ALAN D. GISHLICK CURRICULUM VITAE

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Current Appointments

2014 – Present: Instructor
Department of Environmental, Geographical and Geological Sciences
Bloomsburg University of Pennsylvania
Bloomsburg, PA

2009 – Present Curatorial Affiliate
Division of Vertebrate Paleontology
Peabody Museum of Natural History
New Haven, CT

Courses Taught

Bloomsburg University:
- Dinosaurs (EGGS 103)
- Natural Disasters (EGGS 107)
- Physical Geology (EGGS 120)
- Historical Geology (EGGS 130)
- Paleontology (EGGS 365)
- Special Topics: Museum Science (EGGS 390)

New York Institute of Technology:
- Foundations of Scientific Principles
- Foundations of Inquiry
- Environmental History of Long Island

Yale University:
- Science and Pseudoscience

University of Wisconsin-Eau Claire:
- Principles of Geology
- Sedimentology and Stratigraphy
- Earth History (400 level)

Gustavus Adolphus College:
- Principles of Geology
- Evolution of the Earth
- Dinosaurs and Extinction
- Sedimentology and Stratigraphy
- Paleontology and Evolutionary Theory

Education

Ph.D. Geology and Geophysics, Yale University. 2002.

Dissertation: The functional morphology of the forelimb of *Deinonychus antirrhopus* and its importance for the origin of avian flight

M.Phil. Geology and Geophysics, Yale University. 1999

B.A. (Geology) Augustana College, Rock Island IL. 1995

Previous Appointments

2012-2014 Associate Adjunct Instructor, New York Instituge of Technology
2011 Visiting Assistant Professor of Geology, University of Wisconsin-Eau Claire, Eau Claire, Wisconsin.
2007-2009 Visiting Assistant Professor, Gustavus Adolphus College, Saint Peter, Minnesota
2001-2006 Postdoctoral Scholar/Visiting Researcher National Center for Science Education, Oakland, California
1995-2001 Graduate Fellow, Yale University, New Haven, Connecticut

Scientific Publications

Seilacher, A. and A. D. Gishlick. 2014. Morphodynamics. CRC Press, 551p.

Gishlick, A. D., M. Fox, W. G. Parker and A. Behlke. 2014. Biodiversity in the Triassic: Preliminary results of the field operations of the Yale Peabody Museum in the Petrified Forest National Park. Journal of Vertebrate Paleontology 34 (Supplement).

Dalman, S. and A. D. Gishlick. 2011. Theropod material from Lameta, India, in the Collection of the American Museum of Natural History and its bearing on the diagnosis and phylogenetic and taxonomic status of *Indosuchus raptorius*. Journal of Vertebrate Paleontology 31 (supplement):95.

Tsuihiji, T., M. Watabe, A. D. Gishlick, R. Barsbold, and K. Tsogtbaatar. 2009. New information on the pectoral girdle, sternum, and forelimb of *Avimimus* (Dinosauria: Theropoda) from the Gobi Desert of Mongolia. Journal of Vertebrate Paleontology 29 (supplement):192A.

Gishlick, A. D. 2007. Developmental pattern of wrist elements in palaeognaths and its bearing on the evolution of theropod carpals. *Journal of Vertebrate Paleontology*, 27 (supplement):81A.

Gishlick, A. D. and Gauthier, J. A. 2007. A revision of the manual morphology of *Compsognathus longipes* and its bearing on the diagnosis of Compsognathidae. *Zoological Journal of the Linnean Society* 149:569-581

Kim, H. M., Gishlick, A. D. and Tsuihiji, T. 2005. The first non-avian maniraptoran skeletal remains from the Lower Cretaceous of Korea. *Cretaceous Research* 26:299-306.

Gishlick, A. D. 2004. Where have all the carpals gone? Reconstructing wrist evolution in theropod dinosaurs. *Journal of Vertebrate Paleontology*, 24 (supplement):64A.

