Anthropology

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Educational History:

B.S. 1994 Duke University Durham, North Carolina Biology (with a concentration in Evolutionary biology) / Biological Anthropology and Anatomy, *cum laude*

Ph.D. 2002 Harvard University Cambridge, Massachusetts Anthropology "Faunal and Environmental Change Surrounding the Extinction of *Sivapithecus*, a Miocene Hominoid, in the Siwaliks of Pakistan," David Pilbeam, advisor

Employment History:

Postdoctoral research associate 2002-2004 University of Michigan Museum of Paleontology Ann Arbor, Michigan

Department Affiliate 2004-2007 Harvard University Department of Anthropology Cambridge, Massachusetts

Assistant Professor 2005-2007 Boston University Department of Anthropology Boston, Massachusetts

Assistant Professor 2007-2015 University of New Mexico Department of Anthropology Albuquerque, New Mexico

Department Affiliate 2013-current Harvard University Department of Human Evolutionary Biology Cambridge, Massachusetts

Associate Professor 2015-current University of New Mexico Department of Anthropology Albuquerque, New Mexico

Professional Honors:

1994-1997	National Science Foundation Graduate Research Fellowship
1996	Distinction in Teaching Award Harvard University
1997	Distinction in Teaching Award Harvard University
2002	American School of Prehistoric Research Award for Outstanding Ph.D. Thesis
2011	Research Semester Fellowship University of New Mexico
2013	University of New Mexico 2013 Top-Ten Research Stories
2016	Nominated, Outstanding Teacher of the Year, University of New Mexico

Short Description of Research, Teaching, and Service Interests:

My research focuses on the interaction of climatic, vegetation, and faunal changes in the fossil record, particularly with respect to ape and hominin paleoecologies. I use stable isotopic and dental microwear analyses to reconstruct paleohabitats, climates, and diets. To better reconstruct the past, I also work with modern ecosystems. My goal is to have a direct comparison between fossil and modern data to better interpret fossil ape and hominin adaptations.

Much of my work focuses on Miocene hominoids, with a goal of determining whether Miocene apes had habitat requirements similar to those of modern apes and thereby understand what role changing climate played in their extinction. If fossil apes differed in their habitat and dietary requirements from modern apes, then how, with similar body and brain sizes as well as life history regimes, could they ecologically afford to exploit harsher habitats? Much of my work has focused on *Sivapithecus*, a fossil ape from the Siwaliks of Pakistan. The Siwaliks are a rare 20 million year sequence offering the opportunity to examine changes in an ape's habitat through time, including through that ape's extinction. My research has provided more detailed reconstruction of forest type, vegetation mosaic, fruit availability, and seasonality than previously available for Miocene habitats, and for the ecology of *Sivapithecus*.

My fossil hominoid projects also include paleoecological reconstructions for two of the most enigmatic apes, *Oreopithecus* and *Gigantopithecus*. I am interested in *Oreopithecus* because it is found in Europe long after other apes there went extinct. A question remains, why did *Oreopithecus* survive outside of modern ape habitat range when no other ape could? My isotopic analyses indicate that *Oreopithecus* fed on a wider range of foods than other apes, and that these foods may have included aquatic vegetation. My isotopic analyses of *Gigantopithecus*, the largest ape on record, indicate deep forest, with the lowest carbon isotopic values for a fossil locality yet recorded.

I also conduct isotopic analyses of fossil equids because they are essential to understanding the expansion of grasslands in the Miocene as well as changes in climate such as increasing seasonality. I have documented the oldest C₄ diet in Africa, and my work with fauna from a German Miocene site yields the first C₄ grassland dietary signal of faunas from Europe, suggesting the presence of grasslands where C₄ does not grow today.

To improve our resolution in paleoecological reconstructions, I analyze modern habitats, including an isotopic analysis of fauna from Kibale National Park, Uganda. This investigation reports the first isotopic analyses of enamel from a large chimpanzee community and associated fauna, thus providing a means of comparing fossil ape and early hominin paleoecologies to those of a modern ape. Within Kibale forest, oxygen isotopes differentiate primate niches, allowing for the first isotopic reconstructions of degree of frugivory vs. folivory as well as use of arboreal vs. terrestrial resources. I am currently expanding my Kibale study to incorporate isotopic and phytolith load analyses of Kibale vegetation. My goal is to expand my analyses of modern habitats to span a range of potential early hominin habitats in order to understand what habitat could drive the changes we see from ape to hominin but still support the earliest hominins whose ancestors required rainforest and a year-round supply of fruit.

