

Lexi O'Donnell

College of Population Health (primary department)

Department of Pathology (secondary department)

University of New Mexico, Health Sciences Center

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Education

- 2019** University of New Mexico, Albuquerque, NM
Ph.D. Anthropology
Dissertation: Health, Stress, and Migration in the pre-contact Southwest United States.
Chair: Dr. Patricia Crown; committee: Dr. Jane Buikstra, Dr. Heather Edgar, Dr. Osbjorn Pearson
- 2016** University of New Mexico, Albuquerque, NM
M.S. Anthropology – Evolutionary Anthropology
Advisor: Dr. Heather Edgar; committee: Dr. Keith Hunley, Dr. Osbjorn Pearson
- 2008** University of Arizona, Tucson, AZ
B.A. Anthropology

Research Interests

The overarching goal of my research is to investigate the intersections between human biology and culture, with specific attention to population-level health outcomes in vulnerable groups. I seek to understand how inequality, marginalization, and movement impact the lived experience, how they are embodied, and how they are visible in the dead. I am also interested in heterogeneity in individual frailty and risks, and how the nature of skeletal assemblages impacts our interpretations of health and stress in the dead (the Osteological Paradox). My recent work focuses on the etiology of cribra orbitalia and porotic hyperostosis and population-level health outcomes in pediatrics.

Lab: Virtual Early Life Stress - Pediatrics (VELS-Pediatrics Lab). I direct the VELS-Pediatrics lab with Dr. Ethan C. Hill. We train students in data collection, research development, and presentation of results.

Keyword interests: Dental morphology, biodistance, paleopathology, human osteology/skeletal biology, the Osteological Paradox, stress and frailty, migration, health, metabolic associated steatotic liver disease, nutrition/obesity, bone mineral density, cribra orbitalia/porotic hyperostosis, biostatistics, statistical analysis, Kaplan-Meier survival analysis, hazards and odds ratios, postmortem computed tomography

Visit my website for more information: <https://lexiodonnell.wixsite.com/research>

Publications

**student author; *senior author

Peer-reviewed publications

O'Donnell L., Corron L, Hill EC, Jr. O'Donnell M, Wyatt B**, Perez J** 2025. Skeletal and adipose manifestations of stress in a contemporary pediatric sample. *American Journal of Biological Anthropology*. 186(1):25058. <https://doi.org/10.1002/ajpa.25058>.

Corron L, McPherson CB, Hill EC, **O'Donnell L***. 2025. Analyzing patterns of skeletal indicators of developmental stress through the double lens of ontogeny and the life course approach in a contemporary reference sample. *American Journal of Biological Anthropology* (first published 25 Dec 2024). <https://doi.org/10.1002/ajpa.25052>.

Wyatt B**, McPherson CB, **O'Donnell L***. 2024. Stature and its association with physiological stress exposure in a paediatric autopsy sample. *American Journal of Human Biology*. 37(1):e24190. <https://doi.org/10.1002/ajhb.24190>.

Swift SL, **O'Donnell L**, et al. 2024. State Adoption of Paid Sick Leave and Cardiovascular Disease Mortality Among Adults Aged 15-64 in the United States, 2008 to 2019". *Journal of Public Health Policy*. <https://doi.org/10.1057/s41271-024-00531-z>

O'Donnell L, Wyatt B**. 2024. How does social inequality alter relationships between porous cranial lesions and mortality? Examining the relationship between skeletal indicators of stress, socioeconomic status, and survivorship in a pediatric autopsy sample. *American Journal of Human Biology*. 37(1): e24164. <https://doi.org/10.1002/ajhb.24164>. **Joint first authors.**

O'Donnell L, McPherson CB. 2024. A review of the relationship between diet and porous cranial lesions in the Southwest United States. Accepted, *American Antiquity*, June 28, 2024.

