)
- Assistant Professor, Department of Philosophy (2006–2011)
- Member, Laboratory of Integrative Neuroscience (2006–2013)

EDUCATION

Ph.D in Philosophy, Princeton University (January 2007)

Dual B.A. *summa cum laude* in Philosophy and Scientific & Philosophical Studies
of Mind, Franklin and Marshall College (2001)

PUBLICATIONS

BOOKS

- *What the Body Commands: The Imperative Theory of Pain.* (2015) Cambridge, MIT Press.

EDITED COLLECTIONS

- *Mind Design III: Philosophy, Psychology, and Artificial Intelligence.* (2023) John Hauge-land, Carl Craver, and Colin Klein Cambridge: MIT Press.
- *Social Virtue Epistemology.* ed Mark Alfano, Colin Klein, and Jeroen De Ridder. (2022). New York: Routledge.

ARTICLES, CHAPTERS, AND PROCEEDINGS

- “Epistemic minimax and related principles in the contemporary epistemic environment” Mark Alfano, Marinus Ferreira, Ritsaart Reimann, Marc Cheong, and Colin Klein. Forthcoming in Popa-Wyatt, M. (ed.), *Misinformation and Other Epistemic Pathologies*. Cambridge University Press.
- “Pain asymbolia is probably still pain” (2026) Alexandre Duval and Colin Klein. *Philosophy of Science*. 93(1): 221–229. <https://doi.org/10.1017/psa.2025.10098>
- “Computational Individuation: Isomorphism, not Indeterminacy” (2026) *Analysis* 86(1): 60–70. <https://doi.org/10.1093/analysis/anaf003>
- “Represented structure versus representational structure: A challenge for interpreting LLMs” (2026) *Philosophy and the Mind Sciences* 7: 1–12. <https://doi.org/10.33735/>

phimisci.2026.12137

- “Identifying Indicators of Consciousness in AI Systems” Patrick Butlin et. al. (2025) *Trends in Cognitive Sciences* 30(6): 488–501. <https://doi.org/10.1016/j.tics.2025.10.011>
- “Phenomenal interface theory: a model for basal consciousness” (2025) Colin Klein and Andrew Barron. *Philosophical Transactions of the Royal Society B*, 380: 20240301. <https://royalsocietypublishing.org/doi/10.1098/rstb.2024.0301>
- “Measuring Moral Dimensions in Social Media with Mformer” (2024) Tuan Dung Nguyen, Ziyu Chen, Nicholas George Carroll, Alasdair Tran, Colin Klein, Lexing Xie *Proceedings of the International AAAI Conference on Web and Social Media* 18, 1134–1147
- “Exploratory analysis and the expected value of experimentation” (2024) *Philosophy of Science* 91(5): 1109–1117
- “Trust in a Social and Digital World” (2024) Mark Alfano & Colin Klein *Social Epistemology*, 38:6, 669–673.
- “Cognitive Ontology” (2024) *The Open Encyclopedia of Cognitive Science* <https://doi.org/10.21428/e2759450.6ddb1c41>
- “Comparing cognition across major transitions using the hierarchy of formal automata” Colin Klein and Andrew Barron (2024) *WIREs Cognitive Science* e1680; <http://doi.org/10.1002/wcs.1680>
- “Addressing Climate Change with Behavioral Science: A Global Intervention Tournament in 63 Countries” Vlasceanu, M., Doell, K. C., Bak Coleman, . . . Van Bavel, J. J. (2024) *Science Advances* 10(6), eadj5778
- “Investigating gender and racial biases in DALL-E Mini Images” Marc Cheong, Ehsan Abedin, Marinus Ferreira, Ritsaart Willem Reimann, Shalom Chalon, Pamela Robinson, Joanne Byrne, Leah Ruppner, Mark Alfano & Colin Klein (2024) *ACM Journal on Responsible Computing* 1(2)13: 1–20. <https://doi.org/10.1145/3649883>
- “Transduction, calibration, and the penetrability of pain” (2024) *Ergo*. 10: 50. <https://doi.org/10.3998/ergo.5187>
- “Consciousness in Artificial Intelligence: Insights from the Science of Consciousness” (2023) Patrick Butlin, Robert Long, et al. <https://arxiv.org/abs/2308.08708>
- “Is Pain Asymbolia a Deficit or a Syndrome? Historical Reflections on an Ongoing Debate.” (2023) Colin Klein and Alexandre Duval. *Belgrade Philosophical Annual* (special issue in honor of Nikola Grahek) 36/02 p41–57.
- “The affiliative use of emoji and hashtags in the Black Lives Matter movement in Twitter.” (2023) Mark Alfano, Ritsaart Reimann, Ignacio Ojea Quintana, Marc Cheong, and Colin Klein. *Social Science Computer Review* 41(6): 2145–2160..
- “Computing in the nick of time” (2023) Brendan Ritchie and Colin Klein. *Ratio* 36(3): 169–179.
- “Transitions in cognitive evolution” (2023) Andrew Baron, Marta Halina, and Colin Klein. *Proceedings of the Royal Society B* 290: 20230671
- “The `wisdom_of_crowds`: an efficient, philosophically-validated, social epistemological network profiling toolkit” (2023) Colin Klein, Marc Cheong, Marinus Ferreira, Emily Sullivan, and Mark Alfano. In: Cherifi, H., Mantegna, R.N., Rocha, L.M., Cherifi, C., Miccichè, S. (eds) *Complex Networks and Their Applications XI*. (Studies in Computational Intelligence, vol 1077). 62–73.
- “A Tragic Coalition of the Rational and Irrational: A threat to collective responses to COVID-19” (2023) Marinus Ferreira, Marc Cheong, Colin Klein, and Mark Alfano. *Philosophical Psychology* 36(6): 1062–1079.
- “Explaining Neural Transitions through Resource Constraints” (2022) *Philosophy of Science* 89(5), 1196–1202.
- “Polarization and trust in the evolution of vaccine discourse on Twitter during COVID-