Finally, I am working on a project to determine timing of weaning through isotopic analyses of urine from chimpanzee mother-infant pairs. Weaning is a process whose timing is critical to understanding the energetic trade-offs of reproduction from the mother's point of view, and the energetic requirements of morphological, cognitive, and behavioral development from the infant's. Quantifying the progression of weaning from behavioral data alone is problematic. Stable isotope analyses from mother-infant pairs will allow us to monitor infants' weaning transitions from a diet of 100% mother's milk to 100% solid foods. We will then compare weaning schedules to timing of M1 eruption. Weaning, M1 eruption, and near completion of brain growth have been heralded as some of the few isochronic relationships in primate life history, suggesting inertia in these traits. Yet, both humans and chimpanzees are exceptions to this rule. Though M1 eruption and cessation of most brain growth appear to remain isochronic in both species, humans wean their infants long before first molar eruption. Provisioning, as well as cooked weaning foods, likely play a role in accelerating weaning time for humans. Chimpanzees, on the other hand, continue to breastfeed well after their offspring erupt first molars and complete most of their brain growth. By combining isotopic measurements of weaning, growth measurements in offspring, and energetic measurements of mothers, our study will be the first to address why chimpanzee mothers continue to nutritionally invest in offspring past brain growth. Given the use of M1 eruption as a life history marker in hominin evolution, understanding exactly what M1 eruption means in terms of maternal energetics and infant development is critical.

I enjoy teaching a suite of introductory and advanced courses focusing on understanding primate and human behavior and ecology through the process of evolution, the fossil record, primate socioecology, and modern forager ecology. At UNM, in addition to supporting graduate student research in my laboratory, over 20 undergraduates have conducted research, with six producing honor's theses. In addition to teaching at the university, I enjoy providing outreach activities for students aged preschool through high school and working with the Maxwell Museum on informal science education.

Books Authored:

2003 Nelson, S. The Extinction of *Sivapithecus*: Faunal and Environmental Changes Surrounding the Disappearance of a Miocene Hominoid in the Siwaliks of Pakistan. *American School of Prehistoric Research Monograph* 1. Boston: Brill Academic Publishers.

Articles in Refereed Journals:

- Nelson, S., C. Badgley, and E. Zakem. Microwear in modern squirrels in relation to diet. *Paleontologica Electronica* vol 8, issue 1, 14A, 15p.
- Nelson, S. Paleoseasonality inferred from equid teeth and intra-tooth isotopic variability. *Palaeogeography, Palaeoclimatology, Palaeoecology* 222: 122-144.
- 2007 Nelson, S. Isotopic reconstructions of habitat change surrounding the extinction of *Sivapithecus*, a Miocene hominoid, in the Siwalik Group of Pakistan. *Palaeogeography*, *Palaeoclimatology*, *Palaeoecology* 243: 204-222.
- 2008 Badgley, C., J. Barry, M. Morgan, S. Nelson, A. Behrensmeyer, T. Cerling, and D. Pilbeam. Ecological changes in Miocene mammalian record show impact of prolonged climatic forcing. *Proceedings of the National Academy of Sciences* 105: 12145-12149.
- 2009 Morgan, M, A. Behrensmeyer, C. Badgley, J. Barry, S. Nelson, D. Pilbeam. Lateral trends in carbon isotope ratios reveal a Miocene vegetation gradient in the Siwaliks of Pakistan. *Geology* 37: 103-106.
- 2010 Nelson, S. The cooking hypothesis revised: fresh food for thought. *Evolutionary Psychology* 8: 340-342.
- 2010 Kaiser, T., C. Seiffert, C. Hertler, L. Fielder, J. Schwartz, S. Frost, L. Giemsch, R. Bernor, D. Wolf, G. Semprebon, S. Nelson, F. Schrenk, K. Harvati, T. Bromage, and C. Sanaane. Makuyuni, a new Lower Paleolithic hominid site in Tanzania. *Mitteilungen Hamburgisches Zoologisches Musuem und Institut* 106: 69-110.
- 2010 Wolf, D., S. Nelson, H. Schwartz, G. Semprebon, T. Kaiser, and R. Bernor. Taxonomy and paleoecology of the Pleistocene Equidae from Makuyuni, Northern Tanzania. *Palaeodiversity* 3: 249-269.
- 2011 Bernor, R., T. Kaiser, S. Nelson, and L. Rook. Systematics and paleobiology of *Hippotherium malpassii* n. sp. (Equidae, Mammalia) from the latest Miocene of Baccinello V3 (Tuscany, Italy). *Bollettino della Societa Paleontologica Italiana* 50:175-208.
- Nelson, S. Chimpanzee fauna isotopes provide new interpretations of fossil ape and hominin ecologies. *Proceedings of the Royal Society B* 280: 20132324.

