**Arnon Levy**

*Curriculum Vitae*

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**Appointments**

**Associate Professor, The Hebrew University of Jerusalem,** 2018 – present

**Senior Lecturer, The Hebrew University of Jerusalem,** 2014 – 2018

**Polonsky Postdoctoral Fellow, The Van Leer Jerusalem Institute**,2010 – 2014

**Education**

**Harvard University**, Ph.D., philosophy, 2010

**Harvard University**, A.M. (equivalent to an M.Sc.), organismic and evolutionary biology, 2010

**The Hebrew University of Jerusalem**, 2003, B.Sc. *Magna cum Laude*, joint honors: philosophy and biology

**Areas of Specialization**

Philosophy of science, philosophy of biology.

**Areas of Competence**

Philosophy of mind (esp. cognitive/neuro science), meta-ethics.

**Publications**

Book

1. "Explanation and Understanding", Routledge New Problems of Philosophy (forthcoming).

Edited volume:

1. “The Scientific Imagination: Philosophical and Psychological Perspectives” (co-edited with Peter Godfrey-Smith), Oxford University Press (2020).

Research articles:

1. “Game Theory, Indirect Modeling & the Origins of Morality”, *Journal of Philosophy* (2011) CVII(4):171-187
2. “Information in Biology: A Fictionalist Account”, *Noûs* (2011) 45(4):640-657
3. “Models, Fictions and Realism: Two Packages”, *Philosophy of Science* (2012), 79(5):738-748
4. “Three Kinds of New Mechanism”, *Biology & Philosophy* (2013), 28 (1):99-114
5. “Abstraction and the Organization of Mechanisms” (with William Bechtel), *Philosophy of Science* (2013), 80 (2):241-261
6. “What was Hodgkin and Huxley’s Achievement?” *British Journal for the Philosophy of Science* (2014)*,* 65 (3):469-492
7. “Machine-likeness and Explanation by Decomposition” *Philosophers’ Imprint* (2014), 14(6)
8. “Modeling without Models”, *Philosophical Studies* (2015), 172(3):781-798
9. "Design sans Adaptation" (with Sara Green and William Bechtel*), European Journal for Philosophy of Science* (2015), 5(1):15-29.
10. “Engineering & Biology: Counsel for a Continued Relationship” (with Brett Calcott, Mark Siegel, Orkun Soyer and Andreas Wagner), *Biological Theory* (2015), 10(1): 50-59.
11. “Model Organisms are not (Theoretical) Models”(with Adrian Currie), *British Journal for the Philosophy of Science* (2015), 66(2): 327-348.
12. ”The Unity of Neuroscience: a Flat View”, *Synthese* (2016), 193(12): 3843–3863.
13. ”The Debunking Challenge to Realism: How Evolution Ultimately Matters” (with Yair Levy), *Journal of Ethics and Social Philosophy* (2016), 11(1): 1-12.
14. “Models and Scientific Realism: Strange Bedfellows?”, in Saatsi, J. (Ed.), *The Routledge Handbook of Scientific Realism* (2017), London: Routledge.
15. “Causal Order and Kinds of Robustness”, in Gissis, S., Lamm, E., Shavit, A. (Eds.), *Landscapes of Collectivity in the Life Sciences,* (2017). Cambridge, MA: MIT Press.
16. “Idealization and Abstraction: Refining the Distinction”. *Synthese* (2018)*, https://link.springer.com/article/10.1007/s11229-018-1721-z.*
17. “Evolutionary Models and the Normative Significance of Stability”. *Biology and Philosophy, 33(5-6)* (2018) <https://link.springer.com/article/10.1007/s10539-018-9643-1>.
18. “Why Experiments Matter” (with Adrian Currie). *Inquiry* (2019), 62(9-10): 1066-1090.
19. “Evolutionary Debunking Arguments Meet the Science of Evolution” (with Yair Levy). *Philosophy and Phenomenological Research,* 100(3):491-509.(2020)
20. ”Metaphor and Scientific Understanding”, in Levy, A. & Godfrey-Smith, P. (Eds.) *The Scientific Imagination: Philosophical & Psychological Perspectives*, (2020) Oxford University Press.
21. ”Introduction” (with Peter Godfrey-Smith), in Levy, A. & Godfrey-Smith, P. (Eds.) *The Scientific Imagination: Philosophical & Psychological Perspectives,* (2020) Oxford University Press.
22. “Models and Fictions: Not So Similar After All?”, *Philosophy of Science* 87(5): 819-828 (2020)*.*
23. “Beyond Machine-Like Mechanisms” (with William Bechtel) in Holt, L., Serban, M. & Sune Holm (Eds.), *Living Machines? Philosophical Perspectives on the Engineering Approach in Biology,* (2021). London: Routledge.
24. “What, if anything, is Biological Altruism?” (with Topaz Halperin). *British Journal for the Philosophy of Science.* (2021) <https://www.journals.uchicago.edu/doi/10.1086/716097>
25. ”Modeling and Simulation” (with Brett Calcott), forthcoming in Nuño de la Rosa, L. & Müller, G.B. (Eds.), *The Evolutionary Developmental Biology Reference Guide*. (2021), Springer.
26. “The Epistemic Imagination Revisited” (with Ori Kinberg) *Philosophy and Phenomenological Research.* (2022)[*https://onlinelibrary.wiley.com/doi/full/10.1111/phpr.12909*](https://onlinelibrary.wiley.com/doi/full/10.1111/phpr.12909)
27. “Can Bayesian Models of Cognition Show That We Are (Bayes) Rational?” *Philosophy of Science.* (2023) <https://www.doi.org/10.1017/psa.2023.37>
28. “Evolutionary Debunking of (Arguments for) Moral Realism.” (With Itamar Weinshtock Sa’adon) *Synthese*. (2023). <https://link.springer.com/article/10.1007/s11229-023-04157-8>
29. “Biological Machines: a Qualified Defense” Forthcoming in *Biology & Philosophy.* (2023).
30. “Models, Fiction and the Imagination” Forthcoming in Knuuttila, T. (Ed.) *The Routledge Handbook of Scientific Modeling.*
31. “Thought Experiments in the Philosophy of Science*”* Forthcoming in Currie, A. and Veigel, S. (Eds.) *Philosophy of Science – A User’s Guide* (MIT Press).

