# Anya Plutynski

Email: aplutyns@wustl.edu
Department of Philosophy
1 Brookings Dr. Wilson Hall,
Washington University in St. Louis, St. Louis, MO 63130

## **EDUCATION:**

University of Pennsylvania, Ph.D., Philosophy, 2002 University of Pennsylvania, MA, Biology, 2000 University of Chicago, AB, Philosophy, with Honors, 1994

### **EMPLOYMENT:**

# 2022-current: Full Professor, Department of Philosophy, Washington University in St. Louis

2019: Distinguished Visiting Professor, History and Philosophy of Science, University of Pittsburgh 2014-2021: Associate Professor, Department of Philosophy, Washington University in St. Louis 2009-2014: Associate Professor, Department of Philosophy, University of Utah 2001-2009: Assistant Professor, Department of Philosophy, University of Utah

### **PUBLICATIONS:**

### **BOOKS AND EDITED COLLECTIONS**

- 3. Explaining Cancer: Finding Order in Disorder. 2018. NY: Oxford University Press. (Winner of the Lakatos Award 2021)
- 2. *The Routledge Companion to Philosophy of Biodiversity* 2016. coedited with Justin Garson and Sahotra Sarkar. Routledge.
- 1. *The Blackwell's Companion to Philosophy of Biology*. 2008. Ed. Sahotra Sarkar and Anya Plutynski, Blackwell Publishing.

## ARTICLES, BOOK CHAPTERS, ETC.

- 56. "Concepts of Actionability in Precision Oncology." *Philosophy of Science*. (Co-authored with Chin-Yee, Benjamin, forthcoming, 2024)
- 55. "Myth 12. That Darwin's theory brought an instant and immediate revolution in the life sciences," (forthcoming, 2024) *Darwin Discovers Evolution, and other myths from the history of Darwinism.* Kostas Kampourakis (Ed.) Cambridge University Press. (co-authored with Shruti Santosh)
- 54. "Mechanisms for Cancer: Local, Context-specific and Unstable." (forthcoming) in *Minnesota Studies in Philosophy of Science: Causation in Biology*. Jim Woodward and Ken Waters (Eds.).
- 53. "The Cancer Genome Atlas Project: Data-driven, Hypothesis-driven or Something In-Between?" (forthcoming) In: C. Donohue and A.C. Love (eds), *Perspectives on the Human Genome Project and Genomics. Minnesota Studies in the Philosophy of Science*. Minneapolis: University of Minnesota Press.
- 52. "Going big by going small: Trade-offs in microbiome explanations of cancer" (2023) *Studies in History and Philosophy of Science*, 97, 101-110. (co-authored with Emily Parke)
- 51. "Four Ways of Going" Right" Functions in Mental Disorder" (2023) *Philosophy, Psychiatry, & Psychology, 30*(2), 181-191.