- 2014 Nelson, S. The paleoecology of Early Pleistocene *Gigantopithecus blacki* inferred from isotopic analyses. *American Journal of Physical Anthropology* 155: 571-578.
- 2016 Nelson, S. and L. Rook. Isotopic reconstructions of habitat change surrounding the extinction of *Oreopithecus*, the last European ape. *American Journal of Physical Anthropology* 160:254-271.
- 2019 Hamilton, M., S. Nelson, D. Fernandez, and K. Hunt. Detecting riparian habitat preferences in "savannah" chimpanzees and associated fauna with strontium isotope ratios: implications for reconstructing chimpanzee-human last common ancestor habitat use. *American Journal of Physical Anthropology* 170: 551-564.
- 2021 Hamilton, M., D. Fernandez, and S. Nelson. Using strontium isotopes to determine philopatry and dispersal in primates: a case study from Kibale National Park. *Royal Society Open Science* 7: 200760.
- 2021 Waseem, M., A. Khan, J. Quade, and S. Nelson. Paleoclimatic and vegetational change in the Siwalik sub-group of Pakistan and its contemporary geographic regions: a stable isotope perspective. *Australian Journal of Earth Sciences* DOI: 10.1080/08120099.2021.1893221.

Articles Appearing in Edited Volumes:

- 2004 Bernor, R., T. Kaiser, and S. Nelson. The oldest Ethiopian Hipparion (Equinae, Perissodactyla) from Chorora: systematics, paleodiet, and paleoclimate. Senckenberg Courier Special Volume 246: 213-226.
- 2005 Badgley, C., S. Nelson, J. Barry, A. Behrensmeyer, and T. Cerling. Testing models of faunal turnover with Neogene mammals from Pakistan. In Interpreting the Past: Essays on Human, Primate and Mammal Evolution in Honor of David Pilbeam. *American School of Prehistoric Research Monograph*. Boston: Brill Academic Press.
- 2005 Nelson, S. Habitat requirements and the extinction of the Miocene ape, *Sivapithecus*. In Interpreting the Past: Essays on Human, Primate and Mammal Evolution in Honor of David Pilbeam. *American School of Prehistoric Research Monograph*. Boston: Brill Academic Publishers.
- 2017 Nelson, S. and M. Hamilton. Evolution of the human dietary niche initial transitions. In Muller, Wrangham, and Pilbeam (eds.) *Chimpanzees and Human Evolution*. Cambridge: Harvard University Press.

Invited and Refereed Abstracts / Presentations at Professional Meetings: Reconstruction of paleoprecipitation regimes, and associated forests inhabited by *Sivapithecus*; S. Nelson; New England Biological Anthropology Symposium; Yale University; 2002.

Paleoenvironmental reconstructions with respect to the extinction of *Sivapithecus* in Pakistan; S. Nelson; American Association of Physical Anthropologists; Buffalo, New York; 2002.

The preferred habitats of *Sivapithecus* in the Siwaliks of Pakistan and paleoenvironmental changes leading to its extinction; S. Nelson; Asian Paleoprimatology Symposium; Primate Research Institute of Kyoto University, Japan; 2003.

Miocene paleoseasonality inferred from equid teeth and intra-tooth isotopic profiles; S. Nelson; Society of Vertebrate Paleontology; Minneapolis, Minnesota; 2003.

Dental microwear analyses of *Sivapithecus* and contemporaneous fauna; S. Nelson; American Association of Physical Anthropologists; Tampa, Florida; 2004.

A comparison of *Sivapithecus* and modern chimpanzee habitats, and environmental changes associated with the extinction of *Sivapithecus*; S. Nelson; International Geological Congress; Florence, Italy; 2004.

Testing models of faunal turnover with Neogene mammals from Pakistan; C. Badgley, S. Nelson, J. Barry, A. Behrensmeyer, and T. Cerling; Society of Vertebrate Paleontology; 2004

Isotopic reconstructions of Late Miocene climate, vegetation, and faunal change in the Siwaliks of Pakistan; S. Nelson; International Paleontological Congress, Beijing, China; 2006.

Evidence for habitat gradients using lateral variation in stable carbon isotope ratios within the Miocene Siwalik Sequence of Pakistan; M. Morgan, A. Behrensmeyer, C. Badgley, S. Nelson, and J. Barry; Society of Vertebrate Paleontology; 2006.

Dietary reconstructions of the Middle and Late Miocene ungulate communities in the Siwaliks, Pakistan; M. Belmaker, S. Nelson, M. Morgan, L. Flynn, J. Barry, D. Pilbeam, and C. Badgley; Paleoanthropology Society; 2007

Mesowear analysis of selenodont ungulates in the Middle to Late Miocene of the Siwaliks, Pakistan: dietary and paleoenvironmental implications; M. Belmaker, S. Nelson, M. Morgan, J. Barry, and C. Badgley; Society of Vertebrate Paleontology; 2007.

Reconstructing *Oreopithecus*' paleoecology by means of stable isotopic analyses. Preliminary data; S. Nelson and L. Rook; European Fossil Primates Colloquium; Italy; 2008.