McPherson CB, **O'Donnell L**, Moes E**, Edgar HJH. 2024. No relationship exists between dental fluctuating asymmetry, birthweight, and birthterm in two modern North American Samples. *American Journal of Human Biology*. 36(9):e24114. <https://doi.org/10.1002/ajhb.24114>.

Moes E**, **O'Donnell L**, et al. 2024. Mortuary practices and the importance of rockshelters during the Early and Middle Holocene in the southern Maya Mountains. *Bioarchaeology International*, August 2024. <https://doi.org/10.5744/bi.2023.0029>.

O'Donnell L, Green, J, Hill EC, O'Donnell M. 2024. Biocultural and social determinants of ill-health and early mortality in a New Mexican pediatric autopsy sample. *Journal of Biosocial Science*. 56(4): 693-714. <https://doi.org/10.1017/s0021932024000129>.

Hill EC, **O'Donnell L**. 2023. Low bone mineral density is associated with fatty liver disease and respiratory illness in a pediatric mortality sample. *Osteoporosis International*. 34: 1231-1239.

O'Donnell L, Buikstra JE, Hill EC, Anderson AS, O'Donnell M. 2023. Skeletal manifestations of disease experience: Length of illness and porous cranial lesion formation in a contemporary mortality sample. *American Journal of Human Biology*. DOI: 10.1002/ajhb.23896.

O'Donnell L, Corron L, Hill EC. 2023. Perinatal disorders and small birthweight are significantly associated with small vertebral neural canal size in a contemporary pediatric autopsy sample. *Spine*. 48(11): E158-E168.

O'Donnell L, Hill EC, Anderson AS**, Edgar HJH. 2022. A biological approach to adult sex differences in skeletal indicators of childhood stress. *American Journal of Biological Anthropology*. 177 (3): 381-401.

Kennett et al. 2022. South-to-North Migration Preceded the Advent of Intensive Farming in the Maya Region. *Nature Communications*. 13 (1) 1530.

O'Donnell L, Moes E**. 2021. Sex differences in linear enamel hypoplasia prevalence and frailty in Ancestral Puebloans. *Journal of Archaeological Science: Reports*. (39):103153.

Anderson AS**, Sutherland ML, **O'Donnell L**, Hill EC, Hunt DR, Blackwell AD, Gurven MD. 2021. Do computed tomography findings agree with traditional osteological examination? The case of porous cranial lesions. *International Journal of Paleopathology*. 33():209-219.

O'Donnell L, Edgar HJH. 2021. Social determinants of health and wealth at Freedman's Cemetery, Dallas, Texas. *Biodemography and Social Biology*. 170(3):404-417.

O'Donnell L, Schillaci MA. 2021. Inferring population relationships of the Gallina and Pottery Mound Pueblo populations using craniometric and dental morphological biodistance. *Kiva*. 87(1): 97-128.

O'Donnell L, Moes E**. 2021. Increased dental fluctuating asymmetry is associated with active skeletal lesions, but not mortality hazards in the pre-contact Southwest United States. *American Journal of Physical Anthropology* 175(1):156-171.

O'Donnell L, Hill EC, Anderson AS**, Edgar HJH. 2020. Cribra orbitalia and porotic hyperostosis are associated with respiratory infections in a contemporary mortality sample from New Mexico. *American Journal of Physical Anthropology*. 173(4):721-733.

Kennett et al. 2020. Early Isotopic Evidence for Maize as a Staple Grain in the Americas. *Science Advances*. 6(23) eaba3245.

O'Donnell L, Meyer JV**, Ragsdale CS. 2020. Trade relationships and gene flow at Pottery Mound Pueblo, New Mexico. 2020. *American Antiquity*. 89(3):492-515.

O'Donnell L. 2019. Indicators of stress and their association with frailty in the precontact Southwestern United States. *American Journal of Physical Anthropology*. 170(3):404-417.

O'Donnell A, Ragsdale CS. 2017. Biological distance analysis and the fate of the Gallina in the American Southwest. *Kiva*. 83(4):515-531.

