

GUNNAR O. BABCOCK

Department of Biology
Duke University
Durham, NC

gunnar.babcock@duke.edu

845-417-7704

gunnarbabcock.com

EDUCATION

University at Albany, SUNY
PhD in Philosophy, 2020
MA in Philosophy, 2017

Sarah Lawrence College
BA in Liberal Arts, 2008

RESEARCH INTERESTS

Areas of Specialization
Philosophy of Science, Philosophy of Biology

Areas of Competency
Metaphysics, Epistemology, Ancient Philosophy

APPOINTMENTS

Postdoctoral Associate
Dept. of Biology, Duke University
(Dec. 2020 – present)

Lecturer
Cognitive Science Dept., Rensselaer Polytechnic Institute
(Aug. 2022 – June 2023)

Research Associate
Dept. of Biology, Duke University
(June. - Dec. 2020)

RESEARCH

Peer-Reviewed Journal Articles:

Babcock, G., McShea, D.W., (forthcoming). “Goal directedness and the field concept”, *Philosophy of Science*

Babcock, G., (2023). “Teleology and function in non-living nature”, *Synthese*, 201(4)

Babcock, G., McShea, D.W., (2023). “Resolving teleology’s false dilemma”, *Biological Journal of the Linnean Society*, 39(4): 415-432

Babcock, G., (2021). “Are Synthetic Genomes Parts of a Genetic Lineage?”, *British Journal for the Philosophy of Science*, 72(4): 995-1011

Babcock, G., McShea, D.W., (2021). “An externalist teleology”, *Synthese*, 199: 8755-8780

Babcock, G., (2020). “Asexual organisms, identity and vertical gene transfer”, *Studies in History and Philosophy of Science Part C: Studies in History and Philosophy of Biological and Biomedical Sciences*, 81:101265

Book Chapters:

Babcock, G., McShea, D.W. (forthcoming). “Agency as internal control” In Baedke, J., Tejada, A.F., Radick, G. & Prieto, G.I. (Eds.), *The Riddle of Organismal Agency: New Historical and Philosophical Reflections*, Routledge.

Book Reviews:

Babcock G., (2022). “Review of *Rethinking Evolution: The Revolution That’s Hiding in Plain Sight*, by Gene Levinson”, *The Quarterly Review of Biology*, 97(1): 52-3

Public Philosophy:

“The split-body problem”, *Aeon Magazine*, March (2022). <https://aeon.co/essays/we-need-to-stop-thinking-about-sex-when-it-comes-to-reproduction>

In Progress:

“Functions without goals?” [under review]

“The ecological species concept: a solution to the species problem?” [draft available on request]

“Life’s purposes” (with Dan McShea) [commissioned by *Aeon Magazine*]

Grants and Funding:

- \$246,053 Co-Project Leader, Dept. of Biology, Duke University (start date Dec. 2022, 2.5-year project) Grant title: *Purpose, Agency, and Field Theory*
<https://www.templeton.org/grant/purpose-agency-and-field-theory>
- \$500 Hartwick College Faculty Development Grant: Fall (2019).
- \$1000 Graduate Student Employees Union Professional Development Grant: Spring (2018).
- \$16,000 Extended-Year Graduate Funding, SUNY Albany: (2018).
- \$2000 University at Albany Graduate Student Assn. Grants: (2016 & 2017).

Presentations:

“Functions without goals?” *Eighth Annual Conference of the Society for the Metaphysics of Science*, Halifax, NS, Canada (refereed paper: 2023).

“Reproductive symbiosis?” *Philosophy and Biology Shop Talks*, UNC at Greensboro, NC, (refereed abstract: 2023).

“What do we mean by ‘teleology’?” *Consortium in History and Philosophy of Biology*, Institut d’Histoire et de Philosophie des Sciences et des Techniques, Paris, France, (invited presentation: 2023).

“Agency in teleological systems”, [with Dan McShea] *The Place of the Organism in Biology and Medicine, 10th Ruhr University Bochum Workshop on the History and Philosophy of the Life Sciences*, remote (invited presentation: 2022).

“Beyond mechanisms: a field theoretic approach to explanations in biology, neuroscience, and elsewhere”, presented for the Cognitive Science Dept., Rensselaer Polytechnic Institute, Troy NY, (invited presentation: 2022).

“Field Goals: Three points about how teleology is structured”, [with Daniel McShea] *28th Biannual Meeting of the Philosophy of Science Association*, Pittsburgh, Pennsylvania, (refereed paper: 2022).

“New developments in the field theoretic approach to teleology”, *The Evolution of Complexity Conference*, The Milner Centre for Evolution, University of Bath, Bath, England, (invited presentation: 2022).

“Notions of ecosystem health”, presented for the Dept. of Science, Technology and Society, South Dakota School of Mines, Rapid City, SD, (invited presentation: 2022).

“Fission and genetic lineage pluralism”, *27th Biannual Meeting of the Philosophy of Science Association*, Baltimore, Maryland, (refereed paper: 2021).

“Species’ temporal parts”, *Sixth Annual Conference of the Society for the Metaphysics of Science*, remote conference, (refereed paper: 2021).

“An externalist teleology” [with Daniel McShea], *Linnean Society of London, “Evolution ‘On Purpose’: Teleonomy in Living Systems*, remote conference, (invited presentation: 2021).

“Can you own a species?”, Bentley University, sponsored by the Hoffman Center for Business Ethics, Waltham, MA., (invited presentation: 2020).

“Individuality and Binary Fission”, *What is an Individual Organism?* at Jagiellonian University. Krakow, Poland, (refereed abstract: 2019).

“Asexual Organisms, Identity and Vertical Gene Transfer” presented at the Philosophy Dept., University at Albany, Albany, NY, (refereed paper: 2019).

