

## RESEARCH

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**Areas of Specialization:** philosophy of biology, history and philosophy of science, scientific metaphysics

**Areas of Competence:** bioethics, philosophy of art, early modern philosophy of science

## EDUCATION

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<i>May 2024 (Expected)</i>	<b>Duke University</b> Ph.D. in Philosophy <i>Dissertation: "Groundwork of the Metaphysics of Models"</i> <i>Committee: Alex Rosenberg (co-advisor), Robert Brandon (co-advisor), Dan McShea, Marc Lange, and Charles Pence</i>  M.S. in Biology <i>Committee: Dan McShea, V. Louise Roth, Alex Rosenberg</i>
<i>July 2023-June 2024</i>	<b>University of Pennsylvania</b> Visiting Scholar, Department of Philosophy <i>Hosts: Michael Weisberg and Quayshawn Spencer</i>
<i>July 2019</i>	<b>Georgia State University</b> M.A. in Philosophy <i>Committee: Dan Weiskopf and Andrea Scarantino</i>
<i>December 2016</i>	<b>Missouri Western State University</b> B.S. in Biology and Philosophy

## PUBLICATIONS

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7. **Hazelwood, Caleb.** (2023). "An Emerging Dilemma for Reciprocal Causation." *Philosophy of Science*, 1-43. doi:10.1017/psa.2023.124
6. **Hazelwood, Caleb.** (2023). "Newton's 'law-first' epistemology and 'matter-first' metaphysics." *Studies in History and Philosophy of Science*, 101, 40-47. <https://doi.org/10.1016/j.shpsa.2023.08.005>
5. **Hazelwood, Caleb.** (2023). "Reciprocal causation and biological practice." *Biology and Philosophy* 38, 5 <https://doi.org/10.1007/s10539-023-09895-0>
4. D'Aguillo, Michelle, **Caleb Hazelwood**, Brandie Quarles, Kathleen Donohue. (2021). "Genetic Consequences of Biologically Altered Environments." *Journal of Heredity*. <https://doi.org/10.1093/jhered/esab047>
3. **Hazelwood, Caleb.** (2021). "Practice-Centered Pluralism and a Disjunctive Theory of Art." *The British Journal of Aesthetics*. <https://doi.org/10.1093/aesthj/ayaa039>
2. Nijhout, H. Frederik., Anna M. Kudla, and **Caleb C. Hazelwood.** (2021). "Genetic assimilation and accommodation: Models and mechanisms." *Current Topics in Developmental Biology*. S. F. Gilbert, Academic Press. 141: 337-369.
1. **Hazelwood, Caleb.** (2018). "The species category as a scientific kind." *Synthese*.

## BOOK REVIEWS

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3. **Hazelwood, Caleb.** (Forthcoming). Dickins, T.E. and Dickins, B.J. eds., 2023. *Evolutionary biology: contemporary and historical reflections upon core theory*. Springer Nature. *The Quarterly Review of Biology*.
2. **Hazelwood, Caleb.** (2023). “Review of Charles H. Pence’s *The Causal Structure of Natural Selection*.” *Philosophy of Science*.
1. **Hazelwood, Caleb.** (2022). Bruce S. Grant, *Observing Evolution: Peppered Moths and the Discovery of Parallel Melanism*. Baltimore, Maryland: Johns Hopkins University Press, 2021. *History and Philosophy of the Life Sciences* 44, 52 <https://doi.org/10.1007/s40656-022-00543-6>