O'Donnell A, Daneshvari S, Edgar HJH. 2017. Can cephalometrics discriminate between the sexes in a diverse juvenile sample? *Journal of Forensic Sciences*. 62(3):735-740.

Edgar HJH, Willermet C, Ragsdale CS, **O'Donnell A**, Daneshvari S. 2015. Frequencies of rare incisor variations reflect factors influencing precontact population relationships in Mexico and the American Southwest. *International Journal of Osteoarchaeology*. 26(6):987-1000.

Works in review

O'Donnell L, Hill EC, Buro AW, Corron L, McPherson CB, Swift Sam. Musculoskeletal alterations in pediatric decedents with traumatic brain injuries. **Article submitted to Brain Injury, January 2024.**

Works in preparation

O'Donnell L, Berry S, Hill EC, O'Donnell M. Obesity/overweight and their comorbidities in a contemporary New Mexican pediatric autopsy sample. **Article in prep.**

Moes E, **O'Donnell L**. Comparing biodistance in the Southwest United States using permanent and deciduous dental morphology. *Journal of Archaeological Sciences: Reports*.

Schwartz M, ... **O'Donnell L**, Yetish G, Gurven M, Kaplan H. The role of parity and sex in tooth loss in a natural fertility population with little access to dentistry. **Article in prep.**

Reports, Book Chapters, and Non-refereed Materials

Moes E, **O'Donnell L**, Hill EC, Robinson M, Kennett DJ, Prufer K. Life into Old Age: A Female Forager-Horticulturalist from the Middle Holocene in Belize. 2024. In: Wrobel G, Cucina A (eds.). *Mesoamerican Osteobiographies: Revealing the Lives and Deaths of Ancient Individuals*. University Press of Florida.

Rogers, Thatcher A**, Kurota A, and **O'Donnell A**. 2021. Chamisal Site Bioarchaeology. Office of Contract Archeology, University of New Mexico, Albuquerque.

Rogers, Thatcher A**, Kurota A, and **O'Donnell A**. 2021. Analysis of Mogollon Pottery from the Lake Roberts Site (LA 47821) and Hooker Site (LA 127051). In *Excavations at the Lake Roberts Site (LA 47821) and the Hooker Site (LA 127051), Grant County, New Mexico*, edited by Thatcher A. Rogers and Alexander Kurota, pp.

10-1-10-80. OCA/UNM Report No. 185-1097. Office of Contract Archeology, University of New Mexico, Albuquerque.

O'Donnell L. 2022. Living and Moving in the La Plata Valley. *Readings in Southwest Bioarchaeology*, ed. Ann L. W. Stodder.

O'Donnell L and G. Woodhead**. 2022. Themes in Bioarchaeological Studies of Chaco Canyon. *Readings in Southwest Bioarchaeology*, ed. Ann L. W. Stodder.

Moes E**, **O'Donnell L**, Robinson M, Kennett, DJ, Prufer K. 2021. Old Age among Ancient Foragers: Evidence from the Middle Holocene in Belize. *Book Chapter*, ed. Gabriel Wrobel & Andrea Cucina.

O'Donnell A. 2019. Doctoral Dissertation: Trends in Health, Stress and Migration in the pre-Contact Southwest United States.

Stodder, Ann L.W. and **O'Donnell L.** Coalition Period Burials from the 2018 Guadalupe-Johnson Street Water Line Projects. Santa Fe: Office of Archaeological Studies, The Museum of New Mexico. Report Submitted to the City of Santa Fe Water Division.

Moes, E and **O'Donnell L.** Multiple reports on individual skeletal analyses for Bladen Paleoindian and Archaic Archaeological Project and Uxbenká Archaeological Project.

Stodder, Ann L.W. and **O'Donnell L.** Multiple reports on skeletal analyses for remains excavated in New Mexico.