Paleoecology of *Oreopithecus bambolii* faunas (Tuscany and Sardinia): stable isotopic analyses results; L. Rook and S. Nelson; Regional Committee on Mediterranean Neogene Stratigraphy; Italy; 2009.

Systematics and paleoecology of diverse species of Equidae from the Pleistocene locality of Makayuni, Northern Tanzania; D. Wolf, R. Bernor, T. Kaiser, S. Nelson, and G. Semprebon; Society of Vertebrate Paleontology; Great Britain; 2009.

Paleoecology of *Oreopithecus* faunas based on stable isotopic analyses; S. Nelson and L. Rook; American Association of Physical Anthropologists; Albuquerque, New Mexico; 2010.

Stable Isotopic Analyses of New Mexico Mummies with Multiple Tissues; C. Mitchell, C. Kieffer, K. Kitagawa, C. Mosley, P. Naranjo, S. Nelson, V. Atudorei, and H. Edgar; American Association of Physical Anthropologists; Minneapolis, Minnesota; 2011.

Paleoecology of *Gigantopithecus blacki* based on stable isotope analyses; S. Nelson; Southwestern Association of Biological Anthropologists, Tempe, Arizona; 2013.

How did Late Miocene rodents respond to changes in the grassland biome of southern Asia?; L. Flynn, Y. Kimura, and S. Nelson; North American Paleontological Convention, Gainesville, Florida; 2014.

The use of Bayesian-inference stable isotope mixing models to infer niche breadth in the fossil record: an extant study from Kibale National Park; M. Hamilton and S. Nelson; American Association of Physical Anthropologists, Calgary, Canada; 2014.

Paleoecology of *Oreopithecus* faunas based on stable isotope analyses; S. Nelson; Southwestern Association of Biological Anthropologists, Albuquerque, New Mexico; 2015.

Stable isotopes as a species and anthropogenic indicator in a Gold Rush-era Galapagos Tortoise and Sea Turtle from San Francisco, California; C. Conrad. L. Barcelo, E. Jones, S. Newsome, S. Nelson, J. Seminoff, K. Bruner, and A. Pastron; Stable Isotopes in Zooarchaeology, Athens, Georgia; 2016.

Strontium isotopes as indicators of philopatry/ dispersal patterns; M. Hamilton and S. Nelson; American Association of Physical Anthropologists, Austin, Texas; 2018

Differentiating frugivore and folivore diets using Sr/Ca ratios and non-destructive XRF analysis; American Association of Physical Anthropologists, Cleveland, Ohio; 2019

Invited participant in workshop. Functional Trait Resource for Environmental Studies (FuTRES); Held virtually due to pandemic; 2020

Field Research:

1993-1994 Behavior of Black-and-White Ruffed Lemurs, Duke University Primate Center (Natural Habitat Enclosures)

1994 Communication in Carolina Chickadees, North Carolina

1994	Study of diet and behavior of howler monkeys, Costa Rica
1995	Paleontological excavation Kromdraii, South Africa
1996	Paleontological excavation Can Llobateres, Spain
1996	Paleontological excavation Sinap and Pasalar, Turkey
1996	Paleontological survey Siwalik sediments, Pakistan
2000	Paleontological survey Siwalik sediments, Pakistan
2002	Chimpanzee behavior and isotopic analyses of fauna, Kibale Forest, Uganda
2003	Dental microwear analyses of Hadza diets, Tanzania
2004	Chimpanzee behavior and isotopic analyses of fauna, Kibale Forest, Uganda
2014	Isotopic stratification in rainforest canopy and strontium variability of plants. Kibale Forest, Uganda
2015	Isotopic stratification in rainforest canopy and strontium variability of plants. Kibale Forest, Uganda
2016	Isotopic stratification in rainforest canopy and strontium variability of plants. Kibale Forest, Uganda
2017	Isotopic stratification in rainforest canopy and strontium variability of plants. Kibale Forest, Uganda
2018	Faunal isotopes, Kibale Forest, Uganda
2019	Faunal isotopes, Kibale Forest, Uganda

Funding:

Delta-Kappa Educational Foundation Scholarship Grant for Prospective Educators Sherry Nelson 1990

Behavior of Black-and-White ruffed lemurs, Duke University Primate Center Sherry Nelson Pew-Cosen Research Fellowship 1993 \$3200 Diet and behavior of howler monkeys, Costa Rica Sherry Nelson Undergraduate Research Fellowship 1994 \$2500 plus travel

National Science Foundation Graduate Research Fellowship; Sherry Nelson 1994-1997 \$43,200 plus tuition

Excavation of Kromdraii, a fossil hominid locality Sherry Nelson Mellon Research Grant 1995 \$3000

Training in dental microwear and analysis of Siwalik fauna Sherry Nelson American School of Prehistoric Research 1998 \$571

Training in stable isotope ecology Sherry Nelson American School of Prehistoric Research 1999 \$2490

