

ANDREW HAMILTON

Curriculum Vitae

School of Life Sciences
Arizona State University
P.O. Box 874501
Tempe, AZ 85287
480-965-5145
ahamilton@asu.edu

EDUCATION

Ph.D. in Philosophy and Science Studies

Dissertation title: *Laws, Causes, and Kinds: Toward a Solution to the Biology Problem*

Committee: Nancy Cartwright (Chair), William Bechtel, Craig Callender, Naomi Oreskes, and Milton Saier

University of California, San Diego, 2001–2005

M.A. in Philosophy

Boston College, 1999–2000

B.A. in Philosophy, Minor in Latin

Berea College, 1992–1996

APPOINTMENTS

2007– Affiliated Faculty, Department of Philosophy, Arizona State University

2007– Honors Disciplinary Faculty, Barrett Honors College, Arizona State University

2006– Assistant Professor of Life Sciences, Arizona State University

2005–2006. Visiting Lecturer, Department of Philosophy, University of California, Davis

2005–2006. Affiliated Faculty, Science and Technology Studies, University of California, Davis

2004–2006. Associate, Center for the History and Philosophy of Science, California Academy of Sciences

2003–2005. Adjunct Lecturer, University of San Francisco

2000–2001. Visiting Lecturer, University of Dar es Salaam

PUBLICATIONS

In Press. Hamilton A, Haber, M.H., Odenbaugh, J.O. and Okasha, S. “Biology.” In *Philosophy of the Special Sciences*, F. Allhoff, ed.

In Press. Hamilton, A. and Wheeler, Q. D. “Taxonomy and Why History of Science Matters for Science: A Case Study. *Isis*.

In Press. Hamilton, A. “Toward a Mechanistic Evo Devo.” In *Form and Function in Evolutionary Development*, M. Laubichler and J. Maienschein, eds. Cambridge: Cambridge University Press.

In Press. Hamilton, A., Haber, M. H., and Smith, N. R. “Social Insects and the Individuality Thesis: Cohesion and the Colony as a Selectable Individual.” In *Organization of Insect Societies: From Genome to Sociocomplexity*. J. Gadau and J. Fewell, eds. Harvard University Press.

2007. Bechtel, W. and Hamilton, A. “Natural, Behavioral, Social Sciences and the Humanities: Reductionism and the Unity of the Sciences.” In *General Philosophy of Science: Focal Issues*. Theo Kuipers, ed. North Holland Press, 377–430.

2007. Hamilton, A. “Laws of Biology, Laws of Nature: Problems and (Dis)solutions.” *Blackwell Philosophy Compass*, 2: 592–610.

2007. Elser, J. J. and Hamilton, A. "Stoichiometry and the New Biology: The Future is Now." *PLoS Biology*, 5: 181–183.
2006. Hamilton, A., and Haber, M. H. "Clades are Reproducers." *Biological Theory*, 1: 381–391.
2006. Cartwright et al. "Philosophy of Science: Laws." In *Oxford Handbook of Contemporary Philosophy*, Frank Jackson and Michael Smith, eds. Oxford: Oxford University Press: 792–818.
2005. Haber, M. H. and Hamilton, A. "Coherence, Consistency, and Cohesion: Clade Selection in Okasha and Beyond." *Philosophy of Science*, 72: 1026–1040.
2005. Hamilton, A. "Plato's Theory of Forms Reconsidered: Radical Purity in *Philebus* 11a–15b?" *Ancient Philosophy*, 25: 349–363.
2005. Fagan, M. et al. "Meeting Report: First ISHPSSB Off-Year Workshop." *Biology & Philosophy*, 20: 927–929.
2002. Hamilton, A. "Wonderful Life: On Stephen Jay Gould and Ourselves." *History of Science Society Newsletter*, 31: 3, p. 4.