Under review and in preparation:

1. “Brining Back Thought Experiments into The Philosophy of Science.” (W/ Adrian Currie) Under review.
2. “Inductive Risk and Value-Freedom: Jeffrey Revisited” Under review.
3. “Approximating Bayes? On the Notion of Approximation in Bayesian Cognitive Science” Under Review.
4. “What’s So Good about Being Optimal? The Optimality Approach in Cognitive Science” (W/ Lotem Elber-Dorozko). In prep.
5. “Questions, Answers and Explanations” (W/ William Bechtel)

Book reviews:

1. “The organic codes: a review of Marcello Barbieri”, (co-authored with Eva Jablonka), Acta Biotheretica (2004), 52(1): 65-69.
2. “Explaining what? A Review of Explaining the Brain by Carl Craver,” Biology & Philosophy (2009), 24: 137-145.
3. “Makes a difference: a Review of Depth, by Michael Strevens”, Biology & Philosophy (2011) 26: 459-467.
4. “Anchoring Fictional Models: a Review of Models as Make-Believe by Adam Toon”, Biology & Philosophy (2013), 28(4): 693-701.
5. “Essay Review: In search of Mechanisms”, Philosophy of Science (2015), 82(2): 321-325.
6. "How to do Science with Models by Axel Gelfert", Notre Dame Philosophical Reviews (2017), <https://ndpr.nd.edu/news/how-to-do-science-with-models-a-philosophical-primer/>

**Awards, Honors, Fellowships**

Senior Visiting Fellowship, Center for the Philosophy of Science, University of Pittsburgh, 2023-24

Visiting Fellowship, Center for the Philosophy of Science, University of Pittsburgh, 2022-23

“Model Organisms are not (Theoretical) Models” selected as *BJPS* Editor’s Choice, winter 2015

Winner, Alon Fellowship for Outstanding Young Researchers, Israel Council for Higher Education, 2013 (declined)

Visiting Fellowship, Department of Philosophy, New York University, 2013

Visiting Fellowship, Centre for the Foundations of Science, The University of Sydney, 2012

Fellow, Israel Institute for Advanced Studies, group on Computation & the Brain 2011

George Plimpton Adams Prize for best dissertation, Harvard University, 2010

Whiting Dissertation Completion Award, Harvard University, 2010-2011 (declined)

Mind, Brain & Behavior Summer Research Award, Harvard University, summer 2009

Bechtel Prize for best philosophy essay, Harvard University, 2008-09

Graduate Fellow, The Edmond J. Safra Center for Ethics, Harvard University, 2008-09

Mind, Brain & Behavior Graduate Student Term-Time Award, Harvard University, Spring 2008

Graduate School of Arts and Sciences Merit Fellowship, Harvard University, Fall 2007

Yedlin Prize for excellence in the study of philosophy, Hebrew University, 2001

Dean’s List, Faculty of Humanities, The Hebrew University of Jerusalem, 2000, 2001.