- 19” (2022) Ignacio Ojea Quintana, Ritsaart Reimann. Marc Cheong, Mark Alfano, Colin Klein. *PLOS ONE* 17(12): 1–21. <https://doi.org/10.1371/journal.pone.0277292>
- “Attention and counter-framing in the Black Lives Matter movement on Twitter” (2022) Colin Klein, Ritsaart Reimann, Ignacio Ojea Quintana, Marc Cheong, Marinus Ferreira, and Mark Alfano. *Humanities and Social Sciences Communications*. 9:367
 - “Mapping Topics in 100,000 Real-life Moral Dilemmas” (2022) Tuan Dung Nguyen, Georgiana Lyall, Alasdair Tran, Minjeong Shin, Nicholas Carroll, Colin Klein, and Lexing Xie. *Proceedings of the International AAAI Conference on Web and Social Media* 16(1), 699–710.
 - “Introduction: A research program for social virtue epistemology.” (2022) Mark Alfano, Colin Klein, and Jeroen de Ridder. In *Social Virtue Epistemology*. ed Mark Alfano, Colin Klein, and Jeroen De Ridder. (2022). New York: Routledge.
 - “Evolutionary Transition Markers and the Origins of Consciousness” (2022) Marta Halina, David Harrison, and Colin Klein. *Journal of Consciousness Studies* 29(3-4): 62–77.
 - “The Coordination Dilemma For Epidemiological Modelers” (2021) Ignacio Ojea Quintana, Sarita Rosenstock, and Colin Klein. *Biology and Philosophy* 36(54): 1–17.
 - “Technologically scaffolded atypical cognition: The case of YouTube’s recommender system” (2021) Mark Alfano, Amir Ebrahimi Fard, J Adam Carter, Peter Clutton, Colin Klein. *Synthese* 199: 835–858.
 - “The Ethical Gravity Thesis: Marrian Levels and the Persistence of Bias in Automated Decision-making Systems” (2021) Atoosa Kasirzadeh and Colin Klein. in *AIES ’21: Proceedings of the 2021 AAAI/ACM Conference on AI, Ethics, and Society* pp 618–626
 - “Do we represent peripersonal space?” (2021) in *The World at our Fingertips: A Multidisciplinary Exploration of Peripersonal Space* ed F. de Vignemont, H.Y. Wong, A. Serino, and A. Farné. Oxford: Oxford University Press. pp139–154
 - “What is the job of the job description challenge? A case study from body representation” Colin Klein and Peter Clutton. (2021) in *Neural Mechanisms: New Challenges in Philosophy of Neuroscience* ed Fabrizio Calzavarini & Marco Viola. Dordrecht: Springer. pp 449–465.
 - “A Humean challenge to predictive coding” (2021) in *The Philosophy and Science of Predictive Processing* ed Dina Mendonça, Manuel Curado, and Steven Gouveia. Bloomsbury Press. pp25–38.
 - “Explanation in the Science of Consciousness: From the Neural Correlates of Consciousness (NCCs) to the Difference Makers of Consciousness (DMCs)” Colin Klein, Jakob Hohwy, and Tim Bayne. (2020) *Philosophy and the Mind Sciences* 1(II), 4. <https://doi.org/10.33735/phimisci.2020.II.60>
 - “Polychrony and the process view of computation” (2020) *Philosophy of Science* 87(5): 1140–1149.
 - “How Experimental Neuroscientists Can Fix the Hard Problem of Consciousness” (2020) Colin Klein and Andrew Barron *Neuroscience of Consciousness* 6(1): niaa009
 - “Putting the ‘social’ back in social psychology” (2020) *Current Controversies in Philosophy of Cognitive Science*, Routledge, ed. Adam J. Lerner, Simon Cullen, Sarah-Jane Leslie. pp 174–187.
 - “First-person interventions and the meta-problem of consciousness” (2020) Colin Klein and Andrew Barron *Journal of Consciousness Studies* 27(5-6): 82–90.
 - “Pain and Spatial Inclusion: Evidence from Mandarin” (2020) Michelle Liu and Colin Klein. *Analysis* 80(2): 262–272
 - “Pathways to conspiracy: the social and linguistic precursors of involvement in Reddit’s conspiracy theory forum” (2019) Colin Klein, Peter Clutton, and Adam Dunn. *PLOS ONE* 14(11) 1–23.
 - “Trust in a Social and Digital World” (2019) Mark Alfano and Colin Klein. *Social Epis-*