- 50. Pradeu, T., Daignan-Fornier, B., Ewald, A., Germain, P. L., Okasha, S., Plutynski, A., ... & Laplane, L. (2023). Reuniting philosophy and science to advance cancer research. *Biological Reviews*.
- 49. "Sometimes you ride the Pegasus, sometimes you take the road: Mitchell on laws in biology." (2023) THEORIA. An International Journal for Theory, History and Foundations of Science.
- 48. "On Explaining Peto's Paradox." (2022) European Journal of Epidemiology. https://rdcu.be/cX25Q
- 47. "Ethical questions surrounding the commercial determinants of health: moving towards policies that promote equity, autonomy and wellbeing." (2022) *Eurohealth*, 28(2), 33-36.
- 46. "Philosophical Issues in Cancer and Public Health" (2022) in *The Routledge Handbook of Philosophy of Public Health*. Broadbent, A. & Venkatapuram, S. editors. Routledge. Taylor & Francis.
- 45. "Clinical decisions using AI must consider patient values" (2022) *Nature Medicine*. (co-authored with Jonathan Birch, Katie Creel, and Avinash Jha). 28(2): 229-232.
- 44. "Testing Multi-Task Cancer Evolution: How do we Test Ecological Hypotheses in Cancer?" (2021) Frontiers in Ecology and Evolution. 9, 666262.
- 43. "How is cancer complex?" (2021) European Journal for the Philosophy of Science. 11(2), 1-30.
- 42. "Philosophy of Evolutionary Biology," (2021) Oxford Bibliographies (Evolutionary Biology, Douglas Futuyma, editor.)
- 41. "Why Precision Oncology is Not Very Precise (and why we should not be surprised)" (2021) in Bertolaso, M. & Beneduce, C., eds. *Personalized Medicine in the Making. Philosophical Perspectives from Biology to Healthcare*, Springer.
- 40. "Is cancer a matter of luck?" (2021) Biology and Philosophy. 36:3
- 39. "Microbiomes: Proportional Causes in Context" (2020) *Biology and Philosophy*. (coauthored with Nuhu Osman Attah and Marina DiMarco). 35(1), 1-5.
- 38. "Models and theory in biology" (2020) co-authored with Emily Parke, in Kampourakis and Uller, eds. *Philosophy of Biology for Biologists*. Cambridge University Press.
- 37. "Cancer Modeling: The advantages and limitations of multiple perspectives" (2019) in *Understanding Perspectivism: Scientific Challenges and Methodological Prospects*. Massimi, M. and C. McCoy, (Eds.) Routledge.
- 36. "Cancer" (2019) Stanford Encyclopedia of Philosophy. (https://plato.stanford.edu/entries/cancer/)
- 35. "The Origins of 'Dynamic Reciprocity': Bissell's Expansive Picture of Cancer Causation" (2018) in Dietrich, M. and O. Harman (Eds.) *Dreamers, Visionaries and Romantics in the Life Sciences*. Chicago: University of Chicago Press.
- 34. "What and How Do Cancer Systems Biologists Explain?" (2018) *Philosophy of Science*: Proceedings. (Coauthored with Marta Bertolaso) 85(5), 942-954.
- 33. "Speciation Post Synthesis: 1960–2000." (2018) Journal of the History of Biology, 1-28.

- 32. "How Good Decisions Result in Bad Outcomes" (2017) in *Measurement in Medicine: Philosophical Essays on Assessment and Evaluation*. McClimans, L. (Ed.) Rowman & Littlefield.
- 31. "Safe, or Sorry? Cancer Screening and Inductive Risk" (2017) In *Exploring Inductive Risk*. Richards, T and K Elliott (Eds.) Oxford University Press.
- 30. "Evolutionary Perspectives on Molecular Medicine" (2016) In *Philosophy of Molecular Medicine: Foundational Issues in Research and Practice*. Boniolo, G. and M. Nathan. (Eds.) Routledge.
- 29. "Chance in the Modern Synthesis" (2016) in *Chance in Evolution*. G. Ramsey and C. Pence. (Eds.) Chicago: University of Chicago Press. (co-Authored with Dan Molter, Lucas Matthews, and Blake Vernon)
- 28. "Putting Biodiversity Conservation into Practice: The Importance of Local Culture, Economy, Governance and Community Values" (2016) (coauthored with Y. Fujita-Lagerquist) Garson, J., S. Sarkar, and A. Plutynski, eds. *Routledge Companion to the Philosophy of Biodiversity*. Routledge.
- 27. "The Evolution of Failure: Cancer from a Multilevel Perspective" (2015) *Biology and Philosophy*. 31(1): 39-51. (co-author with Christopher Lean)
- 26. "Integrative perspectives on the prevalence of brain tumors in males" (2015) *Cellular and Molecular Life Sciences*. 72(17), 3323-3342. (co-author with Tao Sun, Stacey Ward, Joshua Rubin.)
- 25. "Cancer and the Goals of Integration" (2013) *Studies in the History and Philosophy of the Biological and Biomedical Sciences*. 44 Issue 4, Part A Pages 466-476.
- 24. "Biomedical Research Ethics" (2013) in Kampourakis, K., ed. *The Philosophy of Biology: A Companion for Educators*. Springer.
- 23. "Ethical and Scientific Issues in Cancer Screening and Prevention." (2012) *Journal of Medicine and Philosophy*. 37(3): 310-323.
- 22. "Four Problems of Abduction: A brief history" (2011) HOPOS: The Journal of the International Society for the History of Philosophy of Science. 1(2), 227-248.
- 21. "Ethics and Science" (2011) *Green Series Volume 8: Green Ethics and Philosophy*. SAGE E- Reference. J. Newman and P. Robbins, (Eds.).
- 20. "In Defense of Rationalist Science" (2011) Creager, W., ed. Science at the Frontiers: Perspectives in History and Philosophy of Science. Lexington Books.
- 19. "Should Intelligent Design be taught in Public School Science Classrooms?" (2010) *Science and Education*. Vol. 19, No. 6-7: 779-795.
- 18. "Karl Popper" (2009) Literary Encyclopedia Online.
- 17. "Crow, James" Encyclopedia of the Life Sciences. (2009) John Wiley & Sons, Ltd.
- 16. "Water, the West and our Changing Climate: Political and Ethical Challenges" (2009) in Keller, D. ed. *Environmental Ethics Case Studies: An Archive*.
- 15. "The Rise and Fall of the Adaptive Landscape?" (2008) Biology and Philosophy. 23: 605-623.