“Environmental Engineering: Value in Art & Nature” presented at Hartwick College and sponsored by the Hartwick Philosophy Dept, Oneonta, NY, (invited presentation: 2018)

“Pacifism, Morality, and Martial Arts” presented for the University at Albany chapter of Minorities and Philosophy, Albany, NY, (invited presentation: 2018).

“Synthetic Yeast & Historical Lineages”, *University of Calgary Graduate Philosophy Conference*, University of Calgary, Calgary, AB, Canada, (refereed paper: 2018).

“Discordance in the Species Category”, *Species in the Age of Discordance* at University of Utah. Salt Lake City, Utah, (refereed poster: 2017).

“Environmental Engineering and Human Intentionality”, *First Annual Bovay Workshop on Engineering and Applied Ethics*, Texas A&M. College Station, TX., (refereed paper: 2016).

Affiliations:

McShea Lab, Dept. of Biology, Duke University (2020-present)

Awards:

University at Albany Philosophy Graduate Essay Award (2019)

Recipient of *Zimmerman Prize for Excellence in Philosophical Work*, Sarah Lawrence College (2008)

PROFESSIONAL SERVICE

Journal Referee:

Theoria (2023), *Organon F* (2023), *Philosophy, Theory, and Practice in Biology* (2023), *Synthese* (2022), *Acta Biotheoretica* (2022), *Biological Journal of the Linnean Society* (2022), *BioSystems* (2022), *Evolutionary Biology* (2021)

Organizational Service:

Vice President of University at Albany Philosophical Assn. (2017-8, 2018-9)
Graduate Student Representative for University at Albany Philosophical Assn. (2017-8, 2018-9)
Presenter: Minorities and Philosophy Club presentations/meetings (2013-2017)
Grant Reviewer, Graduate Student Association (2016-7)
Review Coordinator, Graduate Student Conference (2016-7)
Reviewer, University at Albany Philosophical Assn. (2013-5 & 2020)

Conference Organizer/Commentator/Referee:

“On Purpose”, Dept. of Biology and Dept. of Philosophy, Duke University, Durham, NC, (2024).
“Biological Mistake Theory and the Question of Function”, *Eighth Annual Conference of the Society for the Metaphysics of Science*, Halifax, NS, Canada
“Philosophy of Biology” *13th Annual University at Albany Graduate Conference*, Albany, NY, (2021).
“Experimental Philosophy” *12th Annual University at Albany Graduate Conference*, Albany, NY, (2019).
“Environmental and Animal Philosophy” *9th Annual University at Albany Graduate Conference*, Albany NY, (2015).
“Moral Psychology” *8th Annual University at Albany Graduate Conference*, Albany NY, (2014).

Judge:

22nd Annual Eastern Section Junior Science and Humanities Symposium (2023).

TEACHING EXPERIENCE

Duke University

Life’s Purpose [graduate/undergraduate course, cross-registered in biology] (Fall 2023)
Independent Study/Senior thesis, “Mistakes in biology” (Fall/Spring 2023-4)

Rensselaer Polytechnic Institute

Philosophy of Biology (Fall 2022, Spring 2023)
Moral Dilemmas [two sections] (Spring 2023)
Great Ideas in Philosophy [two sections] (Fall 2022)

Independent Study, “Teleology and entropy” (Fall 2022)

Bard Early College, Hudson Valley

First Year Seminar, “The Examined Life” (Fall/Spring 2021)

Bard College at Simon’s Rock

Philosophical Problems (Fall 2021)

First Year Seminar, “The Examined Life” (Fall 2021)

Writing and Thinking Workshop (Summer 2021)

Hartwick College

Plato on Eros, Poetry, and Philosophy [upper division] (Spring 2019, Spring 2020)

Propaganda and Democracy [cross-registered in political science course] (Fall 2020)

Puzzles & Paradoxes: Philosophy and Science Fiction (Fall 2019)

Just the Facts!: Experimental Philosophy [cross-registered in psychology course] (Fall 2019)

Environmental Ethics (Spring 2019)

Happiness (Fall 2018, Spring 2020, Fall 2020)

Bioethics (Fall 2018)

Marist College

Philosophical Perspectives [two sections] (Fall 2019)

University at Albany, State University of New York

Moral Dilemmas (Spring 2018)

Philosophical Problems (Fall 2017)

Matanuska-Susitna College, University of Alaska

Introduction to Logic (Fall/Spring 2011-2)

Introduction to Philosophy (Spring/Fall 2012)

University at Albany, State University of New York

Philosophical Problems (Spring 2015)

Introduction to Ethical Theory (Spring 2016)

PROFESSIONAL MEMBERSHIPS

Philosophy of Science Association, 2020 - present

Society for the Metaphysics of Science, 2021 - present

REFERENCES

P.D. Magnus
Professor of Philosophy
University at Albany
pmagnus@albany.edu
518-442-4223

Daniel McShea
Professor of Biology [& philosophy]
Duke University
Editorial board member, *Biology & Philosophy*
dmc Shea@duke.edu
919-225-8679

David Oderberg
Professor and Chair of Philosophy
University of Reading
Editor, *Ratio*
d.s.oderberg@reading.ac.uk

Stefanie Rocknak
Professor and Chair of Philosophy
Hartwick College
rocknaks@hartwick.edu
607-431-4391

Ronald McClamrock
Associate Professor of Philosophy
University at Albany
rmcclamrock@albany.edu

Monika Piotrowska
Associate Professor of Philosophy
University at Albany
mpiotrowska@albany.edu

Sergei Nirenburg
Professor and Chair of Cognitive Science
Rensselaer Polytechnic Institute
zavedomo@gmail.com