INVITED PRESENTATIONS

2008. "Emergence and Division of Labor in Seed Harvester Ants: Philosophical Perspectives." Presented at The Philosophy of Science Retreat, St. James Reserve, Idyllwild, CA. May 8.
2007. "Systematics and Why History Matters." Presented at the Dibner-ASU History of Biology Seminar, Marine Biological Laboratory, Woods Hole, May.
2007. "Comment on Angela Potochnik's "Generality, Complexity, and Approaches to Explanation." Presented at the Annual Meeting of the American Philosophical Association, Pacific Division. April 5.
2007. "From the Parmenides to the *Philebus*: Rethinking Plato's Theory of Forms." Presented at the ASU Philosophy Department Colloquium. March 26.
2007. "Models and the Modeling Modelers Who Write Them: A Fair and Balanced Look at General Circulation Models." Presented at the Consortium for Science Policy and Outcomes, Arizona State University. March 6.
2005. "Unnatural Kindness: Complexity, Contingency, and the Biology Problem." University of California, Davis. December 9.
2005. "Nativeness Considered." Instituto de Investigaciones Filosóficas, Universidad Nacional Autónoma de México. June 8.

PRESENTATIONS

2008. "Rethinking the Origins of Sociality: Harvester Ants and the Dynamics of Group Cohesion." Presented at the Seventh Annual Conference in Philosophy and Biology, Duke University, 13 April.
2007. "An Overview of the Development of Historical Perspectives on Multilevel Selection." Presented at the Readings in Complexity Colloquium Series, Center for Social Dynamics and Complexity, ASU, November 6.
2007. "What Makes a Group an Evolutionary Unit?" Presented at the 2007 meeting of the International Society for the History, Philosophy, and Social Studies of Biology, Exeter, UK, July 26.
2005. "Causation, Stability, and Invariance: Drawing the Right Continuum." Presented at the 2005 meeting of the International Society for the History, Philosophy, and Social Studies of Biology, Guelph, June 16.
2005. "Natives and Aliens." Presented (with co-author Matt Chew) at the Southwest Colloquium for the History and Philosophy of the Life Sciences, Arizona State University, April 1.
2005. "Clades as Reproducers?" Presented (with co-author Matt Haber) at the

- Southwest Colloquium for the History and Philosophy of the Life Sciences, Arizona State University, April 1.
2004. "Coherence, Consistency, and Cohesion: Clade Selection in Okasha and Beyond." Presented (with co-author Matt Haber) at the Philosophy of Science Association Meeting, Austin, November 18.
2004. "Bio-Complexity and Other False Truisms: How to Dissolve the Biology Problem." Presented at the Southwest Colloquium for the History and Philosophy of the Life Sciences, University of Texas at Austin, March 6.
2004. "Bio-Complexity and Other False Truisms: How to Unify Science in Three Easy Steps." Presented at the Science Studies Program Colloquium Series, UCSD, February 9.
2003. "Biology: Unity and Disunity." Presented at the 2003 meeting of the International Society for the History, Philosophy, and Social Studies of Biology, Vienna, June 17.
2002. "Evolution and Contingency." Presented at the Saier Molecular Biology Lab, UCSD, November.
2001. "Teaching Philosophy in Africa: Some Themes and Concerns." Presented at the University of Dar es Salaam "Philosophy in Africa" Conference.
2000. "Amnesia and Anamnesis: The State of African Philosophy." Presented at the Annual Graduate Student Conference In African Studies, Boston University.

