ZVI BIENER-CV

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ACADEMIC & PROFESSIONAL APPOINTMENTS

2023-2025	President, International Society for the History and Philosophy of Science
2021-2023	Vice-President and President-Elect, <i>International Society for the History and Philosophy of Science</i>
2020-2026	Editor-in-Chief, PhilSci-Archive
2017-	Associate Professor of Philosophy, University of Cincinnati
2017-	Affiliate Faculty Judaic Studies and History Departments, and Center for Public Engagement with Science, University of Cincinnati
2011-2017	Assistant Professor of Philosophy, University of Cincinnati
2008-2011	Assistant Professor of Philosophy, Western Michigan University
2007–2008	Lecturer, Western Michigan University

EDUCATION

2008	Ph.D. History and Philosophy of Science, University of Pittsburgh
2005	M.A. Philosophy, University of Pittsburgh
1995	B.A. Philosophy, B.A. Physics, Rutgers University

ARTICLES ('*' DENOTES BLIND REVIEW)

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"Working Hypothesis, Mathematical Representation, and the Logic of Theory Mediation in Newton's *Principia*." With Mary Domki, in Chris Smeenk and Marius Stan (eds.), *Theory, Evidence, Data: the Philosophical Legacy of George E. Smith.* Springer, Boston Studies in the Philosophy and History of Science.

"Newton's Regulae Philosophandi," in Chris Smeenk and Eric Schliesser (eds.),

The Oxford Handbook of Isaac Newton. Oxford University Press.

Published online (2018) at doi: 10.1093/oxfordhb/9780199930418.013.4

"Mechanics in Newton's Wake" with Brian Hepburn, in Dana Jalobeanu and

David M. Miller (eds.) The Cambridge History of Philosophy of the Scientific

Revolution, Cambridge, Cambridge University Press, 293-312.

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- "Newtonianism: An Introduction," for *Encyclopedia of Early Modern Philosophy and the Sciences*, edited by Dana Jalobeanu and Charles T. Wolfe. Springer.
- * "Divergence of Values and Goals in Participatory Research." with Dunlap L, Corris A, Jacquart M, Biener Z, Potochnik A. *Studies in History and Philosophy of Science*. 14 (88): 284-291. doi: 10.1016/j.shpsa.2021.06.015.
- * "Definitions more Geometrarum and Newton's Scholium on Space and Time." Studies in History and Philosophy of Science 72 (2): 179-191. doi: 10.1016/j.shpsb.2020.05.005
- * "De Gravitatione Reconsidered: The Changing Significance of Experimental Evidence for Newton's Metaphysics of Space." *The Journal of the History of Philosophy* 55 (4): 583–608. doi: 10.1353/hph.2017.0067.
 - * "The Certainty, Modality, and Grounding of Newton's Laws." With Eric Schliesser. *The Monist* 100 (3): 311–325. Special issue on "Laws of Nature," edited by Angela Breitenbach and Michela Massimi. doi: 10.1093/monist/onx012.
 - * "From Kepler to Gibson." With Raja Galian, Vicente and Tony Chemero. *Ecological Psychology* 29 (2): 146-160. doi: 10.1080/10407413.2017.1297186. "Introduction." With Adams, M., Feest, U., and Sullivan J. In *Oppur si Mouve: Doing History and Philosophy of Science with Peter Machamer.* Springer.
- * "Newton and the Ideal of Exegetical Success." *Studies in History and Philosophy of Science, Part A* 60: 82-87. doi: 10.1016/j.shpsa.2016.07.001
 - * "Hobbes on the Order of Sciences: A Programmatic Defense of the Mathematization Thesis." *The Southern Journal of Philosophy* 54 (3): 312–332. doi: 10.1111/sjp.12175
 - "Issac Newton (1642–1727)." Routledge Encyclopedia of Philosophy. Routledge. doi:10.4324/9780415249126-Q075-2
- "Introduction." With Eric Schliesser. in *Newton & Empiricism*. Oxford University Press, p. 1-15.
- * "Cotes's Queries: Newton's Empiricism and Conceptions of Matter." With Chris Smeenk. In Janiak, Andrew and Schliesser, Eric (eds.), *Interpreting Newton*, Cambridge University Press, 103-137.
- * "Galileo's First New Science: The Science of Matter," *Perspectives on Science* 12 (3): 262-287. doi: 10.1162/1063614042795462
 - * "Pendulums, Pedagogy, and Matter: Lessons from the editing of Newton's *Principia*." With Chris Smeenk. *Science & Education* 13 (4-5): 309-320. doi: 10.1023/B:SCED.0000041825.12956.35
 - Reprinted in Matthews, M.R., Gauld, C.F. & Stinner, A. (eds.) (2005). *The Pendulum: Scientific, Historical, Philosophical and Educational Perspectives*, Springer, Dordrecht, 127-138. doi: 10.1007/1-4020-3526-8
 - "Physics." With Peter Machamer. in *Europe 1450 to 1789: Encyclopedia of the Early Modern World*, ed. Jonathan Dewald. New York: Charles Scribner's Sons, Vol 4: 467-473.

