W. Andrew Barr

Center for the Advanced Study of Human Paleobiology
Department of Anthropology
The George Washington University

800 22nd St NW, Suite 6000
Washington, DC 20052
wabarr@gmail.com - (202) 994-3213

Education

2014   University of Texas at Austin. Ph.D., Anthropology. *The Paleoenvironments of Early Hominins in the Omo Shungura Formation (Plio-Pleistocene, Ethiopia): Synthesizing Multiple Lines of Evidence Using Phylogenetic Ecomorphology.*

2008   University of Texas at Austin. M.A., Anthropology.

2005   Tulane University. B.S., Anthropology and French.

Employment Experience

2016 - Present   Visiting Assistant Professor. Center for the Advanced Study of Human Paleobiology. Department of Anthropology. The George Washington University.

2014 - 2016   Postdoctoral Scientist. Center for the Advanced Study of Human Paleobiology. Department of Anthropology. The George Washington University. Advisor: Bernard Wood.

2006 - 2014   Teaching Assistant and Graduate Research Assistant. The University of Texas at Austin.

Fieldwork Experience

2014 - Present   Mille-Logya Research Project, Afar Region, Ethiopia (Plio-Pleistocene). My fieldwork at MLP seeks to discover new evidence of the morphology and environmental context of earliest genus *Homo*

2010 - Present   Dikika Research Project, Afar Region, Ethiopia. My fieldwork at Dikika aims to understand paleoenvironmental change through the Hadar Formation, and to document the frequency and nature of bone surface modifications at this site which preserves the oldest reported evidence of stone-tool modified bones

2016 - Present   Koobi-Fora Research and Training Program, East Turkana, Kenya. My fieldwork seeks to document the variability of hominin habitats in the Turkana Basin from the Pliocene through the Pleistocene, and to understand how this variability influenced human behavior and evolution.

2013 - 2014   Great Divide Basin Project, Wyoming. Collected primate and mammalian fossils from Eocene sediments, and prospected for new localities.

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

2009   Contrebandiers Cave, Temara, Morocco. Excavated site preserving Middle Stone Age archaeology (Aterian) and hominin remains. Performed systematic analysis of rodent fauna.

Collaborative Research Affiliations

2015 - Present	External Member. Evolution of Terrestrial Ecosystems Working Group. National Museum of Natural History.
2014 - Present	Research Associate. Department of Paleobiology. National Museum of Natural History.
2012 - Present	Research Associate and Software Developer. PaleoCore Project.

Research Grants and Fellowships

In Review	Collaborative Proposal: IRES Track I: Biological and behavioral adaptations to ecological variability through time in the Turkana Basin (Kenya). Role: Co-PI. $276,089.
2013	Named Continuing Fellowship - University of Texas at Austin Graduate School. $29,000.
2012	Dissertation Fieldwork Grant - Wenner-Gren Foundation. $13,317.
2007	Graduate Research Fellowship - National Science Foundation. $90,000.
2007	Liberal Arts Graduate Research Fellowship - University of Texas at Austin. $1,800.

