

CURRICULUM VITAE

Meradeth Snow, PhD

CONTACT INFORMATION

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EMPLOYMENT BACKGROUND

- 2018-Present University of Montana, Missoula. Associate Professor with tenure
 - 2020-present Anthropology Department Co-Chair
- 2015-2018 University of Montana, Missoula. Assistant Professor
- 2012-2015 University of Montana, Missoula. Visiting Assistant Professor
- 2005-2011 University of California, Davis. Lecturer, teaching assistant, and graduate researcher

EDUCATIONAL BACKGROUND

- Doctorate, University of California, Davis in October 2011
 - Dissertation title: “Ancient DNA in North America and the Effects of Migration on Prehistoric Populations”
- Master’s degree from University of California, Davis 2007
 - Anthropology, Evolutionary Wing
 - Molecular Anthropology focus

PAPERS AND PUBLICATIONS

FORTHCOMING:

- Unravelling Signatures of Local Adaptation Among Indigenous Groups from Mexico (accepted by *Genes*)
 - Humberto Garcia-Ortiz , Lorena Orozco. Meradeth Snow, et al.
- Redating Paquime and the Convento Site Sixty Years After the Joint Casas Grandes Expedition (in prep with plans to submit to *Latin American Antiquity*)
 - Michael T. Searcy, Samuel J. Jensen, Meradeth Snow, Lori Barkwill Love

PUBLISHED:

- Geometric Morphometric Sex Determination of the Human Pubic Bone (2022)
 - Baca, Katherine, Brandon Bridge, Meradeth Snow. In *PLOS One*.
- Ethics of DNA research on human remains: five globally applicable guidelines (2021)
 - Songul Alpaslan-Roodenberg, David Anthony, Hiba Babiker, Meradeth Snow, et al. In *Nature*.
- Landscape of genomic diversity in Mexican Indigenous populations: insights into the peopling of the Americas (2021)

- Humberto Garcia-Ortiz, Francisco Barajas-Olmos, Meradeth Snow, et al. In *Nature Communications*.
- Reconstruction of Ancient Microbial Genomes from the Human Gut (2021)
 - Marsha C. Wibowo, Meradeth Snow, Karl Reinhard, Aleksander D. Kostic, et al. In *Nature*.
- The Effects of Soft Tissue Removal Methods on Skeletal Remains (2021)
 - Emily Tarbet Hurst and Meradeth Snow. In *New Florida Journal of Anthropology*
- Using Archaeology and Ancient DNA to Link Trafficked Prehistoric Human Remains Back to Sites: example from Spirit Eye Cave (2020)
 - Schroeder, Bryon, Tre Blohm, Meradeth Snow. In *Journal of Archaeological Science: Reports*.
- Eukaryotic DNA extraction from burial soil samples at incremental distances: a preliminary study (2019)
 - Thomas, Ariane, Meradeth Snow, Kora Dueno, Bill Holben. In *Journal of Forensic Science*.
- Ancient Human Mitochondrial DNA and Radiocarbon Analysis of Archived Quids from the Mule Spring Rockshelter, Nevada, USA (2018)
 - Hamilton-Brehm, Scott D., Meradeth Snow, Lidia T. Hristova, Susan R. Edwards, Jeffrey R. Wedding, Brittany R. Kruger, Duane P. Moser. In *PlosOne*.
- Ancient mitochondrial DNA and ancestry of Paquimé inhabitants, Casas Grandes (1200-1450 A.D.) (2017)
 - Morales, Ana, Meradeth Snow, Annie Katzenberg, Jane Hill. In *American Journal of Physical Anthropology*.
- Additional Analysis of mtDNA from the Tommy and Mine Canyon Sites (2017)
 - Snow, Meradeth, Kathy Roler Durand, Martha Gustafson, David Glenn Smith. In *Journal of Archaeological Science: Reports*.
- A Biological Perspective on Chacoan Identity (2015)
 - Snow, Meradeth, Steven LeBlanc. Chapter in *Chaco Revisited: New Research on the Prehistory of Chaco Canyon* Edited by Carrie C. Heitman and Stephen Plog.
- Stable Isotopes and mtDNA from Woodland period southern Ontario people: results from a tooth sampling protocol (2014)
 - R.F. Williamson, J.C. Sealy, D.G. Smith, M. Snow, C. Forrest, S. Pfeiffer. In *Journal of Archaeological Science*.
- Non-Destructive Sampling of Human Skeletal Remains Yields Ancient Nuclear and Mitochondrial DNA (2012)