Cora Dubois Fellowship Sherry Nelson 2000 \$8000

Mellon Dissertation Completion Fellowship Sherry Nelson 2001 \$8674

American School of Prehistoric Research Award for Outstanding Ph.D. Thesis Sherry Nelson 2002 \$1000

Intra-tooth isotopic variability of modern equid teeth Sherry Nelson

Scott Turner Award in Earth Science

2003

\$3000

Dental microwear analyses of Hadza diets

Sherry Nelson

Women's International Science Collaboration (underwritten by National Science

Foundation)

2003

\$5000

Isotopic analyses of fauna from Kibale National Park, Uganda

Sherry Nelson

American School of Prehistoric Research

2003

\$4000

International Travel Award

Sherry Nelson

University of Michigan Museum of Paleontology

2004

\$1000

International Travel Award

Sherry Nelson

Boston University Graduate School of Arts and Sciences

2006

\$2210

Development of laboratory materials for biological anthropology courses

Sherry Nelson

Teaching Allocations Subcommittee grant, University of New Mexico

2007

\$4980

Stable isotopic analyses of Hoewenegg, a Miocene site in Germany

Sherry Nelson

Subcontract with Hans-Walter Mittmann, Staatliches Museum fur Naturekunde Karlsruhe

2009

\$4000

Isotopic and phytolith analyses of chimpanzee foods

Sherry Nelson

Large Resource Allocations Subcommittee grant

2011

\$8000

Developmental integration and the ecology of life histories in phylogenetic perspective M.N. Muller (PI), S.V. Nelson (co-PI), M. Emery Thompson (co-PI), and R.W. Wrangham (co-PI) National Science Foundation 04/05/14-03/31/17 \$221,004

Equipment request, Paleoecology Laboratory Sherry Nelson Office of the Vice President of Research Equipment Fund 2015 \$15,000

Modeling early human paleoecology through stable isotope analyses of chimpanzee habitats and forest stratification
Sherry Nelson
Resource Allocations Committee grant
2017
\$9,755

External funding of students:

National Science Foundation Graduate Research Fellowship Marian Hamilton 2012-2015

Assessing philopatry and range size with strontium isotopes Marian Hamilton Leakey Foundation 2016 \$14,875

Tracking dispersal and home range size with environmental and faunal strontium isotopes Marian Hamilton
Wenner-Gren Foundation
2016
\$19,980

Undergraduate Student Mentoring:

2003 Undergraduate Research Opportunity Program, University of Michigan

Emily Zakem; 2003-2004; Dental microwear of rodents; University of Michigan

Catherine Mitchell; 2007; Dental microwear and stable isotope laboratory techniques; Boston University

Judy Hartline; 2008-2009; Honors thesis – Dental microwear of South African australopithecines; University of New Mexico

Celeste Schwartz; 2009; Casting and molding dentition, dental microwear

Joshua Vallejos; 2009-2010; Honors thesis – Dental microwear of Kibale primates

Clayton Pilbro; 2009-2011; Honors thesis –Comparison of Early Eocene San Juan Basin, NM *Phenacolemur jepseni* with *Phenacolemur citatus* and *Phenacolemur praecox* from Bighorn Basin, WY – a study of variation and validity of these *Phenacolemur* species

Kamden Cornell; 2010; Casting and molding dentition; monkey taxonomic identification

Oceana Ortiz; 2010; Casting and molding dentition

Thera McAvoy; 2010; isotopic analyses of mummified hair

Jada Patterson; 2011; Dietary reconstructions from mesowear

Nicholas Zamora; 2011; Dental microwear of New World monkeys

Sonee Swisley; 2013; Cellulose extraction of chimpanzee foods

Melissa Sheldahl; 2013; Cellulose extraction of chimpanzee foods

Cybele Carpenter; 2013-2014; Honor's thesis – Measuring Craniofacial Development in Wild Chimpanzees Using Photogammetry, with Implications for Reconstructing Hominin Life History Evolution

Uphoria Blackham; 2014-2015; sample preparation of chimpanzee urine for isotopic analyses

Emma Lathrop; 2015; sample preparation and isotope analysis of chimpanzee urine

Angela Combs; 2015-2016; Honor's thesis – Determining weaning behaviors in wild chimpanzees through stable isotope analysis

Danielle Sanchez-Combs; 2017; sample preparation plants and tooth enamel for isotopic analyses

Shayne Halter; 2017-2018; Honor's thesis – Evaluation of modern chimpanzee sites as models for early hominin habitats

Taylor Williamson; 2018; stable isotope analyses of plant water

Teah Amirkabirian; 2018-2020; sample preparation plants, water, and chimpanzee urine for isotopic analyses

Kathryn Sokolowski; 2019-2021; Honor's thesis – The ecological factors affecting weaning in wild chimpanzees using stable isotopic analyses