Peer-Reviewed Publications

In review	Fraser D, Haupt R, **Barr WA**. Tooth Wear Dietary Niche Proxies Show Strong Phylogenetic Signal. In review at *Ecology and Evolution*.
In press	Blondel C, Rowan J, Merceron G, Bibi F, Negash E, **Barr WA**, Boisserie JR. Feeding ecology of Tragelaphini (Bovidae) from the Shungura Formation, Omo Valley, Ethiopia: contribution of dental wear analyses. *Palaeogeography, Palaeoclimatology, Palaeoecology*.
In press	**Barr WA**. *Ecomorphology*. To be published in D.A. Croft, S.W. Simpson, and D.F. Su (eds.), Methods in Paleoecology: Reconstructing Cenozoic Terrestrial Environments and Ecological Communities. Springer (Vertebrate Paleobiology and Paleoanthropology Series), Cham, Switzerland.
In press	Reed, DN, **Barr WA**, Kappelman J. PaleoCore: an open-source platform for geospatial data integration in paleoanthropology. To be published in Anemone R, Conroy G (eds.), *New Geospatial Approaches in Anthropology*. University of New Mexico Press. Albuquerque, NM.
2017	**Barr WA**. Signal or noise? A null model method for testing hypotheses about pulsed faunal turnover. *Paleobiology*. 43:656-666. doi:10.1017/pab.2017.21
2017	**Barr WA**. Bovid locomotor functional trait distributions reflect land cover and annual precipitation in sub-Saharan Africa. *Evolutionary Ecology Research*. 18:253-269.
2015	**Barr WA**. Paleoenvironments of the Shungura Formation (Plio-Pleistocene: Ethiopia) based on ecomorphology of the bovid astragalus. *Journal of Human Evolution*. 88:97-107. doi:10.1016/j.jhevol.2015.05.002
2015	Reed D, **Barr WA**, McPherron S, Bobe R, Geraads D, Wynn J, Alemseged Z. Digital Data Collection in Paleoanthropology. *Evolutionary Anthropology*. 24:238-249. doi:10.1002/evan.21466
2015	Thompson JC, McPherron S, Bobe R, Reed DN, **Barr WA**, Wynn J, Marean CW, Geraads D, Alemseged Z. Taphonomy of fossils from the hominin-bearing deposits at Dikika, Ethiopia. *Journal of Human Evolution*. 86:112-135. doi:10.1016/j.jhevol.2015.06.013
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
2014	**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

| 2014 | 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 |

Courses Taught

Introduction to Biological Anthropology. ANTH 1001. Undergraduate survey of the field of biological anthropology. The George Washington University, Anthropology. Taught Fall 2016, Spring 2017.

Analytical Methods in Evolutionary Anthropology. ANTH 6413. I designed this graduate course course covering applied statistical methods (e.g, regression, ANOVA and related techniques, categorical data analysis, resampling approaches) and the R statistical programming language. This is a required course for the Hominid Paleobiology PhD program. The George Washington University, Anthropology. Taught Spring 2015, Fall 2016.

Climate Change and Human Evolution. ANTH 3491. I designed this upper level undergraduate course covering changes in global climate through evolutionary time and the impacts on evolution, with an emphasis on humans. The George Washington University, Anthropology. Taught Spring 2016, Spring 2017.

Public Understanding of Science. HOMP 8302. Graduate course in which students complete semester-long public service internships. Student projects target underserved Washington, DC-area public schools and general audiences at public museums with a goal of increasing scientific literacy and creating interest in scientific careers. The George Washington University, Anthropology. Taught Spring 2016.

GIS and Remote Sensing for Archaeology and Paleontology. ANT 391 / GRG 396. Teaching Assistant. University of Texas at Austin, Anthropology. 2010.

Human Variation. ANT 394C. Teaching Assistant. University of Texas at Austin, Anthropology. 2009.

Introduction to Physical Anthropology. ANT 301. Teaching Assistant. University of Texas at Austin, Anthropology. 2006, 2007, 2010, 2011, 2012.

Public Outreach and Science Communication

2016 - Present	Faces of Fieldwork - I believe that public engagement with science increases when people understand who we are and why we do what we do. I launched this outreach website to magnify the reach of the amazing fieldwork being done by diverse early career scientists. So far, the project has highlighted the work of 83 fieldworkers (57 women, 26 men, including many masters and PhD students). In 2017, this website had 6475 distinct visitors from across the world.
2017	*Survivors: What Fossils Tell Us About the Past and Future*. I engaged with members of the general public at the National Museum of National History, to answer questions about extinction, and the future of evolution in light of a changing climate.
2014 - 2015	Volunteer, Explore UT - University wide K-12 educational open house. Organized and implemented the activity "Leaping Lemurs of Madagascar" on locomotion and conservation of lemurs.