- Bolnick, Deborah, Holly Bonine, Jaime Mata-Miguez, Brian Kemp, Meradeth Snow, Steven LeBlanc. In *American Journal of Physical Anthropology*.
- The Relationship of the Mimbres to other southwestern and Mexican populations (2011)
 - Snow, Meradeth, Harry Shafer and David Glenn Smith. In *Journal of Archaeological Science*.
- Ancestral Puebloan mtDNA in Context of the Greater Southwest (2010)
 - Snow, Meradeth, David Glenn Smith, Kathy Roler Durand. In *Journal of Archaeological Science*.
- Discrete Dental Trait Evidence of Migration Patterns in the Northern Southwest (2010)
 - Durand, Kathy Roler, Meradeth Snow, David Glenn Smith, and Stephen R. Durand. In *Human variation in the Americas: the integration of archaeology and biological anthropology. Occasional Paper No. 38*, edited by Benjamin M. Auerbach, chapter 5. Carbondale, IL: Center for Archaeological Investigations.
- Mitochondrial DNA of Protohistoric Remains of an Arikara Population from the Northern Plains: Implications for the Macro-Siouan Hypothesis (2010)
 - Lawrence, Diana M., Brian M. Kemp, Jason Eshleman, Richard L. Jantz, Meradeth Snow, Debra A. George, David Glenn Smith. *Human Biology*.

TECHNICAL REPORTS

- Ancient Genomics (2018)
 - In *The SAS Encyclopedia of Archaeological Sciences*, to be published by Wiley-Blackwell.
- Report on the Analysis of Human Skeletal Remains from the Elkins Site (7NC-G-174), St. Georges Hundred, New Castle County, Delaware (2014)
 - McKeown, Ashley H., Meradeth H. Snow, Roseanne Bongiovanni, Kirsten Green, Rachel Summers-Wilson, and Kathleen Hauther. Delaware Department of Transportation report by Hunter Research, Inc.

PROFESSIONAL MEETINGS

- Society for American Archaeology 2022 Meetings, Chicago, Illinois
 - “A Reanalysis of Population Dynamics in the Casas Grandes Region of Northern Mexico Using Mitochondrial DNA” with Michael Searcy
 - “Biological Connections in the Southern Mogollon” with Jakob Sedig
 - “Redating Paquimé and the Convento Site 60 Years after the Joint Casas Grandes Expedition in Northwestern Mexico” poster with Samuel Jensen and Michael Searcy
- American Association of Biological Anthropologists 2021 Meetings, held online
 - “Using aDNA and Archaeological Data to Explain Migration in the Casas Grandes Region of Northern Mexico” with Michael Searcy
- Society for American Archaeology 2021 Meetings, held online