- temology Review and Reply Collective* 8(10): 1-8. <https://wp.me/p1Bfg0-4tk>
- “Decoding the Brain: Neural Representation and the Limits of Multivariate Pattern Analysis in Cognitive Neuroscience” (2019) Brendan Ritchie, David Kaplan, and Colin Klein. *The British Journal for the Philosophy of Science* 70(2): 581–607.
 - “Imperativism and Pain Intensity” Colin Klein and Manolo Martínez (2019) in *The Philosophy of Pain: Unpleasantness, Emotion, and Deviance*. ed. David Bain, Michael Brady, and Jennifer Corns. New York: Routledge, pp13–27.
 - “Computation, Consciousness, and ‘Computation and Consciousness’” (2019) In *Routledge Handbook of the Computational Mind*, ed. Mark Sprevak and Matteo Colombo, 297–309.
 - “Mechanisms, Resources, and Background Conditions” (2018) *Biology and Philosophy* 33(5): 36
 - “Ghosts in Machine Learning for Cognitive Neuroscience: Moving from Data to Theory” (2018) Thomas A Carlson, Erin Goddard, David M Kaplan, Colin Klein, J. Brendan Ritchie. *Neuroimage* 180(A): 88–100
 - “Interpreting the dimensions of neural feature representations revealed by dimensionality reduction” (2018) Erin Goddard, Colin Klein, Samuel G Solomon, Hinze Hogendoorn, and Thomas A Carlson. *Neuroimage* 180(A): 41–67.
 - “What do predictive coders want?” (2018) *Synthese* 195(6): 2451-2557.
 - “Topic Modeling Reveals Distinct Interests Within an Online Conspiracy Forum” (2018) Colin Klein, Peter Clutton, and Vince Polito. *Frontiers in Psychology* 9: 189.
 - “Hypocrisy and Moral Authority” Jessica Isserow and Colin Klein. (2017) *Journal of Ethics and Social Philosophy* 12(2): 191-222.
 - “Taxonomising Delusions: Content or Aetiology?” Peter Clutton, Stephen Gadsby, and Colin Klein. (2017) *Cognitive Neuropsychiatry* 22(6): 508-527.
 - “Pain, care, and the Body: A response to de Vignemont” (2017) *Australasian Journal of Philosophy* 95(3): 588–593
 - “Imperativism” (2017) in *The Routledge Handbook of Philosophy of Pain*, ed. Jennifer Corns. New York: Routledge: 51-59.
 - “Brain regions as difference makers” (2017) *Philosophical Psychology* 30(1–2): 1–20.
 - “What is a Cognitive Ontology, Anyway?” Anelli Janssen, Colin Klein, and Marc Slors. (2017) *Philosophical Explorations* 20(2) 123–128. “Cognitive ontologies in philosophy of mind and philosophy of psychiatry”
 - “Consciousness, Intention, and Command Following in the Vegetative state” (2017) *The British Journal for the Philosophy of Science*. 68(1): 27-54.
 - “Wang Chong’s epistemology of testimony” Esther Klein and Colin Klein (2016) *Asia Major Third Series*, 29(2): 115–147.
 - “Insect consciousness: Commitments, conflicts and consequences” (2016) Colin Klein and Andrew Barron. *Animal Sentience* 1(9.21) <http://animalstudiesrepository.org/animsent/vol1/iss9/21/>
 - “Insects have the capacity for subjective experience” (2016) Colin Klein and Andrew Barron. *Animal Sentience*. 1(9.1) <http://animalstudiesrepository.org/animsent/vol1/iss9/1/>
 - “Pain signals are predominantly imperative” (2016) Manolo Martínez and Colin Klein. *Biology and Philosophy* 31:283–298.
 - “What insects can tell us about the origins of consciousness” Andrew Barron and Colin Klein (2016) *Proceedings of the National Academy of Sciences* 113(18): 4900–4908.
 - “Olympia and other O-Machines” (2015) *Philosophia* 43(4): 925–931.
 - “Variability, convergence and dimensions of consciousness” (2015) Colin Klein and Jakob Hohwy. In *Behavioral Methods In Consciousness* ed. Morten Overgaard, Oxford: Oxford University Press: 249–264.
 - “What Pain Asymbolia Really Shows” (2015) *Mind* 124(494): 493–516.