2003 "Review of I. B. Cohen and George Smith (eds.) *The Cambridge Companions to Newton.*" With Chris Smeenk. In Gary Gutting (ed.) *Notre Dame Philosophical Reviews*.

UNPUBLISHED

"On The Integration of Mathematical and Physical Considerations in Aristotle's Subordinate Sciences."

EDITED BOOKS AND COLLECTIONS

2020	"Newtonianism" section (~60K words), <i>Encyclopedia of Early Modern Philosophy and the Sciences</i> , edited by Dana Jalobeanu and Charles T. Wolfe. Springer.
2017	Oppur Si Muove: Doing History and Philosophy of Science with Peter Machamer, Springer, with Marcus Adams, Uljana Feest. U., and Jacqueline Sullivan.
2014	Newton and Empiricism, Oxford University Press, with Eric Schliesser.

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SELECTED PRESENTATIONS (**' DENOTES INVITED TALK)

- * "Isaac Newton and the Early Historiography of Mechanics." *The Mechanization of Nature 1300-1700 Conference.* University of Stockholm, Sweden.
 - * "How Worry about Light Created Modern Physics." *Light and life: From basic science to human wellbeing, art and, architecture.* University of Cincinnati.
- 2021 "Fitter, Stronger, More General: The Multiple Aspirations of Newtonian Induction." *Philosophy of Science Association 2020 Meeting.* Baltimore.
- 2020 "The Multiple Aspirations of Newtonian Induction." *HOPOS 2020.* Cancelled due to COVID.
 - * Panel discussant for University of Cincinnati's Data-Day.
- 2019 "AI, Skill, and Human Identity." *AI and the Future of (No) Work Colloquium and Talk Competition.* University of Cincinnati. (Winner of 1st prize).
- 2018 "Newton, Huygens, and the Non-Problematic Status of Induction in the *Principia.*" *Philosophy of Science Association Meeting.* Seattle. Poster Session.
 - * "When Physics Met Astronomy." Cincinnati Observatory.
 - * "Post-Newtonian Mechanical Philosophy." *Revolutions in the History of Early Modern Philosophy and Science Conference*. University of Iowa. Co-authored with Brian Hepburn.
 - "A Deflationary Account of Newton's Rule 3." HOPOS 2018. Groningen.

"A Deflationary Account of Newton's Rule 3: It's A Rebuke of Huygens and a Defense of Simple Induction." Accepted to the Atlantic Canada Seminar, but could not attend.

"Newton, Huygnes, and the Non-Problematic Status of Induction in the Principia." &HPS7, Leibniz Universität Hannover.

"A Deflationary Account of Newton's Rule 3: It's A Rebuke of Huygens and a Defense of Simple Induction." *Early Modern—Saint Louis (EM-STL)*. St. Louis.