- “Migrating Genes: or how to avoid the free-ranging genome” with Michael Searcy
- Society for American Archaeology 2020 Meetings, Canceled due to COVID-19
 - “Mitogenome Analysis of the Elite Individuals Interred in the House of the Dead Complex at Paquimé (Casas Grandes), Mexico” with Rachel Summers, and Michael Searcy
 - “Migrating Genes: Using aDNA and Archaeological Data to Explain Migration in the Casas Grandes Region of Northern Mexico” with Michael Searcy
 - “Paleomicrobiological Analysis of Tripolye Genomes from Vertebea Cave, Ukraine” (poster) Tre Blohm, Jordan Karsten, and Ryan Schmidt
- American Association of Physical Anthropologists 2020 Meetings, Canceled due to COVID-19
 - Chair for session “Human and Non-Human Primate Microbiomes”
 - “DNA integrity in forensic samples” (poster) with Samantha Ramey
 - “Identification of disease at Vertebea Cave, Ukraine” (poster) with Tre Blohm, Jordan Karsten, and Ryan Schmidt
 - “Mitogenome analysis of the elite individuals interred in the House of the Dead complex at Paquimé (Casas Grandes), Mexico” (poster) with Rachel Summers and Michael Searcy
 - “Using aDNA and Archaeological Data to Explain Migration in the Casas Grandes Region of Northern Mexico” (poster) with Michael Searcy
 - “Diet-Breadth Analysis in the Southwest: Comparison of Metabarcoding and Shotgun Sequencing Methods with Coprolites” (poster) with Paige Plattner, Aleksander Kostic, and Marsha Wibowo
- Society for American Archaeology 2019 Meetings, Albuquerque, New Mexico
 - “Domestication of the Cochineal” (poster) with Lauren Clark, Mark MacKenzie
 - “The Use of Forensic Anthropology Methods in Historic Cases” (poster) with Britney Radford, Kirsten Green, Keith Biddle, and Elena Hughes
 - “MtDNA Analysis of the Paquimé (Casas Grandes), Mexico, Population” with Rachel Summers and Michael Searcy
 - “Identification of Mitochondrial Haplogroups in Native Mexican and Mestizo Populations” with Marlen Flores Huacuja, Humberto Garcia-Ortiz, Angelica Martinez-Hernandez, and Lorena Orozco-Orozco
 - “Ancient DNA Analysis of Orton Quarry” with Paige Plattner
 - “Presence of the Mycobacterium Tuberculosis Complex (MTBC) in Ancient Skeletal Samples from Ukraine” with Tre Blohm, Jordan Karsten, and Ryan Schmidt
- Society for American Archaeology 2018 Meetings, Washington D.C.
 - Session Chair and organizer: “Advances in Biomolecular Archaeology”
 - “Genetic Identity and Relationships in the Southwest United States and Mexico”
 - “Microbial Communities from Soil and Coprolites” with Rachel Summers, Joshua Sackett, and Duane Moser
 - “Ancient DNA Investigations of Possible Casas Grandes—Chalchihuites Interactions” with Kyle Waller, Jose Luis Punzo Diaz, Ana Morales-Arce, and Miguel Vallebuena

- “Title IX from a Researcher’s Perspective” with Kirsten Green
- Chacmool at 50: The Past, Present, and Future of Archaeology, University of Calgary
 - Session organizer for “Advances in Biomolecular Archaeology”
 - “Genetic Identity and Relationships in the Southwest United States and Mexico”
- American Association of Physical Anthropologists 2017 Meetings, New Orleans, Louisiana
 - “Explaining Distinct Crania from Colonial Delaware Using Craniometric and Genetic Analyses” with Kathleen Hauther, Ashley McKeown, and Katherine Spradley
- Society for American Archaeology 2017 Meetings, Vancouver BC
 - “Ancient DNA from Stone Tools” with Anna Prentiss and Clare Super
- Society for American Archaeology 2016 Meetings, Orlando, Florida
 - “Kiva B Internments at the Mine Canyon Site, New Mexico: a bioarchaeology and ancient DNA approach” with Kathy Durand Gore and Martha Gustafson
 - “Dog Remains from the Bridge River site in British Columbia: ancient DNA and stable isotopes” with Emilia Tifental and Anna Prentiss
- Society for Historical Archaeology 2016 Meetings, Washington D.C.
 - “Bioarchaeology of Burials Associated with the Elkins Site (7NC-G-174)” with Ashley McKeown, Kathleen Hauther, Roseanne Bongiovani, Kirsten Green, and Rachel Summers
- Society for American Archaeology 2015 Meetings, San Francisco, California
 - “Ancient DNA and Cranial Morphometric Analysis into Ancestry of Five Burials from Colonial Delaware” with Ashley McKeown and Kathleen Hauther
 - Chair of Molecular Analysis in Bioarchaeology session
- Society for American Archaeology 2014 Meetings, Austin, Texas
 - “Life and Health in the Point Community, an Ancestral Puebloan Population in the Middle San Juan Region, New Mexico” with Kathy Durand Gore, Michelle Greene, Elizabeth Adams, and Cathey Cline
- Society for American Archaeology 2013 Meetings, Honolulu, Hawaii
 - “Stable Isotope and aDNA Approaches to Migration in the Middle San Juan Region” with Cody Roush, Kyle Waller, Steven LeBlanc, Mike Glascock, and Jim Guthrie
- Society for California Archaeology 2011 Meetings, Rohnert Park, California
 - “Prehistory of the Southwest Region of the US and Its Relationship to Mesoamerica”
- Society for American Archaeology 2011 Meetings, Sacramento, California
 - “Further Analysis of mtDNA from the Tommy and Mine Canyon Sites”
- Amerind Seminar Proposal: Current Issues in the Archaeology of Chaco Canyon, A.D. 850-1150, Chaco Canyon New Mexico, 2010
 - “A Biological Perspective on Chacoan Identity” with Steven A. LeBlanc
- Next-Generation Sequencing Conference, UC Davis Bioinformatics Core, 2010
- Society for American Archaeology 2010 Meetings, St. Louis, Missouri
 - “Ancient DNA in the Southwest United States and Mesoamerica”
- Washington State University Colloquium Series, November 2009, Pullman Washington
 - “Ancient DNA in the Prehistoric Southwest: Pueblo & Mimbres Populations”