Refereed Abstracts and Conference Presentations

Hill EC, Riggs B**, **O'Donnell L***. 2025. Muscle density, but not cross-sectional area, is related to metabolic dysfunction-associated steatohepatitis. Poster presented before the American Association for Anatomy Annual Meeting at Anatomy Connected, Portland, Oregon. March 28-31.

Riggs B**, Hill EC, Armijo H, Darwin R**, **O'Donnell L***. 2025. Biomechanical measurements of tibial bone strength in children with cerebral palsy compared to other neurological conditions. Poster presented before the American Association for Anatomy Annual Meeting at Anatomy Connected, Portland, Oregon. March 28-31.

Stodder, Ann L.W., **O'Donnell L**, Catrina Whitley, Kyle Bocinsky, Kenneth Blake Vernon. 2025. Through the Biocultural Lens: Resilience, Vulnerability, and Lived Experience in the Ancient Southwest. Invited podium presentation in the Multiscale Data and the History of Human Development in the U.S. Southwest session. 90th Annual meeting of the Society for American Archaeology. Denver, CO.

Neff NC**, **O'Donnell L**, et al. 2025. Tracing Diet Quality and Nutritional Stress using Amino Acid Isotope Analysis: Insights from a Forager-to-Farmer Transition in Southern Belize. International Symposium on Biomolecular Archaeology. August 26-29, 2025. Turin, Italy.

Cerezo-Roman J, Moes E, **O'Donnell L**, Neff N**, Prufer K. 2025. Cremation mortuary practices of hunter-gatherers from Belize during the Late Pleistocene to the Late Holocene. Submitted. 90th Annual meeting of the Society for American Archaeology. Denver, CO. Podium.

Pearson OM, Tierney CA**, Moes E, **O'Donnell L**, Prufer K. 2025. Settling down: alterations in activity patterns with changes from foraging to staple maize agriculture in central Belize. 90th Annual meeting of the Society for American Archaeology. Denver, CO. Podium.

Warner M**, Hill EC, Swift S, O'Dell J, Darwin R, **O'Donnell L***. 2025. Using cross-sectional geometric properties of non-adult tibiae to understand urban and rural physical activity. Podium. 94th Annual Meeting of the American Association of Biological Anthropologists. March 12-15. Baltimore, MD.

McPherson C, Hill EC, Simon T**, **O'Donnell L***. Exploring associations between birth phenotype, deciduous crown volume, and crown surface area in a contemporary New Mexican decedent sample. Invited podium presentation in the Little teeth, big picture: contributions of deciduous dentitions across biological

anthropology symposium. 94th Annual Meeting of the American Association of Biological Anthropologists. March 12-15. Baltimore, MD.

O'Donnell L, McPherson C, Hill EC, Warner M**. Birth phenotype has a complex relationship with porous cranial lesions and dental fluctuating asymmetry. Invited podium presentation in the Little teeth, big picture: contributions of deciduous dentitions across biological anthropology symposium. 94th Annual Meeting of the American Association of Biological Anthropologists. March 12-15. Baltimore, MD.

O'Donnell L, Marques C, III Walser J, and colleagues. 2025. Inextricable Links: The Study of Toxicants in Past and Present Populations. Invited podium presentation in the One Paleopathology: Expanding the Concept Symposium. [One Paleopathology: Expanding the Concept](#). 52nd Annual Meeting of the North American Paleopathology Association. March 10-12. Baltimore, MD.

Edgar HJH, Moes E, **O'Donnell L**, Hannigan, GG. 2024. Stress by any other name? Terminology, Theory, and Method for the study of Inequality of Health. 93rd annual meeting of the American Association of Biological Anthropologists. March 20-23, 2024. Los Angeles, CA.

McPherson CB, **O'Donnell L**, Hill EC, HJH Edgar. Short and healthy, tall and frail: disentangling height and health in skeletal samples. 93rd annual meeting of the American Association of Biological Anthropologists. March 20-23, 2024. Los Angeles, CA.