Madeline Dunn; 2020; sample preparation for isotopic analyses

Graduate Student Mentoring:

Catherine Mitchell; 2008-2012; dissertation advisor; (Program in Interdisciplinary Biological and Biomedical Sciences Scholar)

Keiko Kitagawa; 2008-2010; dissertation committee member

Shawn Whiteman; 2008-2015; dissertation committee member

Tim Petersen; 2009; dissertation committee member

Diana Rabenold; 2009-present; dissertation committee member (co-advisor 2009-2013)

Crystal Kieffer; 2010-2014; dissertation committee member

Sarah Phillips-Garcia; 2011-present; dissertation committee member

Melissa Pardi; 2011-2016; dissertation committee member

Muhammad Tariq; 2011-2015; dissertation committee member, Government College University, Lahore, Pakistan

Marian Hamilton; 2012-2018; dissertation advisor; (NSF Graduate Research Fellowship)

Kristen Sabbi; 2014-2020; dissertation committee member

Catalina Tome; 2014-2019; dissertation committee member

Katlin Schroeder; 2015-2017; dissertation committee member

Cyler Conrad; 2016-2018; dissertation committee member

Jessica Gross; 2017-2019; dissertation committee member

Milena Carvalho; 2018-present; dissertation committee member

Stephanie Fox; 2018-present; dissertation committee member

Joshua Vallejos; 2019-current; Master's co-advisor

Muhammad Tahir Waseem; 2019-2020; dissertation committee member, University of the Punjab, Lahore, Pakistan

Andrew Kennedy; 2020-present; dissertation advisor

Classroom Teaching:

Harvard University teaching fellow:

1996-1998; ANTH 117; Human Evolution; 50-60 students each class

Boston University courses:

2005 Fall ANTH 552; Primate Evolution and Anatomy; 4 students

ANTH 102; Human Behavior and Evolution; 150 students

2006 Fall ANTH 705; Graduate Proseminar in Anthropology; 3 students

ANTH 331; Human Origins; 19 students

2007 Spring ANTH 102; Human Behavior and Evolution; 150 students

ANTH 534; Advanced Topics in Human Behavioral Evolution; 9 students

University of New Mexico courses:

2007 Fall ANTH 357 Human Origins 15 students

2008 Spring ANTH 450/550 Topics in Human Behavioral Evolution; 18 students

ANTH 150 Human Emergence; 103 students

BIO 402/502 Topics in Paleoecology; 26 students

Guest lecture BIO 503 Seminar in Interdisciplinary Biology and Biomedical

Sciences

Guest lecture ANTH 570 Science in Archaeology

2008 Fall ANTH 450/550 Primate Evolution; 13 students

ANTH 457/557 Paleoanthropology; 17 students

BIO 503 Topics in Interdisciplinary Biology and Biomedical Sciences

2009 Spring ANTH 150 Human Emergence; 108 students

ANTH 450/550 Topics in Human Behavioral Evolution; 11 students

ANTH 497 Individual Study; 2 students

ANTH 698 Advanced Research; 1 student

Guest lecture ANTH 570 Science in Archaeology

2009 Fall ANTH 698 Advanced Research; 1 student

Guest lecture ANTH 570 Science in Archaeology

(Maternity Leave)

2010 Spring ANTH 150 Human Emergence; 108 students

ANTH 450/550 Paleoecology Lab; 10 students

ANTH 497 Individual Study; 1 student

2010 Fall ANTH 357 Human Origins; 43 students

ANTH 450/550 BIO 402/502 Primate Evolution; 11 students

ANTH 497 Individual Study; 1 student ANTH 698 Advanced Research; 2 students

- 2011 Spring ANTH 399 Introduction to Field and Lab Research; 1 student
- 2011 Fall ANTH 457/557 Paleoanthropology; 10 students ANTH 450/550 Paleoecology Lab; 7 students ANTH 497 Individual Study; 1 student ANTH 698: Advanced Research: 1 student
- 2012 Spring ANTH 150 Human Emergence; 110 students
 ANTH 464/564 Human Behavioral Evolution; 14 students
 ANTH 698 Advanced Research; 1 student
- 2012 Fall ANTH 357 Human Origins; 41 students ANTH 450/550 Primate Evolution; 11 students
- 2013 Spring ANTH 150 Human Emergence; 110 students
 ANTH 464/564 Human Behavioral Evolution; 11 students
 ANTH 399 Intro to Field and Lab Research; 1 student
 ANTH 698 Advanced Research; 1 student
- 2014 Spring ANTH 450/ BIO 419 Humans and the Environment; 9 students ANTH 497 Individual Study; 1 student BIO 402/502 Elemental Ecology guest lecture
- 2014 Fall ANTH 357 Human Origins; 42 ANTH 450/550 Primate Evolution; 13 ANTH 450/550 Chimpanzees and Human Evolution -- guest lecture
- 2015 Spring ANTH 150 Human Emergence; 108 students
 ANTH 464/564 Human Behavioral Evolution; 8 students
 ANTH 399 Intro to Field and Lab Research; 1 student
 ANTH 698 Advanced Research; 1 student
 ANTH 699 Dissertation; 1 student
- 2015 Fall ANTH 450/550; Paleoecology Lab; 8 students ANTH 457/557; Paleoanthropology; 11 students ANTH 497; Individual Study; 1 student ANTH 699; Dissertation; 2 students
- 2016 Spring ANTH 150; Evolution and Human Emergence; 69 students ANTH 464; Human Behavioral Evolution; 4 students ANTH 699; Dissertation; 2 students
- 2016 Fall ANTH 357; Human Origins; 34

