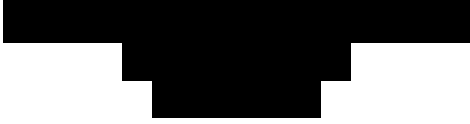


**Andrew Hamilton**  
**Curriculum Vitae**



**Education**

Ph.D., Philosophy and Science Studies, University of California, San Diego, 2005  
M.A., Philosophy, Boston College, 2000  
B.A., Philosophy, Berea College, 1996

**Appointments**

2017-2022. Trustee, Sampoerna University American College, Jakarta, Indonesia  
2016-Present. Associate Dean for Student Success, College of Natural Sciences and Mathematics, University of Houston  
2013-2016. Associate Dean for Student Success, The Honors College, University of Houston  
2012-2013. Executive Director for Academic Innovation, Office of the Provost, University of Houston  
2012-2014. Senior Sustainability Scientist, Global Institute for Sustainability, Arizona State University  
2006-2012. Assistant Professor of Life Sciences, Arizona State University  
2005-2006. Visiting Lecturer, University of California, Davis  
2003-2005. Adjunct Lecturer, University of San Francisco  
2000-2001. Visiting Lecturer (Fulbright), University of Dar es Salaam, Tanzania

**Editorial Positions**

2008-2012. Editorial Board, Species and Systematics Series, University of California Press  
2007-2012. Co-Editor, Philosophy of Biology Café ([philbiocafe.utah.edu](http://philbiocafe.utah.edu))

**Publications [33]**

***Books [1]***

1. 2013. *Hamilton, A., ed. The Evolution of Phylogenetic Systematics.* University of California Press.

***Reviewed Articles [18]***

2. In press. Mathews, M. Smith, B. and *Hamilton, A.* "The Development of the WISE (Writing to Inspire Successful Education) Program: A University-School Collaboration." *Journal of Advanced Academics.*

3. In press. Pirtle, Z., Odenbaugh, J., *Hamilton, A.*, and Szajnfarber, Z. "Engineering Model Independence: A Pluralist Strategy to Encourage Independence Among Models." *Techne: Research in Philosophy and Technology.*

4. 2018. *Hamilton, A.* "The Need for Student Engagement." *New Directions for Teaching and Learning*, 154: 21-32.
5. 2013. *Hamilton, A.* "The Teachable Moment: Rethinking the Large Lecture." *Change: The Magazine of Higher Learning*, 3: 49-51.
6. 2012. Wheeler, Q. D., Coddington, J., Gostony, T., *Hamilton, A.*, Larimer, R., Polaszek, A., Schauff, M., and Solis, M. A. "Nomenclatural Benchmarking: The Roles of Digital Typification and Telemicroscopy." *Zookeys*, 209: 193-202.
7. 2012. Wheeler, Q. D., Knapp, S., Stevenson, D. W., Stevenson, J. W., Blum, S. D., Boom, B. M., Borisy, G. G., Buizer, J. L., de Carvalho, M. R., Donoghue, M. J., Gerson, E. M., Graham, C., Graves, P., Graves, S. J., Guralnick, R. P., *Hamilton, A.*, Hanken, J., Lipscomb, D. L., Lovejoy, T. E., Miller, H., Miller, J. S., Naeem, S., Novacek, M. J., Page, L. M., Platnick, N. I., Raven, P. H., Solis, M. A., Valdecasas, A. G., van der Leeuw, S., Vermeulen, N., Vogel, J., Wilson, E. O., and Woolley, J. B. "Charting the Biosphere: Exploring Species to Understand the Origin, Organization, and Sustainability of Biodiversity." *Systematics and Biodiversity*, 10: 1-20.
8. 2011. *Hamilton, A.* "From Types to Individuals: Hennig's Ontology and the Development of Phylogenetic Systematics." *Cladistics*, 27: 1-11.
9. 2011. Pearson, D., *Hamilton, A.*, and Erwin, T. "Recovery Plan for the Endangered Taxonomy Profession." *Bioscience*, 61: 58-63.
10. 2011. Chew, M. and *Hamilton, A.* "The Rise and Fall of Biotic Nativeness: A Historical Perspective." In *Fifty Years of Invasion Ecology: The Legacy of Charles Elton*. D. Richardson, ed. Oxford: Wiley-Blackwell.
11. 2010. Pirtle, Z., Meyer, R., and *Hamilton, A.* "What Does It Mean When Climate Models Agree? A Case For Assessing Independence Among General Circulation Models." *Environmental Science and Policy*, 13: 351-361.
12. 2009. Haber, M. H. and *Hamilton, A.* "Clade Selection and Levels of Lineage: A Reply to Rieppel." *Biological Theory*, 4: 214-218.
13. 2008. *Hamilton, A.* and Wheeler, Q. D. "Taxonomy and Why History of Science Matters for Science: A Case Study." *Isis*, 99: 331-340.
14. 2007. *Hamilton, A.* "Laws of Biology, Laws of Nature: Problems and (Dis)solutions." *Blackwell Philosophy Compass*, 2: 592-610.
15. 2007. Elser, J. J. and *Hamilton, A.* "Stoichiometry and the New Biology: The Future is Now." *PLoS Biology*, 5: 181-183. Translated into Estonian as Elser, J. J. and *Hamilton, A.* 2008. "Stõhhiomeetria ja uus Bioloogia." *Akadeemia*, 7: 1505-1516.