- 14. "Explaining How and Explaining Why: Developmental and Evolutionary Explanations of Dominance" (2008) *Biology and Philosophy*. 23: 363-381.
- 13. "The Modern Synthesis" (2008) In E. Craig, Editor, Routledge Encyclopedia of Philosophy Online. Routledge.
- 12. "Ecology and the Environment" (2008) in Ruse, M. & D. Hull, eds. Oxford Handbook to Philosophy of Biology. Oxford University Press.
- 11. "Speciation and Macroevolution" (2008) in Sarkar S. and A. Plutynski, eds. *Blackwell's Companion to Philosophy of Biology*. Blackwell Publishing.
- 10. "Drift: A Historical and Conceptual Overview" (2007) Biological Theory. Vol. 2, No. 2:156-167.
- 9. "Neutralism" (2007) in Matthen, M. and C. Stevens, eds. in *The Handbook of the Philosophy of Science: Philosophy of Biology*. Amsterdam: Elsevier, pp. 129-141.
- 8. "Strategies of Model Building in Population Genetics" (2006) *Philosophy of Science: Proceedings*. 73(5): 755-764.
- 7. "What was Fisher's Fundamental Theorem and what was it for?" (2006) Studies in the History and Philosophy of the Biological and Biomedical Sciences. 37: 59-82.
- 6. "Theoretical Population Genetics" (coauthored with Warren Ewens), (2006) Sarkar, S. and J. Pfeiffer, (Eds.), Routledge Encyclopedia for Philosophy of Science. Routledge.
- 5. "Evolution" (2006) in Sarkar, S. and Pfeiffer, J. eds., Encyclopedia for Philosophy of Science. Routledge.
- 4. "Explanatory Unification and the Early Synthesis" (2005) *British Journal for the Philosophy of Science*. 56(3): 595-609.
- 3. "Parsimony and the Fisher-Wright Debate" (2005) Biology and Philosophy. 20: 697-71
- 2. "Explanation in Classical Population Genetics" (2004) Philosophy of Science, Proceedings. 71: 1201-1215.
- 1. "Modeling Evolution in Theory and Practice" (2001) Philosophy of Science, Proceedings, 68: S225-S236.

## **REVIEWS:**

Plutynski, Anya. "A New Paradigm for Cancer?" (2022): *Biological Theory* 1-4. Review of B. Strauss, M. Bertolaso, I. Ernberg, and M.J. Bissell (editors): *Rethinking Cancer: A New Paradigm for the Postgenomic Era*; Vienna Series in Theoretical Biology, MIT Press, Cambridge.

Plutynski, A. (2022). Review of *Malignant: How Bad Policy and Bad Evidence Harm People with Cancer*, by Vinay Prasad, Baltimore, Maryland, Johns Hopkins University Press, 2020. *Cambridge Quarterly of Healthcare Ethics*, 31(2), 275-278.

Review of Cranor, 2019. *Tragic Failures: How and Why We are Harmed by Toxic Chemicals*, Oxford University Press. Kennedy Institute of Ethics Journal. (https://kiej.georgetown.edu/carl- cranor-tragic-failures-how-and-why-we-are-harmed-by-toxic-chemicals-oxford-university- press-2017/)

Review of Bertolaso's Philosophy of Cancer. 2017. History and Philosophy of the Life Sciences.