O'Donnell L, Hill EC, Perez, J**. What's stress got to do with it? Quantifying measures of physiological stress and their relationship to inequality in a contemporary pediatric decedent sample. 93rd annual meeting of the American Association of Biological Anthropologists. March 20-23, 2024. Los Angeles, CA.

Perez J**, Hill EC, **O'Donnell L***. 2023. Socioeconomic Factors are Related to Higher Levels of Pediatric Epicardial Adipose Tissue. American Public Health Association (APHA 2023), Emerging Scholars Plus Recorded Poster Presentations. November 12-15, 2023, Atlanta, GA.

O'Donnell L, Hill, EC, Corron LK. 2023. Cribra orbitalia is associated with increased visceral fat and reduction of the vertebral neural canal in a pediatric autopsy sample. American Association for Anatomy (AAA), Anatomy Connected. March 25-27, 2023, Washington, DC.

Hill, EC, **O'Donnell L**. 2023. Bone mineral density and pediatric fatty liver disease. American Association for Anatomy (AAA), Anatomy Connected. March 25-27, 2023, Washington, DC.

Corron LK, **O'Donnell L**, Hill, EC. 2023. The expression of skeletal markers and their relationship to stress and disease in a contemporary subadult reference sample. 29th Annual Meeting of the European Association of Archaeologists, Belfast, Northern Ireland. Session title: Through Infancy and Beyond: Bioarchaeological Perspectives of Childhood in the Past. September 4.

Moes, E, **O'Donnell L**. 2022. Comparing Biodistance Estimates from Deciduous and Permanent Dental Morphology in a Sample from the Pre-Hispanic Southwest United States. International Symposium on Dental Morphology, Frankfurt Germany, August 15-19.

Edgar, HJHE, **O'Donnell L**, Willermet C, Moes, E, .2022. Biodistance and frailty, Mexico. International Symposium on Dental Morphology, Frankfurt Germany, August 15-19.

Hill, EC, **O'Donnell L**. 2022. Factors associated with low bone density in a juvenile mortality sample. Experimental Biology 2022 [Abstract ID R2403], Philadelphia PA, April 2-5.

Daneshvari Berry S, **O'Donnell L**, Farnbach Pearson AW. 2021. Measuring frailty in a Mississippi asylum sample. American Association of Physical Anthropologists (2020, presented in 2021), Los Angeles, CA.

Anderson A, **O'Donnell L**, Hill EC, Edgar HJH. 2020. Cemetery-to-bedside: Investigating common archaeological indicators of childhood stress in a contemporary sample from the New Mexico Office of the Medical Investigator. Submitted to Cottage Health Research Institute (CHRI) Collaborative Research Symposium.

Daneshvari Berry S, **O'Donnell L**, Farnbach Pearson AW. 2020. Measuring frailty in a Mississippi asylum sample. Submitted to American Association of Physical Anthropologists, Los Angeles, CA.

Hill EC, **O'Donnell L**, Anderson AS, Edgar HJH. 2020. An examination of the frequency and etiology of cribra orbitalia and porotic hyperostosis using computer tomography (CT) scans of a contemporary sample from New Mexico. Submitted to American Association of Physical Anthropologists, Los Angeles, CA.

O'Donnell L, Hill EC, Anderson AS, Edgar HJH. 2020. Examining the etiology of cribra orbitalia and porotic hyperostosis using computed tomography (CT) scans of a contemporary sample from the New Mexico Office of the Medical Investigator. Submitted to Society for American Archaeology, Austin, TX.

O'Donnell L, Moes E, Rusk KM. Does fluctuating asymmetry predict lesion status in systemic stress indicators? Kind of... 2019. Podium presentation, American Association of Physical Anthropologists, Cleveland, Ohio.

Price K, **O'Donnell L**, Marquardt W. Four down, 6,000 to go: Processing and Researching the St. Joseph's Cemetery Site legacy collection. 2019. Podium presentation, Society for American Archaeology, Albuquerque, NM.