16. 2006. *Hamilton, A.*, and Haber, M. H. "Clades are Reproducers." *Biological Theory*, 1: 381–391.
17. 2005. Haber, M. H. and *Hamilton, A.* "Coherence, Consistency, and Cohesion: Clade Selection in Okasha and Beyond." *Philosophy of Science*, 72: 1026–1040.
18. 2005. *Hamilton, A.* "Plato's Theory of Forms Reconsidered: Radical Purity in *Philebus* 11a–15b?" *Ancient Philosophy*, 25: 349–363.

#### Book Chapters [10]

19. 2017. *Hamilton, A.* "Rethinking the Large Lecture." In *College Teaching and Learning for Change: Students and Faculty Speak Out*. M.A. Miller, ed. Routledge.
20. 2013. *Hamilton, A.* and Fewell, J. "Groups, Individuals, and the Transition to Sociality." In *From Groups to Individuals: Perspectives on Biological Associations and Emerging Individuality*. F. Bouchard and P. Huneman, eds. MIT Press.
21. 2013. *Hamilton, A.* "Historical and Conceptual Perspectives on Modern Systematics: Groups, Ranks, and the Phylogenetic Turn." In *The Evolution of Phylogenetic Systematics*. A. Hamilton, ed. University of California Press.
22. 2013. Wheeler, Q. D. and *Hamilton, A.* "The New Systematics, The New Taxonomy, and the Future of Biodiversity Studies." In *The Evolution of Phylogenetic Systematics*. A. Hamilton, ed. University of California Press.
23. 2010. Haber, M. H., *Hamilton, A.*, Odenbaugh, J. O. and Okasha, S. "Philosophy of Biology." In *Philosophy of the Special Sciences*, F. Allhoff, ed. Oxford: Wiley-Blackwell, 185–212.
24. 2009. *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, 572–589.
25. 2009. *Hamilton, A.* "Toward a Mechanistic Evo Devo." In *Form and Function in Evolutionary Development*, M. Laubichler and J. Maienschein, eds. Cambridge: Cambridge University Press, 213–224.
26. 2009. *Hamilton, A.* "Letter to Linnaeus." In *Letters to Linnaeus*, Q. D. Wheeler and S. Knapp, eds. London: The Linnean Society of London, 87–91.
27. 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.

28. 2006. Cartwright, N., Alexandrova, A., Efstathiou, S., *Hamilton, A.*, and Muntean, I. "Philosophy of Science: Laws." In *Oxford Handbook of Contemporary Philosophy*, Frank Jackson and Michael Smith, eds. Oxford: Oxford University Press: 792-818.

### **Invited Articles [3]**

29. 2011. *Hamilton, A.* and Dimond, C. "Groups, Individuals, and Evolutionary Restraints: The Making of the Contemporary Debate Over Group Selection." *Biology and Philosophy*.

30. 2009. *Hamilton, A.* and Wheeler, Q. D. "Reply to Wilson et al." *Isis*. 100: 117-118.