- Society for American Archaeology 2008 Meetings, Vancouver, Canada
 - “Genetic Analysis of the Tommy and Mine Canyon Sites in Relation to the Greater Southwest and Mexico”
- El Hombre Temprano en los Americas 2008 Meetings, Mexico D.F., Mexico
 - “Ancestral Puebloan mtDNA in Context of the Greater Southwest”
- Society for American Archaeology 2007 Meetings, Austin, Texas
 - “Genetic Analysis of the Tommy and Mine Canyon Sites in the Context of Southwest Populations”

INVITED TALKS

- “ESTUDIOS DE ADN E ISÓTOPOS EN RESTOS ÓSEOS HUMANOS”
- ENAH Presentation, April, 2022, online
- Given in Spanish to those students at the INAH Mexican University System in Chihuahua City, Mexico
- “ESTUDIOS DE ADN E ISÓTOPOS EN RESTOS ÓSEOS HUMANOS”
 - Formal Presentation, May, 2022, Nuevo Casas Grandes, Mexico
 - Given in Spanish to interested parties from the business community in Chihuahua, Mexico
- “Ancient DNA and Applications to Human Health, Ancestry, and Forensics”
 - Research presentation to biology department, October, 2021
- “DNA from Dead Things”
 - University of Illinois, Carbondale, Biology and Chemistry Colloquium Series, January 24th, 2018
- “Ancient DNA and Paquime: Toward a better understanding of the Southwest/Northwest”
 - *Instituto Nacional de Medicina Genomica*, May 19th, 2017
- “Ancient DNA & Past Populations”
 - University of Calgary Anthropology Department, April 1st 2015
- “Bioarchaeology in the Desert Southwest”
 - University of Calgary Anthropology Department, March 31st 2015

GRANT FUNDING

- National Science Foundation Senior Researcher, 2020
 - Ancient DNA in West Mexico
 - Principle Investigators: Meradeth Snow and Michael Mathiowetz
 - Amount Awarded: \$164,531
- National Science Foundation Senior Researcher, 2017
 - Identifying Prehistoric Migration in Northern Mexico Using Ancient DNA
 - Principal Investigators: Meradeth Snow & Michael Searcy
 - Amount Awarded: \$162,000
- National Geographic, 2018
 - Analysis of Ancient DNA from Mimbres Population
 - Principle Investigators: Jakob Sedig and Meradeth Snow
 - Amount Awarded: \$9000
- Funding from Harvard Medical School Collaboration with Dr. Kostic, 2017
 - Feasibility Study on Microbiome DNA from Human-Associated Sources

- Amount Awarded: \$9000
- University Research Grant Program (University of Montana), 2016
 - Violence in the Desert Southwest: utilizing ancient DNA to address relatedness in fragmentary mass interments
 - Amount awarded: \$5000
- Faculty Professional Enhancement Program: Mini-Sabbatical, 2015
 - Travel and lodging for week of collaboration with aDNA facilities at UT, Austin
 - Amount awarded: \$1500
- University of Montana Student Instructional Equipment Fund, 2013-2017
 - Laboratory and casts for the student teaching lab
 - Amount requested and awarded over five years: \$15,000
- National Science Foundation Dissertation Improvement Grant, 2007
 - Title: Doctoral Dissertation Improvement: Ancient DNA in the Southwest United States
 - Award amount: \$14,267
- UC MEXUS Dissertation Research Grant, 2007
 - Title: Ancient DNA in the Southwest United States and Mesoamerica
 - Award amount: \$11,990

TEACHING AWARDS

- 2017 Most Inspiring Professor (as voted on by graduating seniors)
- 2016 Cox Educational Excellence Award
- Nominated for the UC Davis Outstanding Graduate Student Teaching Award