"Explanatory Pluralism in the Life Sciences" 2016. Review of Pierre-Alain Braillard and Christophe Malaterre (eds) 2015. Explanation in Biology: An Inquiry into the Diversity of Explanatory Patterns in the Life Sciences. Science and Education.

"Hail the Platypus! Review of *Outsider Scientists: Routes to Innovation in Biology*" 2015. *Science and Education*. Review of Chao, Chen, and Millstein, 2013. *Causality and Mechanism in Biology and Economics*, Springer. *Notre Dame Philosophical Reviews*.

Review of Broadbent's *Philosophy of Epidemiology*. 2014. *Studies in History and Philosophy of the Biological and Biomedical Sciences*. Volume 46: 1070111.

Review of Peter Godfrey-Smith's *Darwinian Populations and Natural Selection*. 2010. *Philosophical Books*. 51 (2):83-101.

Evolutionary Biology: Causes, Consequences and Controversies (A Survey Review of Okasha's *Evolution and the Levels of Selection & Pigliucci and Kaplan's Making Sense of Evolution: The Conceptual Foundations of Evolutionary Biology.*) *Metascience*. 16 (3): 437-445.

A Philosopher Goes Wild: A Review of Sarkar, *Biodiversity and Environmental Philosophy*. 2007. *Studies in the History and Philosophy of the Biological and Biomedical Sciences, Part C*. 38 (1): 289-296.

Seeing the Forest for the Trees: A Review of *Tangled Trees: Phylogeny, Coevolution, Cospeciation* in *Biology and Philosophy*. 19 (2): 299-303.

Review of Mitchell's Biological Complexity and Integrative Pluralism, 2004. In Notre Dame Philosophical Reviews.

#### **PRESENTATIONS**

- 80. "Complexity & Functional Attribution in Psychiatric Disorder" CLMPST-2023, the 17th edition of the International Congress on Logic, Methodology and Philosophy of Science and Technology, Buenos Aires, Argentina.
- 79. "What is a Complex Disease?" June 2023, 10th International Philosophy of Medicine Roundtable, University of Bologna, Italy
- 78. "What is Health?" Spring 2023. Saint Louis University Prison Education Program
- 77. "Towards a Multidimensional Model of Positive Mental Health" Leeds History and Philosophy of Science Colloquium, March 8, 2023.
- 76. "Towards a Multidimensional Model of Positive Mental Health" Department of Logic and Philosophy of Science, University of California, Irvine Spring 2022.
- 75. "On Adaptation in Mental Disorders & Somatic Disease: Why Defend a Pluralist View?" Colloquium April 2021. Department of History and Philosophy of Science, Indiana University.
- 74. "The Dodo Bird Verdict: A Challenge to Evidence-Based Psychotherapy?" with Keerthanya Rajesh, Workshop on Interdisciplinary Perspectives on Contemporary Psychotherapy, Cambridge HPS, September 2021
- 73. "Going big by going small: Tradeoffs in microbiome explanations of cancer" with Emily Parke, ISHPSSB, 2021.