* "The Changing Range of Geometrical Definition in Newton's Metaphysics of Space." Southwest Philosophy Workshop. *University of New Mexico*.

"The Global, Local and Universal: Tensions of Scale in Newtonian Natural 2017 Philosophy (1687-1720). "The 25th International Congress of History of Science and Technology, Rio de Janeiro.

> "Newton on Absolute Space and Geometrical Definitions." *British Society for* Philosophy of Science, University of Edinburgh.

- * "Newton on Geometrical Definitions." Conference on the Occasion of the 50th Anniversary of Howard Stein's "Newtonian Spacetime." University of Chicago.
- * "Newton on Geometrical Definitions." UC Irvine, Department of Logic and Philosophy of Science.

"De Gravitatione Reconsidered: The Changing Role of Geometrical Definitions in Newton's Metaphysics of Space." New York City Workshop in Early Modern Philosophy. New York.

- 2016 * Invited workshop participation. *Pittsburgh-Princeton Descartes Day III*.
 - * "Erasing Hooke from the History of Mechanics," Colloquium in Honor of the 350th anniversary of Robert Hooke's Micrographia, University of Wisconsin-Madison.
 - * "Seeing with the Eyes and 'Seeing' with Math," Department of History of Science, University of Wisconsin-Madison.
- 2015 * "Organizing the Disciplines," *Taft Research Symposium*, University of Cincinnati.
 - * "Was Newton's Commitment to Absolute Space Relevant for Physics?" Ohio State University.
- 2014 "Newton and Galileo (and Hooke)," The Philosophy of Science Association Bi-Annual Meeting, Chicago.
 - * "The Galilean Tradition and Newtonian Mechanics," Boston Colloquium for Philosophy of Science, Center for Philosophy & History of Science, Boston University.

"Newton on the Physiology of Perception," 48th Annual Western Michigan University Medical Humanities Conference, Western Michigan University.

"Substance & Property, System & Relation: Metaphysical Orthodoxy in Newton's Rational Mechanics," The History of Philosophy of Science Bi-Annual Conference (HOPOS), Ghent, Belgium.

* "Galileo on the Limits of Human Understanding," Hendrix College.

- * "When is something a *thing*? A puzzle about Newton, substance, and space," East Tennessee State University.
- * "We Cannot Say All of Nature is Not Alive': A Physiological Context for Newton's Search for Causes," 49th Annual Cincinnati Philosophy Colloquium: The Life and Mathematical Sciences in Early Modernity, University of Cincinnati.
- * "Galileo's Scientific Engagement with Matter Theory (but Not the Matter Theory You Think)," *Experimental Knowledge and the Deep Structure of the World Conference*, Virginia Tech.
- "Hobbes on Geometry and the Structure of the Sciences," Galileo, Descartes,
 Hobbes: Philosophy and Science, Politics and Religion during the Scientific
 Revolution, a National Endowment for the Humanities Summer Seminar led by
 Daniel Garber and Roger Ariew, Princeton University.
- 2009 "Cartesian Heterogenous Foundationalism," *Oxford Seminar in Early Modern Philosophy*, University of Oxford.
 - * "The Classification of Sciences and Foundationalism," *Universidade Estadual de Campinas*, Brazil.
 - "Behind the Geometrical Method," *Bucharest-Princeton Seminar in Early-Modern Philosophy*. Bran, Romania.
 - * Invited participation in *Mapping the History and Philosophy of Science*, a workshop sponsored by the National Science Foundation and the James S. McDonnell Foundation, Indiana University.
 - "Two Dogmas About Newton and Space," *Integrating History and Philosophy of Science Second Annual Conference*. University of Notre Dame.
 - * "Newton's Empiricism and the Changing Metaphysics of Void," *Lunchtime Talk Series*, Western Michigan University.
- 2008 "Other sorts of bodies and another sort of vacuum': Isaac Newton's Missing Theory of the Void and the Scope of Experimental Philosophy," *Bucharest-Princeton Seminar in Early-Modern Philosophy*, Mălâncrav, Romania.
 - "Mixed-Mathematics as a Guide to Cartesian Foundationalism," *The History of Philosophy of Science Bi-Annual Conference (HOPOS)*, Vancouver, Canada.