O'Donnell L, Moes E, Hill EC, Kennett DJ, Prufer KM. Indicators of skeletal stress in a small skeletal sample spanning the Holocene in the Maya Mountains of Belize. 2019. Poster presented to the Society for American Archaeology, Albuquerque, NM.

Marquardt, W, **O'Donnell A**, Price K, Williams K, Edgar HJH. 2018. Mortuary Analysis of St. Joseph Sanatorium, Albuquerque, New Mexico: A Multidisciplinary Approach. Poster presented during the Bioarchaeology in the Americas session, Society for American Archaeology, Washington, DC.

O'Donnell A, Edgar HJH. 2015. Social determinants of health and wealth at Freedman's Cemetery, Dallas, Texas. Poster presented to the Western Bioarchaeology Group (WeBIG), Arizona State University, Phoenix, AZ.

O'Donnell A, Daneshvari S. 2015. Can cephalometrics discriminate between the sexes in a diverse juvenile sample? Podium presentation, American Association of Physical Anthropologists, St. Louis, Missouri.

O'Donnell A, Ragsdale CS, Willermet CM, Edgar HJH. 2014. Rare incisor variants are observed at relatively high frequencies in Mexico and the American Southwest. American Journal of Physical Anthropology Supplemental 48. Poster presented at invited symposium, American Association of Physical Anthropologists, Calgary, Alberta.

O'Donnell A, Rautman ALM, Stodder, ALW. 2013. Developing a systematic tool for differential diagnosis of juvenile scurvy and rickets in archaeological collections. Poster presented to the Paleopathology Association, Knoxville, Tennessee.

Collaborative Projects

Virtual Early Life Stress in Pediatric Decedents (VELS-Pediatrics) Project. Run by O'Donnell and Hill.

Cribra orbitalia and porotic hyperostosis in a contemporary sample from the New Mexico Office of the Medical Investigator (OMI). This project examines cribra orbitalia (CO) and porotic hyperostosis (PH) in a contemporary post-mortem computed tomography database to assess lesion etiology. **Collaborators:** Dr. Ethan Hill, Amy S. Anderson, Drs. Jane Buikstra, John Green, Michael J. O'Donnell, Jr., Louise Corron, Heather Edgar; **Student researchers:** Raychel Durdin (MA research, University of Mississippi), Jennie Austen (PhD research, University of Reading), Cal McGehee (MA research, University of Mississippi). Part of the Virtual Early Life Stress in Pediatrics (VELS-Pediatrics) project run by Drs. O'Donnell and Ethan Hill.

Social and developmental determinants of pediatric obesity and its sequelae. Investigation of social determinants and predictors of non-alcoholic fatty liver disease [NAFLD] (medical insurance status, socioeconomic status, diet and lifestyle); and NAFLD's impacts on bone mineral density (BMD). Low BMD in children predicts early morbidity and mortality in adults. Aims: screening for malnutrition (Vitamins C

and D, protein, calcium deficiency); screening for low BMD; actionable interventions to improve nutrition and behavior, BMD, and outcomes for children. **Collaborators:** Drs. Shamsi Daneshvari Berry, Ethan Hill (UNM-SOM), Sam Swift (UNM-COPH), and Katie Coakley (UNM-COPH). Part of the VELs-Pediatrics project.

Biological expressions of social determinants of health in pediatric decedents from New Mexico: an analysis of dried blood spots, blood serum, and vitreous humor. This project focuses on environmental exposures to heavy metals and other toxicants in pediatric decedents from New Mexico. It further examines childhood nutrition and nutrient deficiencies. The goal is to better characterize, not only how social determinants, such as neighborhood and race/ethnicity impact children's nutrition and risk of exposure to toxicants, but also how those things impact bone health. **Collaborators:** Drs. Ethan Hill (UNM-SOM), Eliane El Hayek (UNM-Pharmacy), Amy Anderson (Max Planck), Heather JH Edgar (UNM-Anthropology), Claudia Pratesi (UNM-COPH).

