# W. Andrew Barr - Curriculum Vitae

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

PhD - 2014 - University of Texas at Austin. Anthropology. MA - 2008 - University of Texas at Austin. Anthropology. BS - 2005 - Tulane University. Anthropology, French.

# **Academic Appointments**

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

**Postdoctoral Scientist**. Center for the Advanced Study of Human Paleobiology. Department of Anthropology. The George Washington University. Advisor: Bernard Wood. Fall 2014 - Fall 2015.

Research Associate. Department of Paleobiology. National Museum of Natural History. 2014 - Present.

# **Peer Reviewed Publications**

# In Prep

**Barr WA**. The morphology of the bovid calcaneus: function, phylogeny, and allometric scaling. To be submitted to *Journal of Morphology*.

# In Review

**Barr WA**, Du A, Toth A, Jukar A, Bercovici A, Dommain A, Dumouchel L, Villasenor A, Negash E, Behrensmeyer AK, and Lyons SK. Evaluating climatic and mid-domain effects on mammalian species richness at global and continental scales. In review at to *Journal of Biogeography*.

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.

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. In review at *Palaeogeography, Palaeoclimatology, Palaeoecology*.

Kemp A and **Barr WA**. Rates of homoplasy vary among regions of the mammalian skeleton. In review at *Journal of Human Evolution*.

## **Accepted or In Press**

**Barr WA**. Signal or noise? A null model method for testing hypotheses about pulsed faunal turnover. In press at *Paleobiology*.

**Barr WA**. Accepted. *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), Dordrecht.

#### 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

W. Andrew Barr - CV 2

**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

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

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

**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**

### 2015

National Science Foundation (Archaeology) - Middle Pleistocene Hominin Behavior and Paleoecology at Farre, Chalbi Basin, Northern Kenya. Pl: Ferraro. Role: Senior Scientist. Amount awarded: \$60,000.

#### 2014

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

# 2013

Named Continuing Fellowship - University of Texas at 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 - University of Texas at Austin. Also recieved in 2009-2011.

### 2007

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

David Bruton, Jr. Graduate Fellowship - University of Texas at Austin. Also received in 2008.

# **Courses Taught**

Introduction to Biological Anthropology. ANTH 1001. Undergraduate survey course with enrollment of approximately 240 students. This course is designed as a survey of the field of biological anthropology, and fulfills a general science requirement. George Washington University, Anthropology. Taught Fall 2016.

Analytical Methods in Evolutionary Anthropology. ANTH 6413. I designed this graduate 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. George Washington University, Anthropology. Taught Spring 2015, Spring 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. (Previous course title: Evolutionary Impacts of Cenozoic Climate Change). George Washington University, Anthropology. Taught Spring 2016.

W. Andrew Barr - CV

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. 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.

# **Professional Preparation**

External Member. Evolution of Terrestrial Ecosystems Working Group. National Museum of Natural History. 2015 - Present.

Research Associate and 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.