- “The Brain At Rest: What It Is doing and Why that Matters” (2014) *Philosophy of Science* 81(5) : 974–985.
- “Psychological Explanation, Ontological Commitment, and the Semantic view of Theories” (2014) in *New Waves in Philosophy of Mind*, ed. Mark Sprevak and Jesper Kallestrup. New York, Palgrave Macmillan: 208-225.
- “The Penumbral Theory of Masochistic Pleasure” (2014) *The Review of Philosophy and Psychology* 5(1):41-55
- “No Problem.” (2014) David Hilbert and Colin Klein. In *Consciousness Inside and Out*, ed Richard Brown. Oxford: Oxford University Press: 299-306.
- “Multiple Realizability and the Semantic View of Theories” (2013) *Philosophical Studies* 163(3): 683-695.
- “Imperatives, Phantom Pains, and Hallucination by Presupposition” (2012) *Philosophical Psychology* 25(6): 917-928.
- “Cognitive Ontologies and Region- versus Network-Oriented Analyses” (2012) *Philosophy of Science* 79(5): 952-960.
- “Two Paradigms for Implementation” (2012) *Journal of Cognitive Science* 13(2): 167-179.
- “The Dual Track theory of Moral Decision-Making: A Critique of the Neuroimaging Evidence” (2011) *Neuroethics* 4, pp143-162.
- “Neuroimaging senza localizzazione” *Sistemi Intelligenti* (2011). Trans. Massimo Marraffa a. XXIII, n. 1, Aprile 2011, pp113-132.
- “Response to Tumulty on Pain and Imperatives” (2010) *The Journal of Philosophy* CVII(10), pp 554-557.
- “Images are not the Evidence in Neuroimaging” (2010) *The British Journal for the Philosophy of Science*. 61, pp. 265-278
- “Confirmation, Refutation and The Evidence of fMRI.” (2010) Chris Mole and Colin Klein. In *Foundational Issues in Human Brain Mapping*, ed. Martin Bunzl and Stephen José Hanson. Cambridge, MIT press: 99-112.
- “Philosophical Issues in Neuroimaging.” (2010) *Philosophy Compass*. 5(2), pp. 186-198.
- “Reduction Without Reductionism: A Defence of Nagel on Connectability.” (2009) *Philosophical Quarterly*. 59(234), pp. 39-53.
- “Dispositional Implementation Solves the Superfluous Structure Problem.” (2008) *Synthese*. 165(1), pp. 141-153.
- “An Ideal Solution to Disputes about Multiply Realized Kinds.” (2008) *Philosophical Studies*. 140(2), pp. 161-177.
- “An Imperative Theory of Pain.” (2007) *The Journal of Philosophy* CIV(10), pp. 517–532.
- “Kicking the Kohler Habit.” (2007) *Philosophical Psychology* 20(5), pp. 609–619.
- “Events as Changes in the Layout of Affordances.” (2003) Anthony Chemero, Colin Klein and William Cordeiro. *Ecological Psychology*, 15(1), 19-28.

LETTERS, COMMENTARIES, AND REVIEWS

- “Neural Evolution as the Key to Major Transitions in Cognitive Evolution” (2025) Colin Klein, Marta Halina, and Andrew Barron. Commentary on “A multi-trait embodied framework for the evolution of brains and cognition across animal phyla” in *Behavioral and Brain Sciences*. 48(e90).
- “Introduction to ‘Trust in the Digital and Social World’” (with Mark Alfano). Forthcoming in *Social Epistemology*
- “The virtues you project and the vices you have: Commentary on Meyer and Alfano” (2022) in *Social Virtue Epistemology* ed Alfano, Ridder, Klein.
- “How should we study animal consciousness scientifically?” Jonathan Birch et al. (2022) *Journal of Consciousness Studies* 29(3-4): 8–28
- Review of *The Complex Reality of Pain* by Jennifer Corns. (2022) *Mind* 131(523) 988–997.