ANTH 450/550 Primate Evolution; 16 ANTH 699; Dissertation; 1

2017 Spring Sabbatical

ANTH 399; Intro to Field and Laboratory Research; 1

ANTH 699; Dissertation; 1

2017 Fall ANTH 453L; Paleoecology Lab; 9

ANTH 457/557; Paleoanthropology; 13

ANTH 499; Field Research; 1 ANTH 699; Dissertation; 1

2018 Spring ANTH 150; Evolution and Human Emergence; 51 students

ANTH 464/564; Human Behavioral Evolution; 7 students

ANTH 497; Individual Study; 1 student

ANTH 499; Field Research; 1 ANTH 699; Dissertation; 1

2018 Fall ANTH 357; Human Origins; 16 students

ANTH 452/552; Primate Evolution; 15 students

2019 Spring ANTH 150; Evolution and Human Emergence; 47 students

ANTH 464/564; Human Behavioral Evolution; 11 students

ANTH 399; Intro to Field and Lab Research; 1 student

ANTH 698; Advanced Research; 1 student

2019 Fall ANTH 453L/553L Paleoecology Lab; 16 students

ANTH 457/557 Paleoanthropology; 9 students

ANTH 399; Intro to Field and Lab Research; 1 student

ANTH 1996; Topics: Career Planning – guest lecture

BIOL 419/519; Topics: Extinction – guest lecture

2020 Spring ANTH150, Introduction to Biological Anthropology; 20 students

ANTH 464/564; Human Behavioral Evolution; 5 students

ANTH 497; Individual Study; 1 student

2020 Fall ANTH 357; Human Origins; 14 students

ANTH 452/552; Primate Evolution; 13 students

Service:

1995-1999 Harvard Earth History and Paleontology (EHAP) seminar series coordinator

1999 Instructor, University of Connecticut "Aquanaut" Whale Communication and Oceanography Program

- 2003 Consultant for television series "Miracle Planet the Evolution of Our World," Japan Broadcasting Corporation and the National Film Board of Canada
- 2006 Mentor, Weston High School Senior Internship Program
- 2007-2009 University of New Mexico Anthropology departmental seminar series coordinator
- 2007-current Manager of the University of New Mexico Anthropology cast collection
- 2007-2015 affiliated faculty Program in Interdisciplinary Biological and Biomedical Sciences (PIBBS)
- 2008 "Sivapithecus: the life and death of a Miocene ape." Ancestors Lecture, Maxwell Museum of Anthropology, University of New Mexico.
- 2008 Consultant in workshop to develop new Maxwell Museum human evolution exhibit.
- 2008 "Sivapithecus: Reconstructing the life of a Miocene ape." Summer Science Program, Socorro, New Mexico.
- 2009 "Miocene: Dawn and demise of the apes." Seminar series, Department of Earth and Planetary Sciences, University of New Mexico.
- 2010 Radio interview for NPR, Pasadena. The discovery of Australopithecus sediba.
- 2010 Café Scientifique. "The human fossil record: interpreting behavior from bones." Four presentations to high school students in Los Alamos, Espanola, Albuquerque, and Santa Fe, New Mexico.
- 2011 Fossils presentation; Albuquerque elementary school
- 2011 "What makes us human? Inferences from the fossil record." Summer Science Program, Socorro, New Mexico
- 2011- present Resource Allocations Committee
- 2012 Fossils presentation; Albuquerque elementary school
- 2012 Science fair. Albuquerque elementary school
- 2012-2013 Search Committee, assistant professor position, Dept. Anthropology
- 2013-current Continuing non-tenure track faculty review committee