## PRESENTATIONS (\*\* = invited)

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24. \*\* “Title: TBD”  
*Brandonfest: A Conference in Honor of Robert Brandon’s Career*  
Duke University, 3-4 May 2024
23. \*\* “An Emerging Dilemma for Reciprocal Causation”  
*Lake Geneva Biological Interest Group*  
University of Geneva (attended virtually), 28 November 2023
22. \*\* “Reciprocal Causation and Biological Practice”  
*Evolvability: a bridge between the proximate and the ultimate?*  
Australian National University, 26-28 June 2023
21. \*\* “Metaphysics and the Philosophy of Biology”  
With Charles Pence at the *Philosophy of Biology Workshop*  
Australian National University, 21-23 June 2023
20. “The Unbearable Lightness of Intervening: Realist Metaphysics for Manipulability Theories of Causation”  
With Yasmin Haddad at *Mechanisms and Ontic Causation in Life Sciences*  
Université catholique de Louvain, 15-16 June 2023
19. \*\* “Revisiting the Metaphysics and Models of ‘Reciprocal Causation’”  
*Consortium for the History and Philosophy of Biology*  
Université Paris 1 Panthéon-Sorbonne, 10-11 May 2023
18. “Newton’s ‘Law-First’ Epistemology and ‘Matter-First’ Metaphysics”  
*9<sup>th</sup> Conference of Integrated History and Philosophy of Science*  
University of South Carolina, 16-18 March 2023
17. “An Emerging Dilemma for Reciprocal Causation”  
*The 28<sup>th</sup> Biennial Meeting of the Philosophy of Science Association*  
Pittsburgh, PA. 10-13 November 2022
16. “Non-Causal Explanations of Complex Evolutionary Systems”  
*Causality and Complexity: A Conference for Philosophy and Science*  
University of Salzburg, 29-30 September 2022

15. “The Limitations of Biological Examples in Evolutionary Explanations”  
*The Ninth Biennial Conference of the Society for Philosophy of Science in Practice*  
University of Ghent, 2-4 July 2022
14. “An Emerging Dilemma for Reciprocal Causation”  
*New Perspectives on Causation in the Life Sciences*  
University of Kent, 27-28 June 2022
13. “Newton’s Solution to the Problem of Bodies”  
*Fourteenth Biennial Congress of the International Society for the History and Philosophy of Science*  
University of California, Irvine, 20-23 June 2022
12. “Niche construction alters the expression of genetic variance and covariance”  
*American Genetics Association President’s Symposium, “Genes as Environment”*  
(hosted virtually due to COVID-19), 15-18 November 2020
11. “Evolutionary Causation and Biological Practice: An Experimental Approach”  
*Philosophy of Biology at the Mountains*  
(hosted virtually due to COVID-19), 29 June 2020
10. “Niche Construction Theory: Difficulties for a Practice Approach to Scientific Metaphysics”  
*The 5th Annual Society for the Metaphysics of Science Conference*  
University of Toronto, 7-9 November 2019
9. “Niche Construction Theory: Difficulties for a Practice Approach to Theoretical Pluralism”  
*The Second Meeting of Philosophy in Biology and Medicine*  
University of Bordeaux, 14-15 October 2019
8. Poster: “Dismantling the Holobiont Problem for Evolutionary Individuality”  
With Lane DesAutels at *The 26<sup>th</sup> Biennial Meeting of the Philosophy of Science Association*  
Seattle, WA. 1-4 November 2018
7. Comments on Philippe Huneman: “Revisiting the Modern Synthesis: The Case of Ecology”  
*The Fifth European Advanced Seminar in the Philosophy of the Life Sciences*  
Konrad Lorenz Institute for Evolution and Cognition Research, 10-14 September 2018
6. “The Species Category as a Scientific Kind”  
*The Seventh Biennial Conference of the Society for Philosophy of Science in Practice*  
University of Ghent, 29 June-2 July 2018
5. “Navigating a plurality of ontological thresholds in practice-based theories of natural kinds”  
*The 7<sup>th</sup> Annual University of Calgary Graduate Philosophy Conference*  
University of Calgary, 3-4 May 2018
4. “Navigating a plurality of ontological thresholds in practice-based theories of natural kinds”  
*Learning from Empirical Approaches to HPS*  
University of Pittsburgh Center for Philosophy of Science, 6-7 April 2018
3. “Extending Evolutionary Individuality: An Appeal to Multi-Dimensional Heredity”  
With Lane DesAutels at *The Generalized Theory of Evolution*  
Dusseldorf Center for Logic and Philosophy of Science, 31 January-3 February 2018
2. “Extended Evolutionary Individuality: Revisiting the problem of biological individuality within the extended

evolutionary synthesis”  
*Interdisciplinary Workshop on Holobionts*  
University of Bordeaux, 6-8 November 2017