- Review of *The Emotional Mind: A Control Theory of Affective States* by Tom Cochrane *Notre Dame Philosophical Reviews* (October 2020).
- “Holistic resource-rational analysis” (2020) Julia Haas and Colin Klein. Commentary on “Resource-rational analysis: understanding human cognition as the optimal use of limited computational resources” by Falk Lieder and Thomas L. Griffiths. *Behavioral and Brain Sciences* v43, e11.
- “Commentary on Bayne” (2019) Online symposium at Brains Blog on Axiomatizations of IIT <https://tinyurl.com/yycr2eop>
- Review of *Philosophy and Computing: Essays in Epistemology, Philosophy of Mind, Logic, and Ethics*, ed. Thomas Power. *Notre Dame Philosophical Reviews* (May 2018).
- ‘Precaution, proportionality and proper commitments.’ (2017) Commentary in *Animal Sentience* 16(9). <http://animalstudiesrepository.org/animalsent/vol2/iss16/9/>
- Review of *Tense Bees and Shell-Shocked Crabs: Are Animals Conscious?* by Michael Tye. *Notre Dame Philosophical Reviews* (April 2017).
- “Reply to S.A. Adamo, B. Key et al, and M. Schilling & H. Cruse: Crawling around the hard problem of consciousness.” Colin Klein and Andrew Barron (2016) *Proceedings of the National Academy of Sciences* 13(27), E3814-E3815
- Review of *Reliability in Cognitive Neuroscience: A Meta-Meta-Analysis* by William R. Uttal. (2015) *Philosophical Psychology* 28(4): 606-609.
- Review of *Engineering the Next Revolution in Neuroscience: The New Science of Experiment Planning* by Alcino J. Silva, Anthony Landreth, and John Bickle. (2014) *Philosophy of Science* 81(3): 486-489.
- Review of *Brain Imaging; What it Can (and Cannot) Tell us about Consciousness* by Robert G. Shulman. *Notre Dame Philosophical Reviews* (June 2013).
- Review of *Explaining the Brain* by Carl F. Craver (2012) *Mind* 121(481): 165-169.
- “Did the Chinese have a Change of Heart?” (2012) Esther Klein and Colin Klein. *Cognitive Science* 36(2), pp. 179-182.
- “Critical Notice: *Cognitive Systems and the Extended Mind* by Robert Rupert” (2010) *The Journal of Mind and Behavior* 31(3&4), pp. 253-264.
- “Redeployed Functions Versus Spreading Activation: A Potential Confound” (2010) Commentary on “Neural reuse: A fundamental organizational principle of the brain” by Michael L. Anderson. *Behavioral and Brain Sciences* 33, pp. 280-281.

SPECIAL ISSUES EDITED

- 2024 Special issue of *Social Epistemology* (with Mark Alfano) on “Trust in a Digital and Social World”
- 2019 special issue of *Social Epistemology Review and Reply Collective* (With Mark Alfano) on “Trust in a Social and Digital World”
- 2017 special issue of *Philosophical Explorations* (with Marc Slors and Anelli Janssen). 20/2 on “Cognitive ontologies in philosophy of mind and philosophy of psychiatry”

WHITE PAPERS, PREPRINTS, TECHNICAL REPORTS, AND SOFTWARE

- “Exploring major transitions in the evolution of biological cognition with artificial neural networks” Voudouris, K., Barron, A.B., Klein, C., Halina, M., and Patel, M. arXiv preprint. <https://arxiv.org/abs/2509.13968>
- “What do language models model? Transformers, automata, and the format of thought” arXiv preprint. <https://arxiv.org/abs/2508.18598>
- “The International Climate Psychology Collaboration: Climate change-related data collected from 63 countries” (2024) Doell, K.C., Todorova, B., Vlasceanu, M. et al. *Scientific Data* 11, 1066 (2024). <https://doi.org/10.1038/s41597-024-03865-1>

- `wisdom_of_crowds` Python package, available at <https://github.com/cvklein/wisdom-of-crowds>
- “Automated clustering of COVID-19 anti-vaccine discourse on Twitter” Ignacio Ojea Quintana, Marc Cheong, Mark Alfano, Ritsaart Reimann, and Colin Klein. <https://arxiv.org/abs/2203.01549>