- 72. Lecture/Conversation with Dien Ho, Massachusetts College of Pharmacy, Nov. 2020 (discussing my 2017 paper, "Safe or Sorry? Cancer Screening and Inductive Risk")
- 71. "Precision Oncology, Big Data, and AI: Is Better?" Plenary Address: Prague Conference in Conceptual in Methodological Aspects of Biomedical Research 28, October 2020 Department of Analytic Philosophy, Institute of Philosophy, Czech Academy of Sciences.
- 70. "Why Precision Oncology is Not so Precise (and why we should not be surprised)" Experts Meeting in Personalized Medicine, Organized by Bertolaso. Rome, Università Campus Bio- Medico di Roma FAST, Istituto di Filosofia dell'Agire Scientifico e Tecnologico
- 69. "Why Precision Oncology is Not So Precise" 2<sup>nd</sup> Annual UC Davis Research Quality and Design Symposium: Research Design, Analysis, and Ethics Challenges in Clinical Translation. Sponsored by the UC Davis Ethics Commons, Clinical and Translational Science Center
- 68. "Cancer as a complex system," Philosophy of Cancer Biology Workshop, Bristol Center for Science and Philosophy, followed by public lecture, "Why Precision Oncology is Not So Precise" Sponsored by the Elizabeth Blackwell Institute for Health Research & Department of Philosophy, University of Bristol, UK.
- 67. "What is Complexity? Cancer as a case study." September 2019. European Society Philosophy of Science Association, Geneva.
- 66. The Hype, the Hope and the Science Behind Precision Oncology, April 2019. University of Pittsburgh, Center for Philosophy of Science.
- 65. When do you call it? Methodological Transitions in The Cancer Genome Atlas Project (TCGA): Or, how larger samples can lead to more false positives, November 2018, Perspectives on the Human Genome Project and Genomics, Co-sponsors: NHGRI (National Human Genome Research Institute); Workshop organized by Alan Love and Chris Donohough
- 64. Cancer Genomes & Shifting Standards of Completeness June 2019, Invited Talk, National Human Genome Research Institute (NHGRI), Chris Donohue, organizer.
- 63. Is cancer a matter of luck? November 2019. St. Louis University, Department of Philosophy Colloquium Series
- 62. "Cancer Genomics and Translational Medicine: Challenges and Opportunities" University of Cincinnati, 53rd Annual Philosophy Colloquium: Philosophy of Biology
- 61. Is there a unified theory of cancer? May 9, 2018. For: United Fronts: Unity, Organisation and Syntheses in the Life Sciences, a workshop organized by Andrew Buskell, Department of History & Philosophy of Science at the University of Cambridge. Cambridge University, Cambridge, UK.
- 60. Is cancer a matter of luck? March 29, 2018. Interdisciplinary talk series, Departments of History and Philosophy, University of New England, Portland, ME.
- 59. "Philosophical Issues Surrounding Cancer Screening," organized by Joseph Wu and Stephen John, Department of History & Philosophy of Science at the University of Cambridge. Cambridge University, Cambridge, UK.
- 58. Is cancer a matter of luck? Plenary Talk, October 2018. Philosophy of Cancer Philosophy of Cancer Biology Workshop, (hosted by: The University of Bordeaux, the CNRS, ImmunoConcEpT, and PhilInBioMed) Bordeaux, France, organized by Sara Green, Lucie Laplane, Maël Lemoine, Thomas Pradeu, and Elena Rondeau, and funded by ERC-funded project IDEM.

- 57. Cancer Classification, Realism and the Pragmatic Turn, Plenary Address, British Society for the Philosophy of Science. July 2017
- 56. Drawing Boundaries around Biological Objects, Special Session in Pacific APA (American Philosophical Association Meetings). sponsored by the Society for Socially Relevant Philosophy of Science and Engineering, April 2017
- 55. Comment on Sprenger and Stegenga: Three Arguments for Absolute Outcome Measures, Pacific American Philosophical Association Meetings: Pacific Division, April 2017
- 54. Risk and Reason: Cancer Screening and Pathological Uncertainty, Colloquium, Department of Philosophy, Western Michigan University, March 2017
- 53. Cancer Systems Biology: A New Approach to Biological Explanation? with M. Bertolaso, Philosophy of Science Association Meetings, November 2016
- 52. Commentator on Bertolaso, Reductionism and Integration, Bioethics and Behavior: A Conference Celebrating the Career of Kenneth F. Schaffner, University of Pittsburgh, Department of the History and Philosophy of Science, Sept. 2016
- 51. Cancer Modeling: The Advantages and Limitations of Different Perspectives, Workshop on Perspectival Modeling: Pluralism and Integration, hosted by University of Edinburgh, funded by the ERC (European Research Council) June 2016
- 50. Cancer Systems Biology: The Promises and Pitfalls of a New Paradigm Pacific Meetings of the AAAS (American Association for the Advancement of Science), San Diego, June 2016
- 49. What, if anything, does Systems Biology of Cancer Explain? Philosophy of Science Association Meetings, San Francisco, June 2016
- 48. Cancer Causation, Explanation and the Metaphysical Commitments of Theory, Paris, New Trends in the Metaphysics of Science Conference at the Sorbonne, organized by Pradeau, T. and M. Kistler, December 2015
- 47. Cancer from a Multi-Level Perspective: Tumors as Proto-Organisms? Bordeaux Colloquium in Philosophy of Science. 2015
- 46. Cancer from a Multi-Level Perspective: Tumors as Proto-Organism, Organismality Workshop, Washington University in St. Louis, sponsored by the Templeton Foundation, May 23, 2015
- 45. Cancer: Disunified Kind, Unified Explanation? Boston Colloquium for Philosophy of Science, April 10, 2015
- 44. Pluralism and Integrative Explanations in Cancer Research, DEX3: 3rd annual Davis Extravaganza, March 30, 2015
- 43. The Evolution of Failure: Cancer from a Multi-Level Perspective, Virginia Tech Annual Burian-McNabb Lecture, sponsored by STS and Philosophy, Virginia Tech, December 2014
- 42. Speciation Since the Modern Synthesis, Workshop on History of Evolutionary Biology since the Modern Synthesis, University of Chicago, Sponsored by Philippe Hunneman and Jean Gayon, CNRS, Paris. Nov. 2014
- 41. The Evolution of Failure, Keynote Address at Evolutionary Thinking: 7th Munich-Sydney- Tilburg Conference in the Philosophy of Science, Sponsored by the Munich Center for Mathematical Philosophy (MCMP), the Sydney

