

Sherry V. Nelson

Anthropology

February 2024

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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:

2005 Nelson, S., C. Badgley, and E. Zakem. Microwear in modern squirrels in relation to diet. *Paleontologica Electronica* vol 8, issue 1, 14A, 15p.

2005 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 Museum 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.

2013 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.

2024 Hamilton, M., S. Copeland, and S. Nelson. A reanalysis of strontium isotope ratios as indicators of dispersal in South African hominins. *Journal of Human Evolution* v. 187: 103480.

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. Semperebon; 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; M. Hamilton and S. Nelson; 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

Early life stress exposure and wide perikymata spaces using museum faunal collections.
A Kennedy and S. Nelson; Southwestern Association of Biological Anthropologists,
Tucson, Arizona; 2023

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 Kromdraai, 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 Kromdraai, 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 für Naturkunde 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 Photogrammetry, 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; 2011-2021; 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; 2018-2021; dissertation committee member

Stephanie Fox; 2018-2023; dissertation committee member

Joshua Vallejos; 2019-2022; Master's co-advisor

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

Andrew Kennedy; 2020-present; dissertation advisor

Sarah Phillips; 2021; dissertation advisor

Marina Ruiz 2022-present; Master's committee member

Jordan Martinez 2023-present; Master's committee member

Classroom Teaching:

2007-current Courses at University of New Mexico – Introduction to Biological Anthropology; Human Evolution; Paleoecology Lab; Paleoanthropology; Primate Evolution; Human Behavioral Evolution; Topics in Paleoecology; Humans and the Environment; Topics in Interdisciplinary Biology and Biomedical Sciences; Guest lectures in -- Chimpanzees and Human Evolution; Elemental Ecology; Science in Archaeology; Seminar in Interdisciplinary Biology and Biomedical Sciences; Topics: Career Planning

2005-2007 Courses at Boston University – Human Behavior and Evolution; Human Origins; Primate Evolution and Anatomy; Advanced Topics in Human Behavioral Evolution; Graduate Proseminar in Anthropology

2003 Instructor at University of Michigan -- Undergraduate Research Opportunity Program

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

1996-1998 Teaching Fellow, Harvard University Department of Anthropology -- Human Evolution

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

2015-2021 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

2019-2022 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 Consultant for *New Scientist* article

2021 Reviewer for promotion to Research Full Professor case, University of Utah
Department of Geology and Geophysics

2021 Annual Review teaching, Catherine Rhodes

2021 Annual Review service, Ian Wallace

2021-current Associate Chair, Department of Anthropology

2021 Teaching evaluation, Catherine Rhodes

2021 Teaching evaluation, Ian Wallace

2022 Teaching report, mid-probationary review, Catherine Rhodes

2022 Human Biology table, UNM Health Professions Symposium

2022 Human Biology table, UNM Preview Day

2022 Anthropology table, UNM Senior Day

2022 Human evolution presentation, Albuquerque preschool

2022-current Biology Department Graduate Student Advocacy Committee

2022 Human evolution interview and lab tour, Albuquerque elementary student

2022-2023 Panelist, Panelist, National Science Foundation Graduate Research Fellowship, Ecology

2023 Mid-probationary review, service, Ian Wallace

2023 “What makes us human? Insights from the fossil record.” Southwest Seminars, Santa Fe, NM

2023 Human Biology table, UNM Health Professions Symposium

2023-current Convener, Evolutionary Anthropology

2023 Scientific content advisor, Maxwell Museum Ancestors Exhibit

2023-2024 Panelist, National Science Foundation Graduate Research Fellowship, Anthropology

2024 Consultant for *Scientific American* article

2024 “Becoming human: the early stages from ape to hominin.” Maxwell Museum, Ancestors Lecture

Peer reviews:

Granting agencies: National Science Foundation, National Geographic Society, Academy of Finland and the National Natural Science Foundation of China, Petroleum Research Fund (American Chemical Society), Leakey Foundation

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