Carney, R. and A. D. Gishlick. 2004. Utilizing digital techniques within an extant phylogenetic bracketing paradigm to reconstruct and analyze the role of articular cartilaginous structures in dromaeosaur forelimb function. *Journal of Vertebrate Paleontology*, 24 (supplement):44A.

Gishlick, A. D. and R. Carney. 2003. Using digital scanning and modeling to reconstruct and test the forelimb function of *Deinonychus antirrhopus*. *Journal of Vertebrate Paleontology* 23(Supplement): 55A

Gishlick, A. D. 2001. Evidence for the muscular control of an avian-style automatic extension and flexion of the manus and elbow in the forearm of non-avian maniraptors. *Journal of Vertebrate Paleontology* 21 (Supplement): 54-55A.

Gishlick, A. D. 2001. The function of the manus and forelimb of *Deinonychus antirrhopus* and its importance for the origin of avian flight. In Jacques A. Gauthier, editor. *New Perspectives on the Origin and Evolution of Birds: Proceedings of the International Symposium in Honor of John H. Ostrom*. Peabody Museum of Natural History Special Publication, New Haven CT p. 301-318.

Gishlick, A. D. 2001. Predatory behaviour in maniraptoran theropods. In D. E. G. Briggs and P. R. Crowther (eds.), *Palaeobiology II*. Blackwell p. 419-422.

Gishlick, A. D. 2000. An evaluation of the climbing capability of basal maniraptors. *Journal of Vertebrate Paleontology* 20 (Supplement):44A

Gauthier, J. A., and Gishlick, A. D. 2000. The manual morphology of *Compsognathus* and its relevance to the form of the coelurosaur manus. *Journal of Vertebrate Paleontology* 20 (Supplement):43A.

Science Education and Popular Writing

Gishlick, A. D. 2008. Feet and Hands. New Book of Knowledge 2008 Edition, Scholastic Publishing, Danbury, vol. 6, p. 79-84

Gishlick, A. D. 2004. Evolutionary paths to irreducible systems: The avian flight apparatus. In M. Young and T. Edis, editors. *Why Intelligent Design Fails: A Scientific Critique of the New Creationism*. Rutgers University Press, New Brunswick p 58-71.

Gishlick, A. D., Matzke, N., and Elsberry, W. R. 2004. Meyer's Hopeless Monster. Published online at *The Panda's Thumb* http://www.pandasthumb.org/pt-archives/000430.html

Scott, E. C. and A. D. Gishlick. 2004. Review of Evolution, third edition, by Mark Ridley. *Quarterly Review of Biology* 79(4):422-423.

Gishlick, A. D. 2004. Intelligent Design: Ready for prime time? Journal of Scientific Exploration, 18:275-282.

Gishlick, A.D. 2003. Where do we come from? In R. Tyson ed. *Footsteps through time: Four Million Years of Human Evolution*. San Diego Museum of Man, San Diego. p.23.

Gishlick, A. D. 2002. Icons of Evolution? Why much of what Jonathan Wells writes about evolution is wrong. Published online at www.ncseweb.org/icons.

Gishlick, A. D. 2002. Where's the shrimp? *Reports of the National Center for Science Education*
22:27.

Padian, K., and A. D. Gishlick. 2002. The talented Mr. Wells. *Quarterly Review of Biology* 77:33-37.

Scientific Meetings

Society of Vertebrate Paleontology 73rd annual meeting, Berlin, Germany, November 5-8, 2011. Biodiversity in the Triassic: Preliminary results of the field operations of the Yale Peabody Museum in the Petrified Forest National Park.

Society of Vertebrate Paleontology 71st annual meeting, Las Vegas, NV, November 2-5, 2011. Theropod material from Lameta, India, in the Collection of the American Museum of Natural History and its bearing on the diagnosis and phylogenetic and taxonomic status of *Indosuchus raptorius*.

2010 Annual Meeting of GSA, Denver, CO, October 30 – November 3, 2010: Microstratigraphy of a Unique Bonebed at the base of the Owl Rock Member of the Chinle Formation, Petrified Forest, National Park.