RECENT CONFERENCE AND INVITED TALKS

- Diffusion Models Represent Directively. HilbertFest UIC, Sep 2026; Stanford University, Sep 2026.
- Addiction and the Perception of Value, DIDU 2026, Sydney, June 2026
- Holism and the Basis of Consciousness. New Ideas in NCC Research, Bamberg (online), May 2026.
- Representing structure versus representational structure. Information in Silicon and Neurons, Macquarie University, Nov 2025.
- Google and the Bee (With Andrew Barron). NIBAI-2025, Sheffield, Sep 2025.
- Phenomenal interface theory: a model for basal consciousness (With Andrew Barron). Google Deepmind, Sep 2025; Institute of Philosophy, London, Sep 2025.
- The Krohn-Rhodes Theorem for the Mathematically Apathetic Philosopher. AAP 2025, Jul 2025
- Pain asymbolia as a taxonomic question. National Yang Ming Chiao Tung University, May 2025
- Transformers and the format of thought. ANU, Apr 2025; CUNY Grad Center, Nov 2024; Johns Hopkins University, Nov 2024; Washington University St Louis, Oct 2024; University of Pittsburgh, Oct 2024; NYU Philosophy of Mind, Oct 2024.
- Comparing cognition across major transitions using the hierarchy of formal automata. Princeton Natural and Artificial Minds group, Nov 2024.
- Social epistemology in the Digital Age, Many Minds, Princeton University, Oct 2024.
- Homeostatic Sensations and the Phenomenal Interface Theory, (with Andrew Barron) ASSC 27, Tokyo, Jul 2024.
- Computation: Indeterminate, Invertible, Isomorphic. Foundations of Computation, ANU Jul 2023; AAP 2023, Jul 2023
- Sticky concepts in comparative philosophy: the case of Yin-Yang (with Esther Klein). UHM-ANU Workshop, Apr 2023
- Exploratory data analysis and the effective value of experimentation. Philosophy of Science Association, Nov 2022
- Transduction, Calibration, and the Cognitive Penetration of Pain. Online Keynote, Italian Association for Cognitive Science Sep 2021; Tübingen University (via Zoom) Jan 2022; Sydney University Mar 2022; Australian Catholic University Sep 2022
- How do we represent peripersonal space? Australian National University, Sep 2022
- Explaining Neural Transitions Through Resource Constraints. Philosophy of Science Association (via Zoom), Nov 2021; Australasian Society for Philosophy and Psychology, Feb 2022
- Is Pain Cognitively Penetrable? InvestMind18 Ruhr-University Bochum, November 2018; ANU Colloquium Series Apr 2021
- Computation is medium-independent, but computational explanation is not. Carleton University (via Zoom), Jan 2021

OTHER RECENT SEMINARS AND COLLOQUIA

- Transitional thinking in Cognitive Evolution. ANU Evolvability Workshop, June 2023
- Attention and Counter-Framing in the Black Lives Matter movement on Twitter. ANU Philosophy of Journalism Workshop, April 2023. MQ Digital Trust Workshop, Nov 2022;

Centre for Social Research Methods at ANU, May 2022

- Predictive coding and bandwidth for change. Emotion, Affect, and Predictive coding workshop, ANU, June 2022.
- Pain as consciousness of a bodily command. Asia Pacific Consciousness Seminar, March 2022
- The Ethical Gravity Thesis: Marrian Levels and the Persistence of Bias in Automated Decision-making Systems Atoosa Kasirzadeh and Colin Klein. AIES 2021 poster session, May 2021
- The Dynamics of Online Trust: Twitter Case Studies and Future Directions. ANU RSP Seminar (via Zoom) May 2021
- Online conspiracy theorising and the psychology of trust. CPAS Brownbag Sep 2020, Sydney University, April 2017.
- Technologically scaffolded atypical cognition: The case of YouTube’s recommender system. Social and Behavioural Dynamics of Attention, ANU Feb 2020
- Implicit Bias and Gender in Philosophy: Panel Discussant, AAP Conference, July 2019
- Topic Modeling and Online Conspiracy Theories. ANU CPS Workshop on Online Misinformation, July 2019

SELECTED ENGAGEMENT

- “Are animals and AI conscious? We’ve devised new theories for how to test this” in *The Conversation*, November 2025 <https://doi.org/10.64628/AA.gnyjpr7cn>
- “Why ChatGPT isn’t conscious – but future AI systems might be” in *The Conversation*, September 2023. <https://tinyurl.com/4yyxx2hu>
- “Why do people believe Conspiracy Theories?” Library Association of NSW, May 2021. U3A Canberra, May 2021.
- Beyond fake news: are we suffering from an information disorder? (Panelist) Australian Library and Information Association (Via Zoom) Feb 2021
- “How close is too close?” Frédérique de Vignemont and Colin Klein. *Aeon*, November 2020. <https://tinyurl.com/y34soyws>
- “Don’t (just) blame echo chambers. Conspiracy theorists actively seek out their online communities” Colin Klein, Adam Dunn, and Peter Clutton. *The Conversation*, November 2019 <https://tinyurl.com/u5cvucu>
- “The ‘painless woman’ helps us see how anxiety and fear fit in the big picture of pain” in *The Conversation*, April 2019 <http://tinyurl.com/yy9mc3oa>; translated for Indonesian Edition May 2019 <https://tinyurl.com/y5gx5kk7>
- Exhibit video for “Born or Built?” exhibit, Questacon, Canberra 2019-present
- “Why we need more than just data to create ethical driverless cars” (Seth Lazar and Colin Klein) in *The Conversation*, October 2018. <https://tinyurl.com/y8javks7>
- Radio ABC Breakfast with Simon Lauder: regular guest during 2018.
- “Online conspiracy theorists are more diverse (and ordinary) than most assume” (Colin Klein, Peter Clutton, and Vince Polito). In *The Conversation*, March 2018, <https://tinyurl.com/y7xsktno>
- “Gay-identifying AI tells us more about stereotypes than the origins of sexuality.” In *The Conversation*, September 2017 <https://tinyurl.com/y7xghe4l>
- “The Philosophy of Pain,” invited presentation to the ‘Kinky Hong Kong’ gathering (via Skype), November 2016.
- Live radio interview for ABC Radio National Afternoons on insect consciousness, April 22, 2016. Archived version at <http://tinyurl.com/jnj7lg>
- “What can insects tell us about the origins of consciousness?” (Colin Klein and Andrew Barron) in *The Conversation*, April 2016 <http://tinyurl.com/z5zk4tv>