- 2013 Teeth and skulls presentation. Albuquerque elementary school
- 2013 Fossil presentation Maxwell Museum summer camp
- 2013-2014 Consultant for documentary "Life Force Borneo," Natural History New Zealand
- 2014-current Advisory Committee, Center for Stable Isotopes
- 2015-current Convener, Evolutionary Anthropology
- 2015-current Advisory Group, Department of Anthropology
- 2015-2016 Panelist, National Science Foundation Graduate Research Fellowship, Ecology
- 2016 Human evolution and fossil presentation five Earth Science classes, Albuquerque middle school
- 2016-2017 Panelist, National Science Foundation Graduate Research Fellowship, Anthropology
- 2017 Fossil presentation, Albuquerque preschool
- 2017-2018 Panelist, National Science Foundation Graduate Research Fellowship, Ecology
- 2017-2018 Search committee, assistant professor position, Department of Anthropology
- 2017-2018 Sabbatical committee, University of New Mexico
- 2018 STEM mentorship mix and match event for undergraduates
- 2018 Principles of evolution presentation five Biology classes, Albuquerque middle school
- 2018 "Chimpanzees, isotopes, and the transition from ape to human." New Mexico Museum of Natural History and Science, Albuquerque, New Mexico
- 2018-2019 Search committee, assistant professor position, Department of Anthropology
- 2018-2019 Panelist, National Science Foundation Graduate Research Fellowship, Ecology
- 2018 Lead content advisor, human evolution exhibit NSF grant proposal Maxwell Museum

- 2019 STEM mentorship mix and match event for undergraduates 2019 Human evolution presentation, Albuquerque preschool (2) 2019 Content advisor, bipedalism display, Maxwell Museum 2019-current Annual Review Committee, Catherine Rhodes 2019 Teaching evaluation, Catherine Rhodes 2019-2020 Panelist, National Science Foundation Graduate Research Fellowship, **Ecology** 2020 Presenter, Maxwell Museum Passport to People: Bones and Stones, Footprints and Fossils Family Fun Day 2020 Children's Hour radio program, Apes and Human Ancestors 2020 Presenter, Maxwell Museum Ancestors Virtual Exhibit 2020-2021 Panelist, National Science Foundation Graduate Research Fellowship, **Ecology** 2020-current Annual Review Committee, Ian Wallace 2020 Teaching evaluation (2), Catherine Rhodes 2020 Teaching evaluation, Keith Hunley 2020 Teaching evaluation, Melissa Emery Thompson 2021-current Associate Editor, Journal of Human Evolution 2021 Reviewer for promotion to Research Full Professor case, University of Utah Department of Geology and Geophysics **Peer reviews:** 2003 Anthropological Science
- 2004 Paleobiology
- 2006 Journal of Mammalogy
- 2007 Human Nature

2007	Grant proposal reviewer for the Academy of Finland and the National Natural Science Foundation of China
2008 2008	Palaeogeography, Palaeoclimatology, Palaeoecology Mammalian Biology
2008	Naturwissenschaften
2008	Paleobiology
2009	Paleobiology
2009	Palaeogeography, Palaeoclimatology, Palaeoecology
2009	Journal of Human Evolution
2009	Grant reviewer National Science Foundation (3)
2010	Palaeogeography, Palaeoclimatology, Palaeoecology
2010	Quaternary International
2010	Human Nature
2011	Palaeogeography, Palaeoclimatology, Palaeoecology (2)
2011	Human Nature
2011	Grant reviewer Petroleum Research Fund (American Chemical Society)
2011	Grant reviewer National Science Foundation
2011	Proceedings of the National Academy of Sciences
2012	Palaeogeography, Palaeoclimatology, Palaeoecology
2012	Proceedings of the National Academy of Sciences (2)
2013	Quaternary International
2013	International Journal of Primatology
2013	Proceedings of the National Academy of Sciences
2013	Current Biology

2014 Grant reviewer National Science Foundation (2) 2014 Proceedings of the National Academy of Sciences 2014 Journal of Anthropological Research 2014 Palaeogeography, Palaeoclimatology, Palaeoecology (2) 2014 Grant reviewer Leakey Foundation 2015 PLOS ONE (2) 2015 Journal of Mountain Science (2) 2015 Grant reviewer, National Geographic Society 2015 Grant reviewer, Leakey Foundation 2015 American Journal of Primatology (5) 2015 Grant reviewer, National Science Foundation 2016 PLOS ONE 2017 Grant reviewer, Petroleum Research Fund (American Chemical Society) 2017 International Journal of Biodiversity and Conservation (2) 2018 Journal of Human Evolution (2) 2018 PLOS ONE 2018 American Journal of Physical Anthropology (2) 2018 Grant reviewer, Leakey Foundation 2019 The Journal of Animal and Plant Sciences 2019 Pakistan Journal of Zoology (5) 2019 Grant reviewer, National Science Foundation 2019 Journal of Human Evolution

2019 American Journal of Physical Anthropology

2020 Frontiers Ecology and Evolution (2)

2020 Spanish Journal of Paleontology

2020 Journal of Archaeological Research

2020 Evolutionary Anthropology

2020 Journal of Asian Earth Sciences

2020 Journal of Human Evolution

2021 Journal of Human Evolution (3)