TEACHING & LEARNING MANAGEMENT SKILLS

- Summer Institute on Scientific Teaching graduate
- Moodle, SmartSite, and Blackboard for course supplements to all my courses
- Online courses through Moodle
 - Have designed and built classes from scratch for online delivery

ACADEMIC TEACHING EXPERIENCE

- University of Montana
 - Summer Laboratory Intensive for Molecular Anthropology
 - Introduction to Biological Anthropology
 - Biological Anthropology Laboratory
 - Human Variation (Intermediate Writing Course GE)
 - Evolution and Genetic Variation of Human Populations
 - Emergence of Modern Humans
 - Forensic Science and technology
 - Seminar in Bioarchaeology and Skeletal Biology (graduate level)
 - Seminar in Human Variation and Evolution (graduate level)

GRADUATE STUDENTS

- Chair:
 - Samantha Powers, PhD (in progress)
 - Mykala Ward, PhD (in progress)
 - Lacy Hazelwood, PhD (in progress)
 - Holli McDonarls, PhD (in progress)
 - Tabitha Marko, PhD (in progress)

- Anna-Marie David, PhD (in progress)
- Emily Owens, MA (in progress)
- Seth Warnic, MA (in progress)
- Haley Rebaridi, MA (in progress)
- Tina Czaplinska, MA (in progress)
- Patricio Gutierrez Ruano, MA (in progress)
- Dan Warilla, MA (in progress)
- Hannah Caron, MA (in progress)
- Ava Godhard, MA (in progress)
- Kaylee Hinds, PhD (in progress)
- Danielle Airola, PhD (in progress)
- Adam Connell, PhD (in progress)
- Rachel Summers, PhD (in progress)
- Tre Blohm, PhD (in progress)
- Samantha Ramey, PhD (2022)
- Keith Biddle, PhD (in progress)
- Haley O'Brien, PhD (in progress)
- Felicia Sporazic, PhD (in progress)
- Samantha Hofland, MA (2021), PhD in progress
- Alexis Rizzolo, MA (2020)
- Katherine Jackson, PhD (2020)
- Amanda Williams, PhD (2020)
- Britney Radford, MA (2019)
- Paige Plattner, MA (2020)
- Claire Hanson, MA (2020)
- Emily Silverman, MA (2018)
- Samuel Austin, MA (2017)
- Kirsten Green, PhD (2016)
- Ariane Thomas, MA (2016)
- Emilia Tiffental, MA (2016)
- Committee:
 - Lee Tallier, PhD (in progress)
 - Ashley Hampton, PhD (in progress)
 - Nazreen Broomand, PhD (in progress at UCSC)
 - Liz Agosto, MA (2013)
 - Rosie Bongiovani, PhD (2014)
 - Jenny Cavallari, MA (2015)
 - Connor Dixon, MA (2015)
 - Brittney Eubank, MA (2016)
 - Julia Schorr, MA (2016)
 - Matthew Walsh, PhD (2016)
 - Paula Sprecht, MA (2016)
 - Megan Richardson, MA (2017)

LANGUAGE SKILLS

- Spanish: capable of reading, writing and speaking at near native speaker level

PRIOR EMPLOYMENT

- Junior Specialist in the Molecular Anthropology Laboratory at UC Davis
- Baseline Data, Inc., a Cultural Resource Management firm in American Fork, Utah
- Museum of Peoples and Cultures at Brigham Young University

UNIVERSITY SERVICE

- University:
 - Data Visualization Certificate Committee (2019-present)
 - University Grievance Committee (2019-present)
 - University Library Committee (2015-present; Chair 2016-17)
 - Interstate Passport Mapping Pilot (2016-2017)
- Department:
 - Co-Chair (Summer 2020-present)
 - Social Media Committee (2013-present)
 - Search Committee for Visiting Assistant Professor (2015, 2016, 2017 as Chair)
 - Public outreach through school visits, summer camps, and other forms of community interaction (2012-present)

PUBLIC SERVICE

- Missoula City Library Coordinator of the adult writing group (2013-Present)
- Literacy volunteer for the Yolo Reads project in Davis, CA (2010-2012)
- Youth Leader at an after-school project for underprivileged youth in Woodland, CA (2004-2005)