Centre for the Foundations of Science (SCFS) and the Tilburg Center for Logic and Philosophy of Science (TiLPS), March 2014

- 40. Nothing in evolution makes sense except in light of population genetics? St. Louis Area Philosophy of Science Association (SLAPSA) February 2014
- 39. The Evolution of Failure, University of Calgary, Department of Philosophy Colloquium, 2013.
- 38. Cancer and the Evolution of Failure, University of Cincinnati, Colloquium, October 2013
- 37. The Evolution of Failure: On Cancer as an Evolutionary Process, Missouri Philosophy of Science Workshop (MOPS) Oct. 2013
- 36. Preventative Medicine, Overdiagnosis and Overtreatment: Challenges Facing Estimates of Effectiveness of Medical Intervention, Brocher Foundation (Geneva) Workshop on Evidence in Healthcare Reform, organized by Alex Broadbent, July 2013
- 35. The Evolution of Failure: Cancer as an Evolutionary Process, Washington University in St. Louis Philosophy Colloquium, Feb. 2013
- 34 Women in the Sciences before and After Rachel Carson" Wallace Stegner Center 17<sup>th</sup> Annual Symposium, Silent Spring at 50: The Legacy of Rachel Carson 2012
- 33. Laws in Biology: A Commentary on Lange and Mitchell, American Philosophical Association Meeting, December 2012
- 32. Overdiagnosis: A Risk of Cancer Screening? Philosophy of Science Association Meetings, for a Symposium on Risk and Cancer, November 2012
- 31. Darwin Day Keynote Speaker, North Dakota State University, Feb. 2011
- 30. Water, Conflict, and Human Rights: Emerging Challenges and Solutions, conference sponsored by the Barbara and Norman Tanner Center for Nonviolent Human Rights Advocacy. February 2011
- 29. Darwin's Importance for Modern Biology, Darwin Day Lecture, SHIFT (Secular Humanism, Inquiry and Free Thought), University of Utah, Feb. 2011
- 28. Health Care: Access and Justice: What is a 'decent minimum?' Annual LEAP (Learning, Engagement, Achievement, and Progress) Lecture, University of Utah, September 2011
- 27. Microbial Evolution: Breaking the Rules, with Fred Adler and Steve Peck, International Society for the History, Philosophy and Social Studies of Biology, (ISHPSSB) July 2011
- 26. From Darwin to Darwinism, Darwin Day Talk at Pacific University Feb. 2009
- 25. Evo-Devo meets Macro-Micro: A New Synthesis? Washington University Working Group in History and Philosophy of Biology, Hosted by Gar Allen. December 2008
- 24. Return of the Hopeful Monsters, University of Chicago Committee on the Conceptual and Historical Studies of Science Colloquium Series. October 2008