MAJOR GRANTS

- Australian Research Council Discovery Project (2024-2027) “Finding equivalence between natural and artificial intelligences” (with Andrew Barron) DP240100400.
- Australian Research Council Discovery Project (2024-2027) “Trust and Distrust in Social Epistemic Networks” (with Mark Alfano) DP240100914
- Templeton World Charity Foundation (2021-2025) “The major transitions in the evolution of cognition” TWCF-2020-20539 (with Andrew Barron and Marta Halina)
- Australian Research Council Discovery Project (2019-2024) “Trust in a Social and Digital World” (with Mark Alfano) DP190101507
- Templeton World Charity Foundation (2020-2022) “Moral Skill and Artificial Intelligence.” (with Claire Benn, Seth Lazar, and Jenny Davis)
- ANU Humanising Machine Intelligence Grand Challenges Project (2019-2024), co-CI
- ANU Futures Grant (2018-2023)
- Australian Research Council Future Fellowship “Changing your mind by changing your brain: An interventionist perspective on cognitive neuroscience” FT140100422 (2014-2018)

AWARDS AND FELLOWSHIPS

- Visiting Fellow, Princeton University (Fall 2024)
- CASS Award for Excellence in Education (Highly Commended) 2022
- Visiting International Professor, Ruhr University Bochum (2017-2018)
- David Harold Tribe Philosophy Award (2016), awarded for *What the Body Commands*
- Faculty Award for Research Excellence, Macquarie University (2016)
- Research Fellow, Australian National University (2013)
- UIC Humanities Institute Fellow (2009-10)

CONFERENCES AND WORKSHOPS ORGANISED

- “New Directions in Philosophy of Suffering” ANU, November 2026
- Major Transitions Grant Retreat, ANU Kioloa, April 2024 & 2025
- Australasian Society for Philosophy and Psychology 2023, ANU, December 2023
- “Foundations of Computation” ANU, July 2023
- “Neural computation and neural representation” ANU, September 2022
- “Digital Trust Workshop” ANU, Feb 2022
- “Scientific Modelling: Pushing the boundaries” ANU, June 2019
- “Recent work on attention” (co-organiser). ANU, May 2019
- The Australasian Society for Philosophy and Psychology 2018 (organising committee), Macquarie University, Dec 2018.
- “Animal Sentience: Pushing the Boundaries,” ANU, August 2018
- “Conspiracy theories, delusions and other ‘troublesome’ beliefs”, Macquarie University, August 2017
- “Reshaping the mind: New work on cognitive ontology,” Macquarie University, June 2016
- Joint workshop “The Feeling of Suffering” (co-organised with the Glasgow Value of Suffering project, CAVE, and UNSW), Macquarie University, February 2016
- Australasian Association for Philosophy (Organixing Committee), Macquarie University, July 2015
- CAVE-CCD Workshop: “Amnesia and identity: Self, memory, and moral psychology” (co-organiser), Macquarie University, 2015
- “Predictive Coding, Agency, and Delusions” Macquarie University, May 2015
- Macquarie Cognitive Ontology Workshop, Macquarie University, February 2015
- Sid Simpson Symposium (co-organixer with the Laboratory for Integrative Neuroscience), University of Illinois at Chicago, April 2012

ANU SERVICE

- Director, ANU Centre for Consciousness (2026-present)
- Deputy Head (Education), School of Philosophy (2024-present)
- School of Philosophy BPNP Liaison, (2024-2026)
- Advisory Panel, John Eccles Institute of Neuroscience (2024)
- Deputy Head, School of Philosophy (2019-2024)
- Bachelor of Philosophy, Neuroscience, and Psychology working group (2022-2024)
- Affiliate Investigator, Humanising Machine Intelligence Project (2022-2024)
- School of Philosophy Equity Working Group (2019-2024)
- ANU NECTAR mentoring program (2019-2021)
- Executive Committee, Humanising Machine Intelligence Project (2018-2022)
- CI, Humanising Machine Intelligence Project (2018-2022)
- School Representative, RSSH Visiting Fellows Committee (2018-2024)
- ANU School of Philosophy Website Taskforce (2018-2019; 2021-2023)
- Acting Director, ANU Centre for the Philosophy of Sciences (2018)