31. 2005. Fagan, M., Forber, P., García Deister, V., Haber, M. H., *Hamilton, A.*, Yamashita, G. "Meeting Report: First ISHPSSB Off-Year Workshop." *Biology & Philosophy*, 20: 927-929.

### **Reviews [2]**

32. 2006. *Hamilton, A.* Review of Ernst Mayr's What Makes Biology Unique? *Philosophy of Science*, 73: 255-257.

33. 2002. *Hamilton, A.* "Wonderful Life: On Stephen Jay Gould and Ourselves." *History of Science Society Newsletter*, 31: 3, p. 4.

### **Teaching**

At UC Davis

Fall 2005      PHI 5, Critical Reasoning (80 students)  
                  PHI 31, Scientific Reasoning (80 students)  
Spring 2006    PHI 38, Philosophy of Biology (60 students)  
                  PHI 107, Philosophy of Physics (25 students)

### **At Arizona State**

Fall 2006      BIO/HPS 394, Philosophy of Biology (21 Students)  
Spring 2007    BIO/HPS 314, Philosophy of Science (68 Students)  
                  BIO 394, Bioethics in Film (14 Students)  
Fall 2007      BIO/HPS 394, Science and Society (181 Students)  
                  ASU 101 (17 Students)  
                  BIO/HPS 498, The Embryo Project Seminar (with Maienschein and  
                  Laubichler) (3 students)  
                  HPS 591, History and Philosophy of Science Lab (Graduate Course, 3  
                  Students)  
Spring 2008    BIO/HPS 498, The Embryo Project Seminar (with Maienschein and  
                  Laubichler) (4 students)  
Fall 2008      BIO/HPS 394, Science and Society (181 Students)  
                  HSD 601, Human and Social Dimensions of Science and Technology  
                  (Graduate Seminar, 13 Students)  
                  BIO/HPS 498, The Embryo Project Seminar (with Maienschein and  
                  Laubichler) (4 Students)  
Spring 2009    BIO/PHI 591, Introduction to Philosophy of Science (with Creath)  
                  (Graduate Seminar, 8 students)

BIO/HPS 498, The Embryo Project Seminar (with Maienschein and Laubichler) (4 Students)  
 HON 171, The Human Event (26 students)  
 Fall 2009 BIO/HPS 394, Science and Society (149 Students)  
 HPS 591, History and Philosophy of Science Lab (with Ellison) (Graduate Course, 13 Students)  
 Spring 2010 HPS 513, Decisions and Strategies (with Armendt) (Graduate Seminar, 6 Students)  
 BIO 100, Introduction to Biology (with Elser) (861 Students)  
 Fall 2010 BIO 591 Species and Speciation (with Gadau) (Graduate Seminar, 6 Students)  
 BIO 189, Tracking Diversity in Nature (Freshman Seminar, 17 Students)  
 Spring 2011 BIO 100, Introduction to Biology (with Elser) (97 Students)  
 BIO/HPS, Philosophy of Biology (Graduate Seminar, 7 Students)  
 Fall 2011 BIO 100, Introduction to Biology (with Pearson) (864 Students)  
 BIO 189, BIO 189, Tracking Diversity in Nature (Freshman Seminar, 19 Students); BIO 591, Teaching Biology Labs (Graduate Seminar, 12 Students)

#### **At University of Houston**

Fall 2013 HON 4397, Civic Engagement  
 Spring 2014 HON 3397, Sustainable Cities  
 Fall 2014 HON 4397, Civic Engagement  
 Spring 2015 BIOL 1362, Introduction to Biology; BIOL 3397, Galápagos Evolving  
 Spring 2016 BIOL 1362, Introduction to Biology; BIOL 3397, Galápagos Evolving  
 HON 3397, Sustainable Cities  
 Spring 2017 BIOL 3397, Galápagos Evolving; IDNS 4399, Discovering Science