Society of Vertebrate Paleontology 69th annual meeting, Bristol, UK. September 22-25, 2009. New information on the pectoral girdle, sternum, and forelimb of *Avimimus* (Dinosauria: Theropoda) from the Gobi Desert of Mongolia.

2008 Joint Annual Meeting (GSA), Houston TX, October 5-9, 2008: Evolution in the Classroom Teacher Forum - The importance of fossils: Transitions and transformations in the history of life. Available online at: http://www.geosociety.org/meetings/2008/K12evolution.htm

Society of Vertebrate Paleontology 67th annual meeting, Austin, TX, October 17-20, 2007: Developmental pattern of wrist elements in palaeognaths and its bearing on the evolution of theropod carpals

Society of Vertebrate Paleontology 64th annual meeting, Denver CO, November 3-6, 2004: Where have all the carpals gone? Reconstructing wrist evolution in theropod dinosaurs *and* Utilizing digital techniques within an extant phylogenetic bracketing paradigm to reconstruct and analyze the role of articular cartilaginous structures in dromaeosaur forelimb function.

Society of Vertebrate Paleontology 63rd annual meeting, Minneapolis MN, October 15-18, 2003. Using digital scanning and modeling to reconstruct and test the forelimb function of *Deinonychus antirrhopus.*

Society of Vertebrate Paleontology 61st annual meeting, Bozeman Mt. October 6-10, 2001: The musculature control of the forelimb of maniraptors.

Society of Vertebrate Paleontology 60th annual meeting, Mexico City, October 2525, 2000: The manual morphology of *Compsognathus* and its relevance to the form of the coelurosaur manus and An evaluation of the climbing capability of basal maniraptors.

New Perspectives on the Origin and Evolution of Birds an International Symposium in Honor of John H. Ostrom. Peabody Museum of Natural History, Yale University February 1314, 1999: The function of the manus and forelimb of *Deinonychus antirrhopus* and its importance for the origin of avian flight.

Palaeontological Association 42nd annual meeting, University of Portsmouth, December 1619 1998: Functional morphology of the hand of *Deinonychus antirrhopus* and its importance for the origin of flight.

Science and Religion Meetings

The Complexification of Nature: Supplementing the Neo-Darwinian Paradigm. The J.K. Russell Research Conference, sponsored by the Center for Theology and the Natural Sciences. October 9, 2004. Pacific School of Religion, Berkeley, CA.

The Past and Future of the Science-Religion Dialogue: Celebrating the Work of Ian G. Barbour. Sponsored by the Center for Theology and the Natural Sciences. October 3-5, 2003, Berkeley, CA.

Interpretation Matters: Science and Religion at the Crossroads. Sponsored by the Metanexus Institute on Religion and Science and the Center for Theology and the Natural Sciences. June 15-20, 2002, Haverford College, Haverford PA.

Interpreting Evolution: Scientific and Religious Perspectives. Sponsored by the Metanexus Institute on Religion and Science and the Center for Theology and the Natural Sciences. June 14-19, 2001, Haverford College, Haverford PA.

Science and Education Presentations (selected)

November 3, 2010. Air Force Academy Biology Department Speaker: On Feathers and Raptors, how we reconstruct function in fossil organisms.

Departmental Seminar Speaker, University of Nevada, Las Vegas. February 17-19, 2010. February 17, 2010 “Geology from Bizarro World: Creationism and the Grand Canyon.” February 18, 2010 “It’s All in the Wrist: How Dinosaurs learned to Fly”

October 4, 2008. Invited Speaker for GSA annual meeting special panel forum Evolution and the Classroom. Title: The importance of fossils: Transitions and transformations in the history of life.

March 2, 2008 Invited respondent to a lecture by Kurt Wise at Elmhurst College, Chicago Illinois. Topic of discussion – Is Young Earth Creationism and Paleontology compatible?