- 23. Peirce and the Theory of Abductive Inference, International Society for the History of Philosophy of Science 2007
- 22. The Rise and Fall of the Adaptive Landscape, University of British Columbia, Spring Colloquium 2006
- 21. Cause for concern: A comment on Causation and Genic Selection, UC Davis, Fall Colloquium, 2005
- 20. Levels of Drift International Society for the History, Philosophy, and Social Studies of Biology (ISHPSSB) July 2005
- 19. Darwin and Darwinism, Utah Valley State, Spring Colloquium Series, 2005
- 18. Drift as a Cause of Evolutionary Change, Department of Philosophy, University of Wisconsin, Madison, Colloquium Series, December 2004
- 17. The Molecular Revolution, Idealization, and Population Genetics, Philosophy of Science Association Meetings, (refereed paper) November 2004
- 16. The Molecular Revolution, Idealization and Classical Population Genetics, UT Austin Colloquium Series, Oct 1, 2004
- 15. Evolution and the Molecular Revolution, International Society for the History of the Philosophy of Science, (HOPOS) June 2004
- 14. Whatever Happened to the Unity of the Genotype? ISHPSSB, July 2003
- 13. Speciation and the Concept of the Population in 20<sup>th</sup> Century Biology, Canadian Society for the History and Philosophy of Science, May 2003
- 12. Parsimony and the Fisher-Wright Debate, Duke Center for Philosophy of Biology, Second Annual Conference: 25 Years after the Panglossian Spandrels: A Conference on Adaptationism, April 2003
- 11. Comment on Sarkar, *Biodiversity and Environmental Philosophy: An Introduction to the Issues*, Pacific American Philosophical Association Meetings, (APA) March 2003
- 10. Will Molecular Biology Solve/Dissolve the Problems of Phylogenetic Systematics? Symposium, The Field Museum, Chicago: Systematics at a Crossroads Again: Biological and Philosophical Arguments in Contemporary Phylogenetics, 2003
- 9. The Place of Molecular Evolution in Evolutionary Biology: Ongoing Synthesis, Reduction, or Neither? Carnegie Mellon University, Department of Philosophy Colloquium, February 2003
- 8. Explanatory Pluralism and Evolutionary Biology, Philosophy of Science Association, 2002
- 7. R.A. Fisher and Sewall Wright: Philosophy of Science for Population Genetics, International Society for the History of Philosophy of Science (HOPOS) 2002
- 6. Parsimony and the Wright-Fisher Debate, University of Cincinnati, Department of Philosophy Spring Colloquium, April 2002
- 5. Saving Unification: A Reply to Morrison, International Society for History Philosophy and Social Study of Biology (ISHPSSB) July 2001

- 4. Wright v. Fisher: Fact or Fiction? University of Utah Department of Biology Colloquium, December 2001
- 3. Ethical Implications of Genetic Patenting, with David Magnus, Western American Philosophical Association (APA) Dec. 2000
- 2. Modeling Evolution, Presented at the Colloquia for the History and Philosophy of Science, University of Texas, Austin, 2000
- 1. Competing Research Traditions and the Speciation Question, ISHPSSB, 1999

## **SERVICE:**

Stanford Encyclopedia of Philosophy, Philosophy of Science Subject Editor (2022-continuing)

Governing Board, Philosophy of Science Association, 2020-continuing

Chair of the Awards Committee, Philosophy of Science Association, 2021-continuing

Co-Chair, Women's Caucus, Philosophy of Science Association, elected Nov. 2016-2020

Associate Editor, Journal for the Philosophy of Medicine, Fall 2020-continuing

Network Member, PhilInBioMed (Institute for Philosophy in Biology and Medicine), an interdisciplinary institute located at the University of Bordeaux (France), 2017-continuing

Program Committee, Annual Philosophy of Cancer Biology Workshop (2018-2022)

National Science Foundation Science Technology and Society Review Panel, Spring 2015

Associate Editor, British Journal for the Philosophy of Science (Spring 2015-continuing)

Editorial Board, Philosophy of Science, Spring 2023-continuing

Editorial Board, Biology and Philosophy

Editorial Board, Philosophy, Theory, and Practice in Biology

Secretary, ISHPSSB (International Society for the Study of the History, Philosophy, and Social Studies of Biology) 2011-2016

Program Review Committee, European Philosophy of Science Association (Fall 2014-Spring 2015) Program Committee for *Philosophy of Science Association* Meetings, November 2012.