**Grants**

**Germany-Israel Fund (GIF) Young Scholars Program**, €18,000. Topic: Philosophical Foundations of Systems Biology". 2017-18

**Interuniversity PhD Program in History and Philosophy of the Life Sciences,** ~NIS 3,500,000 (distributed across HUJI, TAU, BIU)

The Humanities Fund (Rothschild Foundation/CHL), 2016-2023.

**Start-up grant (HUJI),** $40,000

**Mentoring**

* Omer Yerushalmi, M.A. in Philosophy. Topic: Cities and social scientific explanation. (Ongoing)
* Nadav Rubinstein. Ph.D. in Philosophy (IHPLS). Topic: Strong emergence and network biology (Suspended)
* Amir Liron, M.A. in Philosophy. Topic: extrapolation in the social sciences. (Completed, UCSD grad school).
* Topaz Halerpin, Ph.D. in Philosophy (IHPLS). Topic: Neutrality in ecological theory (Completed, Postdoc at Harvard)
* Aya Evron, Ph.D. in Philosophy (IHPLS). Topic: Sexes in evolutionary biology (Completed, Postdoc at Tel Aviv)
* Jonathan Nejenson, Ph.D. in Philosophy (IHPLS). Topic: Philosophical foundations of memory research (completed, Postdoc at Technion)
* Jonathan Fiat , M.A. in Philosophy. Topic: Why randomize? (Discontinued – transferred to MIT)
* Avraham Munitz, M.A. in Philosophy. Topic: Alzheimer’s and multiple realization (Completed, PhD at Heb. U.)
* Or Jupiter, M.A. in Philosophy. Topic: How to define life? (Completed, PhD at Heb. U.)
* Efraim Wallach, M.A. in History and Philosophy of Science. Topic: Niche construction and explanations of human evolution (Completed, PhD at Heb. U.)

**Professional Service**

Co-director, Interuniversity PhD program in *History and Philosophy of the Life Sciences* (joint project with Tel Aviv University, Bar-Ilan University). 2016-present.

Head, Institute for Philosophy, Linguistics and Cognitive Science, The Hebrew University of Jerusalem, 2020-2022.

Editor: “Theories and Models” category in [PhilPapers](https://philpapers.org/browse/theories-and-models).

Program committee member – PSA poster session, 2021.

Referee for: Australasian Journal of Philosophy, Biology & Philosophy, British Journal for Philosophy of Science, The Journal of Philosophy, ERC, Ergo, Erkenntnis, European Journal for Philosophy of Science, Israel Science Foundation, The Monist, Noûs, The Netherlands Organisation for Scientific Research, Philosophia, Philosophical Studies, Philosophy & Theory in Biology, Philosophy of Science, Studies in the History and Philosophy of Biology and the Biomedical Sciences, SPP, Synthese, Teorema.

Organizer or co-organizer for the following conferences:

* Revitalizing Science & Values – Pittsburgh Center for Philosophy of Science, 2024.
* Annual retreats, IHPLS: 2017-2019; 2021-2022.
* “Experimental Philosophy and Philosophical Method”, Hebrew University, June 2019.
* “Modeling Reality” (A joint workshop with Penn Philosophy), Hebrew University – The Edelstein Center. July, 2018.
* “Ethics & Biology: Challenges & Prospects”, Hebrew University's Centre for Moral & Political Philosophy, June 2017
* Annual conference of the Israeli Association of Philosophy, Jerusalem, February 2016
* HUJI/UNC joint bi-annual workshop, topic: Scientific Explanation, May 2014
* “Models & Explanation”, The Van Leer Institute, June 2014
* “Between Biology & Physics: Reduction, Emergence & Complexity”, VLJI & TAU, December 2012
* Co-Organizer, workshop on “Explanatory Styles in Biology”, VLJI, March 2012
* The 13th Annual Harvard/MIT Graduate Student Philosophy Conference, 2005

Mind, Brain & Behavior Steering Committee member, Harvard University, 2007-2009

Collaborating researcher, “Causation and Reduction in Systems Biology” project, University of Oslo.

Advisor, “Model-Development in Neuroscience: Generalizability and Simplicity in Mechanistic Explanations” project, University of Witten/Herdecke & University of Magdeburg.