Keynote speaker for the first annual Outstanding Mathematics and Science Teachers Award Dinner sponsored by Conversations, Connections, and Collaborations, a joint venture of Northern Kentucky University, the University of Cincinnati, and Xavier

University, April 8, 2005: Asking the big questions: Science, religion, and how humans find their place in the universe.

USF (University of San Francisco) Fromm Institute of Lifelong Learning Wonders of Science Series speaker, January 26, 2004: Fossil Art.

Augustana College, Rock Island IL. Convocation Series Speaker, March 20, 2003: Controversy or Conversation: Evolution and Religion in the Twenty-first Century.

Core Knowledge Foundation 2003 National Conference, March 7, 2003. Two presentations: Laying the groundwork: Integrating evolutionary concepts into the Core Knowledge curriculum and Conflict and Conscience: teaching evolution sensitively but with integrity.

USF (University of San Francisco) Fromm Institute of Lifelong Learning Wonders of Science Series speaker, January 29, 2003: Science and Religion.

UTEP (University of Texas at El Paso) Geology Department colloquium speaker, September 19, 2002: Evolving Creationism: Past, Present, and Future.

UCSB (University of California, Santa Barbara) California Science Project on Earth Science and Evolution (for high school teachers), July 15, 2002: Patterns and process: Tying the history of life to evolution in the classroom.

CSTA (California Science Teachers Association) Annual Meeting, San Francisco, CA October 24-26, 2002, Professional development strand speaker: Continuity of reefs through time as a tool for teaching the evolution of biodiversity.

Tamalpais School District science instructor training workshop, speaker, January 8, 2002: What high school students should know about evolution.

New Orleans Darwin Day celebration speaker, March 2, 2002: Tapestry of life: How Darwin changed the way we view the natural world. Also appeared on the radio show Louisiana Live with Jim Engster in conjunction with the talk.

USF (University of San Francisco) Fromm Institute of Lifelong Learning Wonders of Science Series speaker, January 23, 2002: How Dinosaurs Learned to Fly.

Los Angeles County Museum of Natural History, Understanding Science Teachers Evening, Keynote Speaker, December 6, 2001.

Education Content Reviews and Science Advising

Campbell, N., B. Williamson, and R. Heyden. 2004. *Biology: Exploring Life.* Prentice Hall.

Biggs, A., C. Kapicka, and L. Lundgren. 2004. *Biology: The Dynamics of Life*. Glencoe-McGraw Hill.

Cambpell, N. A, and J. B.Reece. 2005. Biology 7th Edition. Benjamin Cummings.

Cambpell, N. A, and J. B.Reece. 2007. Biology 8th Edition. Benjamin Cummings.

Glencoe Biology 2007.

Glencoe Middle School Earth Science 2007.

Glencoe Middle School Human Biology 2007.

Holt Biology 2008.

Glencoe Earth Science: Earth, the Environment, and the Universe 2008.

Miller, K. and J. Levine. Prentice Hall Biology 2009.

Science advisor to Understanding Evolution, a website developed for elementary-university instructors, their students, and the general public, funded by the National Science Foundation and the Howard Hughes Medical Institute. Viewable at http://evolution.berkeley.edu

Content supervisor for Leap and the Lost Dinosaur, a first-grade interactive life sciences learning module about dinosaurs. Copyright 2004 Leap Frog Enterprises Inc.

Television and Documentary advising and appearances

Technical advisor for, and appeared in the BBC program The Truth about *Velociraptor* shown on BBC-1 on September 3, 2005, and on the Discovery Channel on November 5, 2005.

Technical advisor for the television show NUMB3RS season two episode 10 *Bones of Contention*.

Technical advisor for and appeared in a program on the Noachian Flood and the Grand Canyon by the National Geographic Channel aired on September 24, 2006.

Technical advisor for a currently untitled, in production series on dinosaurs produced the BBC/Discovery Channel.

2009 Filmed for a documentary on Creationism and the Grand Canyon, "No Dinosaurs in Heaven." Preview clip available at www.nodinossaursinheaven.org.