GRANTS

2008. Co-Primary Investigator National Science Foundation Grant: Collaborative Research: A Critical Study of Species Discovery Strategies with the Special Reference to the Darkling Beetle Genus *Eleodes*. (Pending: Proposal Number 6802474)
2008. Primary Investigator, National Science Foundation Grant: "History and Philosophy of Ecology." (Grant Number 08080978)
2008. Co-Primary Investigator, National Science Foundation Grant: "IGERT: Governing Scientific and Technological Change." (Pending: Proposal Number 08040040)
2004. Senior Investigator, National Science Foundation Workshop Grant: "Future Directions in ISHPSSB"
2004. ISHPSSB Off-Year Workshop Grant

WORKSHOPS AND CONFERENCES ORGANIZED

2008. Workshop on Historical and Conceptual Foundations of Systematics, Tempe (International Institute for Species Exploration and Center for Biology and Society) Information at <http://www.doubtfulspecies.org/asusystematicsworkshop>
2008. Workshop on Multilevel Selection, Tempe (Center for Social Dynamics and Complexity) Information at <http://www.asu.edu/clas/csdc/events/workshop4.html>
2007. Biology by the Bay, San Francisco
This was a small conference intended to provide graduate students with an opportunity to practice presenting their work as well as to solicit feedback from faculty attendees. More information is available at www.doubtfulspecies.org/biobythebay.
2005. Southwest Colloquium in the History and Philosophy of the Life Sciences, UC Davis
This meeting has for the past several years been a joint venture between the Philosophy Department at the University of Texas at Austin and the Biology and Society Program at Arizona State University. In 2005, I organized for the meeting to be held at UC Davis for the first time and raised part of the money.
2004. Future Directions in ISHPSSB, San Francisco
For this meeting I was part of a small group of graduate students that conceived, organized, and ran a four-day training workshop in the philosophy of biology for

graduate students in all disciplines. The event was attended by approximately eighty students and faculty from around the world. We raised just over \$25,000 from several sources, allowing us to award almost every student participant a travel grant. More information is available at www.ishpssb.org/workshop2004.

TEACHING

- Fall 2006. Philosophy of Biology
The Embryo Project Seminar (with Maienschein and Laubichler)
History and Philosophy of Science Lab
- Spring 2007. Philosophy of Science
The Embryo Project Seminar (with Maienschein and Laubichler)
History and Philosophy of Science Lab
- Fall 2007. Science and Society
ASU 101
The Embryo Project Seminar (with Maienschein and Laubichler)
History and Philosophy of Science Lab
- Fall 2008. Science and Society
Human and Social Dimensions of Science and Technology Graduate Seminar

SERVICE

To the Center for Biology and Society/Human Dimensions Faculty Group
2006–2007. Consulting Editor, Embryo Project (<http://embryo.asu.edu/>)

To the Center for Social Dynamics and Complexity
2006–2008. Co-Organizer (with Jennifer Fewell) Workshop on Multilevel Selection.
2006–Present. Co-Organizer (with Manfred Laubichler) Readings in Complexity Series.

To the School of Life Sciences
2006–Present. Human Dimensions of Biology Representative, Research and Training Initiatives Committee

To the Profession

2008. Referee, *Biological Theory*
- 2007–2009. Member, Off-Year Meeting Committee, International Society for the History, Philosophy, and Social Studies of Biology
- 2007–2009. Member, Membership Development Committee, International Society for the History, Philosophy, and Social Studies of Biology
2007. Session Organizer, “Multilevel Selection, and Major Transitions: Groups, Individuals, and the Units of Selection.” Meeting of the International Society for the History, Philosophy, and Social Studies of Biology
2007. Referee, *Biological Theory*
2006. Referee, *Biological Theory*
2006. Referee, *Philosophy of Science*
2005. Referee, *Philosophy of Science*
2003. Session Chair/Session Organizer at the meeting of the International Society for the History, Philosophy, and Social Studies of Biology, in Vienna, Austria

To Humanity

2004. Organizer and Foreman, USF Spring Break house-building trip to Tijuana,

- Mexico.
- 2004–2005. Webmaster/Grant Coordinator, Umthombo, an NGO that works with street children in South Africa (www.umthombo.org).
2005. Organizer and Foreman, USF Spring Break house-building trip to Tijuana, Mexico

PROFESSIONAL ASSOCIATIONS

American Philosophical Association

Philosophy of Science Association

History of Science Society

International Society for the History, Philosophy, and Social Studies of Biology

Ecological Society of America