SELECTED NON-TRAVEL GRANTS, FELLOWSHIPS AND AWARDS

- 2023 Research Fellowship (2-semester), Charles Taft Research Center. University of Cincinnati.
- UC Forward Faculty Award for Transformational Experiential Learning, for PHIL 3095 "Dinosaurs, Dragon, and Dogma", with Joshua Miller (Biology).
 College of Arts & Sciences college-wide nominee for university-wide Distinguished Teaching Professor award.

2021	R21 grant submitted to the National Instituted of Health, with Rebecca Lee (Nursing), Joshua Gross (Biology), and Mao-Bing Tu (Environmental Engineering). "An Interdisciplinary Approach to Loneliness in Older Adults." Not funded.
2019	Co-PI, "An Interdisciplinary Approach to Loneliness in Older Adults", Office of Research Competitive Start-up Funds, with Rebecca Lee (Nursing), Joshua Gross (Biology), and Mao-Bing Tu (Environmental Engineering). (\$120,000)
	University Honors Program Discover Undergraduate Research Mentor.
2018	Research Fellowship (1-semester), Charles Taft Center Faculty Release Fellowship.
	Selection for 2019-2020 Trans-Disciplinary Research Leadership Council: a yearlong 5-person project for disciplinary innovation within UC.
2017	A&S Dean's Award for Teaching Excellence, Runner-Up.
2016	University Research Council Summer Scholarship Grant.
2015	Third Century Faculty Research Fellowship (semester of research leave, salary equivalent).
2014	Research Fellowship (2-semester), Charles Taft Research Center Fellow.
2013	Summer Research Fellowship, Charles Taft Research Center.
	Publication Costs Award, Charles Taft Research Center
2012	University Research Grant Program.
	Competitive Lecture Award in partial support of 49th Annual Cincinnati Philosophy Colloquium, Charles Taft Research Center.
2010	National Endowment for the Humanities Summer Fellow, Princeton University-July-August 2010, for <i>Galileo</i> , <i>Descartes</i> , <i>Hobbes: Philosophy and Science, Politics and Religion during the Scientific Revolution</i> , summer seminar led by Daniel Garber and Roger Ariew.
	Faculty Research and Creative Activities Award, Western Michigan University, for the construction of a visual database for the history of science and philosophy.
	International Education Faculty Development Fund Award, Western Michigan University.
	College of Arts and Sciences Teachings and Research Award, Western Michigan University.
2009	College of Arts and Sciences Teachings and Research Award, Western Michigan University.
2008	Support for Faculty Scholars Award, Western Michigan University.
	The International Education Faculty Development Fund Award, Western Michigan University.
2006	A. W. Mellon Pre-Doctoral Fellowship 2006-2007, University of Pittsburgh

2004	Foreign Language and Area Studies Fellowship 2004-2005, U.S. Department of Education
2003	Foreign Language and Area Studies Fellowship 2003-2004, U. S. Department of Education

TEACHING

Phil 7008	Cartesian Classics	2011
Phil 7009	Hobbes	2013
Phil 8019	Newton	2013, 2020
Phil 8019	The Problem of Induction	2020
Phil 8031	Mathematics, Reality, and Philosophy	2015
Phil 5980 WMU	Newton's "De Gravitatione"	2010
Phil 6100 WMU	Newtonianism and Empiricism	2009
Phil 6100 WMU	Descartes' Meditations and Natural Philosophy	2009
NCSI 7001	Creativity in Science	2021-22 (x2)
NCSI 7002	Technology, Ethics, and Society	2023

Undergraduate:

Office graduate.		
Phil 0102	Moral and Political Ideas	2012
Phil 0261	Philosophy of the Physical Sciences	2011
Phil 1032	How Science Works	2012-22 (x8)
Phil 1070/Psyc 1070	The Power of Big Data	2017
Phil 2042	Science, Magic, and the Occult	2017
Phil 3023	Philosophy, Science, and Society	2020-22 (x5)
Phil 3040	Philosophy of Science	2016
Phil 3062	Rationalism	2012, 2017
Phil 3063	Empiricism	2016
Plan 3090	How Enlightenment Gave Us the Modern World (study-abroad chaperone, Honors)	2014, 2016
Phil 3093	The Good Life - And How to Live It (Honors)	2017
Phil 3094	The Happiness of Pursuit (Honors)	2021
Phil 3095	Dinosaurs, Dragons, and Dogma (Honors)	2022
Phil 3097	Big Data, Bigger Questions (Honors)	2018, 2020
Phil 2000	Introduction to Philosophy	2009-11 (x3)
Phil 3010 WMU	Modern Philosophy	2008-9 (x3)
Phil 3250 WMU	Scientific and Inductive Reasoning	2010 (x2)

Phil 3500 WMU	Foundation of the Modern World View	2008
Phil 3550 WMU	Philosophy of Science	2008-11 (x6)
Other Teaching Ac		
Dissertation Commi	ttee Member (x4)	2017-
Early Modern Qualif	fying exams author and examiner (x6)	2015-
Pre-Dissertation Adv	visor (x2)	2017-2022
Arts and Scie	nt for "Medicine and the Humanities," a project supported by nces' Innovation Grant. The resulting course is titled "The Hall Scientific Revolution."	U
Teaching mentor for	How Science Works	2023
Teaching mentor for	Introduction to Logic	2023
Teaching mentor for	Introduction to Philosophy	2015-2016
Teaching mentor for	World Philosophy	2017-2019
Writing Academic A	2022	
Selected for "iPad Cohort" technology and teaching year-long CETL initiative.		
Preparation for Job N 2014-2021(x6	Market & Teaching Portfolio Workshops, Lead	
Dissertation Proposa	ıl Writing Seminar, Lead	2013, 2014
	ning Institute for online course design, participant. Quality Matters (www.qualitymatters.org) course re.	2013
ADMINISTRATIVE	SERVICE TO PROFESSION	
President, Internation	nal Society for the History of Philosophy of Science	2023-2025
Vice-President and F of Philosophy	President Elect, International Society for the History of Science	2021-2023
Editor-in-Chief, Phil	Sci-Archive	2020-2023
Designer and admin	istrator of HOPOS 2020 submission system	2019-2020
Steering Committee, HOPOS (elected)		
Editorial Co-Chair, PhilSci-Archive		
Board Member, Phils	Sci-Archive	2008-2017
Local Organizing Committee Chair, Ohio Philosophical Association		
Author of major reconstruction of HOPOS website, front- and back-end 2018		

ACADEMIC SERVICE TO PROFESSION

Book Referee (recurring): Oxford University Press, Routledge, Minnesota Studies in the Philosophy of Science

Journal Referee (recurring): Philosophy of Science, Studies in History and Philosophy of Science, Erkenntnis, Synthese, Australasian Journal of Philosophy, HOPOS: The Journal of the International Society for the History of Philosophy of Science, Oxford Studies in Experimental Philosophy, Southern Journal of Philosophy, Perspectives on Science, Science and Education, Science & Politics.

Symposium Organizer, The Life and Mathematical Sciences in Early Modernity	2012
(Cincinnati)	

- Conference Organizer, *The Life and Mathematical Sciences in Early Modernity* 2012 (Cincinnati)
- Conference Organizer, *Newton and Empiricism*, with Eric Schliesser, 2010 Center for the Philosophy of Science, University of Pittsburgh, Spring
- Symposium Organizer, "Newton, Mechanics, and Mathematics" 2014

 Philosophy of Science Association.
- Symposium Organizer, "Mechanics and its Philosophical Implications in the Aristotelian Tradition," with Andrea Falcon), *HOPOS*, June 2008.

