

W. Andrew Barr - Curriculum Vitae

Current Position

PostDoctoral Scientist - Center for the Advanced Study of Human Paleobiology. Department of Anthropology. The George Washington University.

Education

PhD - 2014 - University of Texas at Austin. Anthropology.

MA - 2008 - University of Texas at Austin. Anthropology.

BS - 2005 - Tulane University. Anthropology, French. Cum laude.

Peer Reviewed Publications

Accepted Barr, WA. Paleoenvironments of the Shungura Formation based on ecomorphology of the bovid astragalus. *Journal of Human Evolution*.

2014 Barr, WA. Functional Morphology of the Bovid Astragalus In Relation To Habitat: Controlling Phylogenetic Signal In Ecomorphology. *Journal of Morphology*. 275:1201-1216. doi:10.1002/jmor.20279

Barr, WA and Scott, RS. Phylogenetic comparative methods complement discriminant function analysis in ecomorphology. *American Journal of Physical Anthropology*. 153:663-674. doi:10.1002/ajpa.22462

Scott, RS and Barr, WA. Ecomorphology and phylogenetic risk: implications for habitat reconstruction using fossil bovids. *Journal of Human Evolution*. 73:47-57. doi:10.1016/j.jhevol.2014.02.023

2010 Reed DN, and Barr WA. A preliminary account of the rodents from Pleistocene levels at Grotte des Contrebandiers (Smuggler's Cave), Morocco. *Historical Biology*. 22:286-294. doi:10.1080/08912960903562192

Funding and Awards

2014 Travel Grant - Paleoanthropology Society for meetings in Calgary. \$500

2013 Named Continuing Fellowship - UT Austin Graduate School. \$29,000

Pollitzer Student Travel Award - American Association of Physical Anthropologists. \$500

2012 Dissertation Fieldwork Grant - Wenner-Gren Foundation. \$13,317

2008 Professional Development Award - Dept. of Anthropology, UT Austin. Also recieved in 2009-2011.

2007 Graduate Research Fellowship - National Science Foundation. \$90,000

Liberal Arts Graduate Research Fellowship - UT Austin.

Student Prize - Texas Association of Biological Anthropologists.

David Bruton, Jr. Graduate Fellowship - UT Austin. Also recieved in 2008.

Professional Preparation

PostDoctoral Scientist. Center for the Advanced Study of Human Paleobiology. The George Washington University. I conduct research related to the paleoenvironments of human evolution. Advisor: Bernard Wood. 2014 - Present.

Instructor. Center for the Advanced Study of Human Paleobiology. The George Washington University. I designed and taught a course entitled *Analytical Methods in Evolutionary Anthropology* for all first- and second-year graduate students. This course covered applied statistical methods and the R language. 2015.

Research Associate & Software Developer. PaleoCore Project. I am a key member of this NSF Funded project, which aims to create a data-standard for physical anthropology. I contributed heavily to the development of PaleoCore informatics tools for data sharing. 2012 - Present.

Participant. AnthroTree Workshop in Phylogenetic Methods. Amherst, MA. 2011.

Research Assistant. eSkeletons.org and eFossils.org. PI: John Kappelman. 2010, 2011.

Head Teaching Assistant. Introduction to Physical Anthropology, UT Austin. 2010, 2012.

Teaching Assistant. GIS and Remote Sensing for Archaeology and Paleontology, UT Austin. 2010.

Teaching Assistant. Human Variation, UT Austin. 2009.

Teaching Assistant. Introduction to Physical Anthropology, UT Austin. 2006, 2007, 2011.

Fieldwork Experience

Mille-Logya Research Project, Afar Region, Ethiopia. PI: Zeresenay Alemseged. I am a member of the scientific team conducting research to recover new fossil evidence of human evolution from this Plio-Pleistocene site. 2014.

Great Divide Basin Project, Wyoming. PI: Robert Anemone. Collected primate and mammalian fossils from Eocene sediments, and prospected for new localities. 2013.

Dikika Research Project, Afar Region, Ethiopia. PI: Zeresenay Alemseged. Surface collection of Plio-Pleistocene hominin and mammalian fossils. Managed GIS data collection with hand-held computers and high-precision GPS base station. 2010, 2012.

Dalquest Research Site, Big Bend Region, Texas. PI: E. Chris Kirk. Surface collected primate and mammalian fossils in the Devil's Graveyard Formation. (Eocene: Late Uintan). 2007, 2008, 2010.

Contrebandiers Cave, Temara, Morocco. PI: Harrold Dibble & Utsav Schurmans. Excavated site preserving Middle Stone Age archaeology (Aterian) and hominin remains. Performed systematic analysis of rodent fauna. 2009.