1. “CRISPR and Commercialization”  
The Hastings Center, July 2016

## **AWARDS AND FELLOWSHIPS**

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8. Dean’s Award for Excellence in Mentoring. Duke University. 2024.
7. Visiting Researcher. CEFISES, Université catholique de Louvain. 2023.
6. Dissertation Research Travel Award. Duke University. 2023.
5. Competitive Summer Research Fellowship. Duke University. 2023.
4. Ph.D. Student Peer Mentoring Fellowship. Duke University. 2021-2022.
3. Templeton Ideas Challenge. John Templeton Foundation. 2020.
2. Ralf F. Munster Fellowship for Excellence in Research. Georgia State University. 2019.
1. Emily Murray Undergraduate Fellowship. The Hastings Center. 2016.

## **SERVICE**

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Co-organizer, “Purpose, Agency, and Field Theory,” May 2024.  
Organizer, “Brandonfest: A Conference in Celebration of the Career of Robert Brandon,” May 2024.  
Organizing Committee, Meeting of the North Carolina Philosophical Society, March 2023.  
University Judicial Board, Duke University, Graduate School Representative, 2022-2023  
Newsletter Editor, Department of Philosophy, Duke University, 2022-2023

## **REFEREE EXPERIENCE**

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*Philosophy of Science* (x2); *Synthese* (x2); *Biology & Philosophy*; *The British Journal of Aesthetics*

## **TEACHING EXPERIENCE**

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### **University of Pennsylvania**

*Graduate Teaching Assistant* *January 2024 – Present*  
Repairing the Planet: Tools for the Climate Emergency (Carlos Gray Santana)

### **Duke University**

*Instructor of Record* *June 2022 – May 2023*  
Philosophy of Biology (x2)

Writing 101: Closing the Gender Gap in STEM  
Logic

*Graduate Teaching Assistant*

*August 2020 – August 2023*

Philosophy of Biology (Alex Rosenberg)  
Problems in the Philosophy of Science (Jennifer Jhun)  
Political Philosophy and Globalization (Alex Rosenberg)  
Introduction to Philosophy (Alex Rosenberg)  
Knowledge and Certainty (Ben Eva)

**Georgia State University**

*Instructor of Record*

*May 2018 – May 2019*

Critical Thinking (x7)

*Writing Across the Curriculum Consultant*

*August – December 2017*

Philosophy and Cognitive Science (Neil Van Leeuwen)

## **REFERENCES**

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### **Alex Rosenberg**

Dissertation Co-Advisor / Teaching Reference  
R. Taylor Cole Professor of Philosophy  
Duke University  
Email: [send.Rosenberg.D743C15222@interfoliodossier.com](mailto:send.Rosenberg.D743C15222@interfoliodossier.com)

### **Robert Brandon**

Dissertation Co-Advisor  
Professor of Philosophy  
Duke University  
Email: [send.Brandon.D0EB3015ED@interfoliodossier.com](mailto:send.Brandon.D0EB3015ED@interfoliodossier.com)

### **Marc Lange**

Dissertation Committee Member  
Theda Perdue Distinguished Professor of Philosophy  
University of North Carolina at Chapel Hill  
Email: [send.Lange.4E8AD188B1@interfoliodossier.com](mailto:send.Lange.4E8AD188B1@interfoliodossier.com)

### **Katherine Brading**

Department Chair  
Professor of Philosophy  
Duke University  
Email: [send.Brading.BCED37AA03@interfoliodossier.com](mailto:send.Brading.BCED37AA03@interfoliodossier.com)

### **Charles Pence**

Dissertation Committee Member  
Chargé de cours, Institut supérieur de philosophie  
Université catholique de Louvain  
Email: [send.Pence.5009D90B85@interfoliodossier.com](mailto:send.Pence.5009D90B85@interfoliodossier.com)