Reviewer for: Philosophy of Science; British Journal for the Philosophy of Science; Biology and Philosophy;

Science and Education; Studies in the History and Philosophy of the Biological and Biomedical Sciences; Synthese;

Erkenntnis; HOPOS: Journal of the International Society for the History of Philosophy of Science; European Journal for the Philosophy of Science; Journal for Biomedical Ethics

Member of Philosophy of Science Association, History of Science Society, HOPOS, ISHPSSB, APA

Graduate Director, Department of Philosophy, Washington University in St. Louis, Fall 2016 -2018

Hiring Committee, WGSS (Women, Gender, Sexuality Studies Department) Washington University in St. Louis, Fall 2022

Medical Humanities Faculty Advisory Committee, Fall 2020-continuing

Hiring Committee, Department of Statistics, Washington University, Fall 2018

Hiring Committee, Department of Philosophy, Washington University in St. Louis, Fall 2016, 2018, 2014

Hiring Committee, Department of History, Wash U, Fall 2014

Graduate Director University of Utah 2009-2013

Program Committee for the International Society for the Study of the History, Philosophy, and Social Study of Biology (ISHPSSB)

Steering Committee for HOPOS (International Society for the History of Philosophy of Science)

Environmental Humanities Representative for Philosophy Department University of Utah 2007-2013

International Studies Review Board University of Utah 2007-2013

Intellectual Explorations Area Committee University of Utah 2008-2013

Publications Council University of Utah 2007-2012

University of Utah General Sciences Area Committee (University Wide Science Curriculum Committee)

## **HONORS & AWARDS:**

The Center for the Humanities in Arts & Sciences at Washington University in St. Louis 2023–24 Faculty Fellow

Cluster Coordinator, Templeton Foundation Grant (\$14.5 million) interdisciplinary project in "Agency,

Directionality, and Function: Foundations for a Science of Purpose." PI: Alan Love, Minnesota Center for

Philosophy of Science, 2021-2024, https://www.biologicalpurpose.org/people/anya-plutynski

2022-23: Co-investigator, \$314,807 Grant from the National Institute of Biomedical Imaging and Bioengineering, part of the National Institutes of Health (NIH), with Abhinav Jha, on ethical issues surrounding uncertainty in Albased tools used to measure quantitative parameters from patient images.

Lakatos Award, 2021 (Award for the best book published in philosophy of science annually).

Visiting Distinguished Professor, University of Pittsburgh, Center for History and Philosophy of Science, Spring 2019.

University of Utah Faculty Fellowship, Spring 2012

University of Utah Dean's International and Interdisciplinary Grant for Fall of 2010.

Dee Foundation Teaching Grant Fall of 2009: for Environmental Humanities

Environmental Humanities Professorship, University of Utah Environmental Humanities Program, 2008-2009, 2009-2010

Honors Professorship for 2006-2007, University of Utah

University Applied Ethics Committee Fellow award 2006-7

Faculty Fellow, University of Uta h Fall 2006.

University Applied Ethics Committee Fellow award for 2005-6

Dibner Institute Fellow, Summer Institute in History of Molecular Evolution, Woods Hole Marine Biological Labs, June 2004.

National Endowment for the Humanities Summer Institute in Science and Values, University of Pittsburgh, Summer 2003

Visiting Scholar, Duke University, Center for the Philosophy of Biology, Spring 2003

American Association of University Women Dissertation Fellowship, 2001-2.

Chimicles Teaching Fellow, University of Pennsylvania, Fall 2000-Spring 2001.

Graduate Arts and Sciences Fellow, University of Pennsylvania, Fall 1999-Spring 2000. Department of Philosophy Fellow, University of Pennsylvania, Spring 1998.

DAAD (Deutsche Akademische Austausch Dienst) Fellow, Leipzig, Summer 1994.

Kociusko Foundation Fellow, 1994-5.