Scholarly Presentations

Conference Presentations with Published Abstracts

2013 Barr, WA. Ecomorphology of the bovid astragalus: body size, function, phylogeny and paleoenvironmental reconstruction. *American Journal of Physical Anthropology*. 150:74.

2012 Barr, WA. Ecomorphology in a phylogenetic statistical context: a case study using the bovid femur. *American Journal of Physical Anthropology*. 147:90-91.

Scott, RS and Barr, WA. Ecomorphology and phylogeny among the Bovidae: implications for habitat reconstruction. *American Journal of Physical Anthropology*.

Kappelman, JK, Keane P, Reed D, Tenbarger J, Witzel A, Barr WA, Nachman BA, Russo GA. eFossils.org: a collaborative website and community database for the study of human evolution. *American Journal of Physical Anthropology*.

2011 Reed DN, McPherron S, Barr WA, Alemseged Z, Bobe R, Geraads D, and Wynn J. A new GPS data collection methodology and data schema for integrating multiple project databases: examples from the Dikika Research Project geodatabase. *American Journal of Physical Anthropology*. 144:249-250.

2009 Barr, WA & Reed, DN. Coping with taxonomic ambiguity and inter-observer variation in paleontological and paleoanthropological analyses. *American Journal of Physical Anthropology*. 144:249-250.

Toborowsky, CJ & Barr, WA & Lewis, RJ. Does environmental unpredictability drive lemur life histories?. *American Journal of Physical Anthropology*.

2008 Barr, WA. The effects of allometric scaling patterns on the template method for estimating dimorphism. *American Journal of Physical Anthropology*.

Scholarly Presentations Without Published Abstracts

2013 Barr, WA, Brett Nachman, Liza Shapiro. The Academic Phylogeny of Physical Anthropology. Annual Meetings of the Texas Association for Biological Anthropologists. Austin, TX.

Reed D, Barr, WA, Urban T. TFree as in speech and beer: open source software solutions for spatial data management in physical anthropology. Annual Meetings of the Texas Association for Biological Anthropologists. Austin, TX.

2012 Barr, WA. Refining hominin paleoenvironmental reconstructions using bovid ecomorphology: the role of phylogenetic comparative methods. Presentation at UT Austin Paleontology Brown-Bag Seminar Series.

Barr, WA. Refining hominin paleoenvironmental reconstructions with bovid ecomorphology. Presentation at UT Austin Informal Physical Anthropology Seminar series.

2011 Barr, WA. Ecomorphology in a phylogenetic statistical context: a case study using the bovid femur. Annual Meetings of Texas Association for Biological Anthropologists. San Marcos, TX.

2010 Barr, WA. Pattern or chaos? Exploring a null model of faunal turnover patterns. Annual Meetings of Texas Association for Biological Anthropologists. Waco, TX.

Barr, WA. Quantitative ecomorphology of mammalian dentitions: Refining a tool for reconstructing early hominin paleoenvironments. Presentation at UT Austin Informal Physical Anthropology Seminar series.

2008 Barr, WA. Coping with taxonomic ambiguity and inter-observer variation in paleontological and paleoanthropological analyses. Annual Meetings of Texas Association for Biological Anthropologists. College Station, TX.

2007 Barr, WA. The effects of allometric scaling patterns on the template method for estimating dimorphism. Annual Meetings of Texas Association for Biological Anthropologists. Austin, TX.

Invited Talks and Guest Lectures

2013 Data reshaping and advanced plotting with ggplot2. Guest Lecture for Dr. Denné Reed's graduate-level course in Statistical Methods at UT Austin.

Guest Lecture for E. Christopher Kirk on Eocene Primate evolution for the Introduction to Physical Anthropology course.

Professional Service

[Academic Phylogeny of Physical Anthropology](#) - In collaboration with Liza Shapiro and Brett Nachman, I created this website as a public resource that tracks academic lineages of Physical Anthropology PhDs. The site has had over 1700 user submissions. 2013.

Volunteer, Explore UT - University wide K-12 educational open house. Helped organize and run activity "Leaping Lemurs of Madagascar" on locomotion and conservation of lemurs. 2010, 2011.

Reviewer - University of Texas Liberal Arts Graduate Research Fellowship. Evaluated grant proposals from students competing for \$50,000 in grant funds. 2008.

Coordinator - Informal Physical Anthropology Seminar Series, UT Austin. Responsible for planning weekly seminars and recruiting speakers. 2008.

Manuscript Reviews

Journal of Human Evolution. 2014, 2015.

Methods in Ecology and Evolution. 2012.

International Journal of Primatology. 2014.

Manning Publications (book proposal review). 2012.

Professional Memberships

American Association of Physical Anthropologists

Paleoanthropology Society