PROFESSIONAL SERVICE

- Philosophy Section Editor, Open Encyclopedia of Cognitive Science (2023-present)
- Secretary, Australasian Society for Philosophy and Psychology (2017-2019; 2022-2024; 2026-present)
- Aphil-L list czar, 2022-2023
- Area editor for *Ergo* (philosophy of mind), (2015-2023)
- Advisory board, “The Cognitive Neuroscience of Religious Cognition,” (John Templeton Foundation, 2022)
- Program Committee Member, Philosophy of Science Association (2014, 2020)
- Initial Organising Committee, Australasian Society for Philosophy and Psychology (2016)
- Associate editor for *Philosophical Explorations* (2015-2018)
- Program Committee Member, European Philosophy of Science Association (2015)
- Program Committee Member, Australasian Society for Cognitive Science (2014)

POSTDOCTORAL SUPERVISION

- Osman Attah (2025-present, ARC)
- Alexandre Duval (2022-2025; TWCF)
- Sarita Rosenstock (2019-2022; HMI)
- Ignacio Ojea Quintana (2019-2022; DP190101507 & ANU Futures)
- Atoosa Kasirzadeh (2019-2021; HMI)
- Julia Haas (2019; ANU Futures)

POSTGRADUATE ADVISING

- **The Australian National University**
 - PhD:**
 - Eamon Little (in progress, primary advisor)
 - Sophie Dortmans (in progress, primary advisor)
 - Matthew McGuire (in progress, primary advisor)
 - Robert Farquaharson (in progress; committee)
 - Aidan Ryall (in progress; committee)
 - Ross Pain (2022; committee) *Evidence, Inference and Human Evolution: Essays in the Philosophy of Cognitive Archaeology*
 - Masters & Honours:**
 - (^{*}1st class honours; [†]University medalist)

- Ben Lloyd-Hurwitz (2025*†) “The Web of Disagreement Tailoring Deep Disagreement and Intellectual Play to Our Political Needs”
- Derrick Appel (2024*) *Conspiracy Theories Sans Frontier: Mapping the International Diffusion of Conspiracy Theories Online and Examining Social Epistemological Implications*
- Josh Nguyen (2023; committee; Masters in Computer Science) *Data-Driven Understanding of Real-Life Moral Dilemmas*
- Rex Henderson (2022*) *Can We Align Democratic Artificial Moral Agents With Our Values?*
- Helen Chen (2020*) *Can the Meta-Problem of consciousness make progress on the Hard Problem?*
- Maeva Bennetto Peris (2018) *Mouse Models of Autism: Frameworks and Limitations*
- **Macquarie University**
 - PhD:**
 - Anelli Janssen (2019; joint between Macquarie University and Nijmegen. Primary Supervisor) *Cognitive ontology and explanations in functional neuroimaging research*
 - Antonios Kaldas (Primary Supervisor through 2017; completed 2019) *Attention, Consciousness, and Working Memory*
 - Matthew Tuxford (Primary Supervisor through 2017; completed 2019) *Complexity Economics: A Mechanistic Methodological Framework for Economic Science*
 - Trisha Nowland (Associate Supervisor through 2017) *A conceptual framework for the generalized latent variable model.*
 - MRes (As primary supervisor):**
 - Meg Ivory (in 2017) *Drosophila melanogaster as a model for schizophrenia: a philosophical inquiry.*
 - Stephen Gadsby (2016) *Anorexia Nervosa and Body Representation*
 - Dinyar Mistry (2015) *Models of Neural Computation: An Examination of David Chalmers’ Causal Theory of the Mind*
 - Peter Clutton (2015*) *A Realist Defence of Doxasticism about Delusions: The Cognitive Phenomenological Defence* (*Received university medal)
- **University of Illinois at Chicago (PhD)**
 - David Schaffer (2018) *Towards an Account of Passive Belief* (Committee)
 - Janella Baxter (2017) *Causal Parity and Causal Selection in Molecular and Cellular Biology.* (Committee)
 - Burak Ozturk (2014) *The Pessimistic Induction and Epistemic Status of Theories: The Extent and The Limits of Post-Computerization Optimism* (Primary Supervisor)
 - Sean Morris (2012) *Investigating the Universe: Quine, New Foundations, and the Philosophy of Set Theory* (Committee)
 - Aleks Zarnitsyn (2012) *Fictioning Thought Experiments* (Committee)
 - Robert Fischer (2011) *Modal Knowledge, In Theory* (Associate Supervisor)
 - Seishu Nishimura (2010) *A Theory of Perceptual Entitlement* (Associate Supervisor)
 - David Potts (2010) *Theories of Experiential Awareness* (Associate Supervisor)
- **Elsewhere**
 - Laurenz Casser (2024; UT Austin, external co-supervisor) *Foundations of Pain*
 - Sabrina Coninx (2019; Ruhr-Universität Bochum. Joint Supervisor.) *Experiencing Pain – A Scientific Enigma & Its Philosophical Solution.*

Last compiled September 11, 2026