#### **Grants Awarded and In Process**

2018: Co-PI NSF HSI STEM Grant (\$1,500,000) (Recommended by Program Officer)  
 2018-2021: Co-PI NSF S-STEM Grant (\$1,000,000)  
 2017-2018: Primary Investigator, NSF HSI STEM Grant (\$100,000)  
 2015-2018. Primary Investigator (Supervisor), Corporation for National and Community Service VISTA Grant, "Creating Lasting Change in Houston's Third Ward." (Grant Number 16VSWTX001, \$200,000)  
 2015-2016. Primary Investigator, Teaching Innovation Program Grant, "Fostering the Narrative Imagination through Interdisciplinary Study. (\$18,000)  
 2010-2011. Primary Investigator, with Ph.D. student Johnny Winston, National Science Foundation Grant: "DDIG: The Science of the Endangered Species Act: The Committee on Rare and Endangered Wildlife Species, 1964-1973" (Grant Number SES-0957131, \$9,984)  
 2009-2012. Primary Investigator, National Science Foundation Grant: "Standard Research: Biological Systematics in Historical and Conceptual Context" (Grant Number SES 0925827, \$104,514)

2008–2010. Primary Investigator, with postdoctoral Fellow David Steffes, National Science Foundation Grant: “Postdoctoral Fellowship: History and Philosophy of Ecology.” (Grant Number SES 08080978, \$84,000)

2004. Senior Investigator, National Science Foundation Workshop Grant (\$10,000)

### **Nominations and Awards**

2018. New and Innovative Program Award, UH chapter of Phi Beta Delta (team award for Galápagos study abroad)

2017. Elected by Peers to Membership in the UH Chapter of Phi Kappa Phi.

2016. UH System Regents’ Award for Academic Excellence (for the Bonner Program)

2013. Member, EduCause/Next Generation Learning Challenges Inaugural Breakthrough Models Academy

2012. Nominee, Centennial Professorship, Arizona State

2011. Finalist, Provost’s Faculty Achievement Award for Excellence in Undergraduate Instruction, Arizona State

2010. Nominee, CLAS Teaching Award at Arizona State

2010. Nominee, Centennial Professorship, Arizona State

2009. Nominee, CLAS Teaching Award, Arizona State

### **Selected Presentations**

2017. Invited Talk, “Opportunities and Challenges for Undergraduate Education.” Pennsylvania State University. Sept 18th.

2014. Convocation Address: “Students as Customers?” Lone Star College, University Park, August, 2014.

2014. Keynote Address: “Building Successful Students.” Lone Star College System Conference on Teaching and Learning, Houston, March 28.

2013. “Assessing for Reform.” 13<sup>th</sup> Annual Texas A&M Assessment Conference, College Station, 17 February.

2011. “Individuating Climate Models: Independence, Robustness, and Uncertainty,” with former student Zach Pirtle (NASA). Fall Meeting of the American Geophysical Union, San Francisco, 5 December.

2011. “Biodiversity and Bioinformatics: Toward a 21<sup>st</sup> Century Approach to Comparative Morphology.” Entomological Society of America Annual Meeting, Reno, November 15.

2011. “Species, Systematics, and Biodiversity: Connecting Concepts and Practice.” UC Irvine Department of Logic and Philosophy of Science Colloquium Series, October 7.

2011. “From Types to Individuals in Phylogenetic Systematics.” ISHPSSB Annual Meeting, Salt Lake City, Utah, July 12.

2011. “What Does it Mean When Climate Models Agree? A Case for Assessing Independence among General Circulation Models.” Presented at the Epistemology of Modeling and Simulation National Conference, University of Pittsburgh, April 1.

2010. “HPS in the Science Curriculum: History and Philosophy at the Lab Bench.” Presented in the opening plenary session at the annual History of Science Society meeting, Montreal, November 4.

2010. “How Systematics Became Phylogenetic.” Presented at the MBL-ASU History of Biology Seminar, Marine Biological Laboratory, Woods Hole, MA., May 22.

2007. “Systematics and Why History Matters.” Presented at the Dibner-ASU History of

- Biology Seminar, Marine Biological Laboratory, Woods Hole, MA. May.
2007. "From the Parmenides to the Philebus: Rethinking Plato's Theory of Forms."  
Presented at the ASU Philosophy Department Colloquium. March 26.
2005. "Nativeness Considered." Instituto de Investigaciones Filosóficas, Universidad  
Nacional Autónoma de México. June 8.
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.

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]