Conference Referee: Southwest Seminar in Early-Modern Philosophy (x2), Newton and Empiricism.

Consultant on 2 films produced by Relativity Media (https://relativitymedia.com)

SERVICE TO UNIVERSITY

Ethics Bowl Judge	2023
Philosophy Head Search Committee	2022
Taft Fellowship Re-envisioning Committee	2020
Liaison to Canvas rollout	2019-2020
Board Member, Taft Research Center	2017-2020
University Research Council Graduate Fellowship Review Committee	2015-2017
Member, A&S Instructional Innovation Advisory Council	2015, 2016
Taft Research Travel Support Committee (Chair)	2016-2017
Authored UC resources for Common Reading on Michael Sandel's Justice	2012-2013
Honor's College Panelist for Honors Courses Workshop	2017- (x4)
Led university-wide faculty workshop in preparation for Justice	2013
Taft Center Research Support Committee	2012-2014
University Research Council Fellowship Review Committee	2013, 2017

Course Grade and Program Dismissal Appeal Committee (WMU) Arts & Science Academic Integrity Committee (WMU) Department library liaison (WMU) AAUP representative (WMU)	2007-2011 2008-2011 2010-2011 2009-2011
SERVICE TO DEPARTMENT	
Diversity, Inclusion, and Wellness Committee	2020-2022
Graduate Studies Committee	2013-14 2019-23
Graduate Professionalization Series (PDP), Speaker	2021-23 (x3)
Chair, Workload Committee	2021-22
Dean's Information Technology Advisory Committee	2017- 2020
Chair, Head's Review Committee	2021
Workload Committee	2021
Pre-dissertation advisor	2020-2021
Workshop on online teaching for graduate students	Aug 2020
Proctor Scholarship Award Committee	2020
Pre-dissertation advisor	2017-2018
Organized and ran Works-In-Progress talk series	2013-2014
A&S Information Technology Philosophy Department Liaison	2011- present
Departmental Library Liaison	2012- present
RPT guidelines revisions committee	2012-2017
Undergraduate Studies Committee 2017	2012-2013,
Director of Graduate Admissions (WMU)	2008-2011
Author of 83-page academic program 10-year review and plan,	2008-2009
the result of a year-long process of information gathering and analysis, external review, and long-term trajectory planning. (WMU)	
Webmaster, coding, administration, upkeep, a major reconstruction of website backend. (WMU)	2007-2011
Job Search Committee (WMU)	2008
Undergraduate Advisor (WMU)	2007-2009

PROFESSIONAL DEVELOPMENT NEH and NIH Grant Writing Seminar, sponsored by VP of research and 2019 Taft Research Center, October 10-11 Team Science Basics Workshop, sponsored by VP of research, May 5 2018 Transdisciplinary Research Leadership Program (including weekly meetings) 2018-2019 Participant in Team Science Basics Workshop, sponsored by VP of research 2018 Participant in UC Libraries Humanities and Technology Camp 2017 Participant in UC Data Day 2017 Participant in Center for Enhancement of Teaching and Learning 2013 6-week eLearning Institute for online course design. Resulted in Quality Matters (<u>www.qualitymatters.org</u>) compliant course Participant in Center for Enhancement of Teaching and Learning Year-Long 2011-2012 New Faculty Research and Publication Workshop LANGUAGES Research and Instruction: English, Hebrew. Research: Latin, French, Italian. **BUSINESS EXPERIENCE** Head, Network Operations & Customer Service Departments, Graphnet 2001 (Overseeing employees in Teaneck, NJ; New York, NY; London, UK; Tel Aviv, Israel; Hong Kong, China). *Graphnet* is a provider of cloud-based Enterprise Content Management and Messaging solutions. Manager, Network Operations, Graphnet. (Overseeing employees in 2000-2001 Teaneck, NJ; New York, NY; London, UK; Tel Aviv, Israel; Hong Kong, China) Network Engineer, Graphnet 1999 - 20001997 - 1999 Customer Service Representative, Graphnet