Other collaborative work

Bioarchaeology Working Group – HNDs-R. Invited member of the bioarchaeology working group for the NSF funded project (Scott Ortman and A. L. W. Stodder, co-PIs) entitled Human Networks, Sustainable Development, and Lived Experience in a Nonindustrial Society.

PSL working group. Invited member of a working group focusing on methods for data collection from computed tomography scans. (alongside Megan Brickley, Jo Buckberry, Amy Anderson, Brianne Morgan)

Research Funding: Contracts and Grants

2024	<i>Understanding the biocultural dimensions of skeletal manifestations of early-life stress in pediatric and adult autopsy samples.</i> LRP Program, Health Disparities Research, Extramural: Eunice Kennedy Shriver National Institute of Child Health & Human Development (NICHD). 2024-2026. Award ID: 1L60HD115990-01. PI: L. O'Donnell. \$48,366.46
2024	<i>Bridges Cemetery Project: Assessing individual ancestry and relationships using dental morphology.</i> Grant number: 3RTA2. 3/1/24-8/31/24. PI: L. O'Donnell. \$25,000
2024	<i>Examining nutrition and toxicant exposures in whole blood samples.</i> Seed Funding Opportunity: Research Development around OMI Data (through FRDO). PI: L. O'Donnell , co-PIs: Ethan C. Hill, Heather Edgar, and Natalie Adolphi. \$2,500
2023	Stipend: Early Childhood Coalition, run by Cuidando Los Niños, funded by the Local Early Childhood Systems Building Grant, Early Childhood Education and Care Department of New Mexico. \$3,500
2023	Stipend: Early Childhood Coalition, run by Cuidando Los Niños, funded by the Local Early Childhood Systems Building Grant, Early Childhood Education and Care Department of New Mexico. \$5,000
2023	Child Health Research Signature Program (CHRSP). <i>A bone strength analysis of a pediatric postmortem CT sample from New Mexico.</i> PI: Ethan C. Hill, co-PI: L. O'Donnell. \$12,120
2023	College of Population Health-Supporting Early Career Faculty (COPH-SECF). <i>Early-life stress and the development of epicardial adipose tissue.</i> PI: L. O'Donnell Collaborator(s): Dr. Kristine Tollestrup (COPH), Ethan C. Hill. \$25,000
2021-2024	co-director (co-PI), University of Mississippi Archaeological Curation Project, Save America's Treasures. Institute of Museum and Library Services. Drs. Edmond Boudreaux, Maureen Meyers, Carolyn Freiwald, and Matthew Murray. Federal Award Identifier ST-03-18-0012-18. \$1,000,000
2019-2020	Quality Enhancement Plan, Critical Thinking Redesign Grant. Received with Drs. Carolyn Freiwald, Kristin Hickman, and Matthew Murray. \$4,000
2019	Departmental Travel Funding. \$500
2018	Harvey C. and Sarah M. Moore competitive travel grant. \$500
2018	Harvey C. and Sarah M. Moore Endowed Fellowship in Anthropology. \$1,000

2018 Friends of Coronado Historic Site Scholarship. Funding for dissertation research. **\$1,500**
2017 Center for Regional Studies, University of New Mexico, Research Fellowship. **\$15,000**
2016 New Mexico Research Grant, High Priority, University of New Mexico: Funding for dissertation research. **\$5,000**
2014 Research, Project and Travel Grant (RPT), University of New Mexico: Funding for travel to conference. **\$840**

Honors and Awards

2016 Anthropology Department, University of New Mexico, Binford Fellowship. **\$14,000**

Academic Appointments

Spring 2024 Assistant Professor, Department of Pathology, University of New Mexico School of Medicine (secondary appointment)
Spring 2023 Assistant Professor, College of Population Health, University of New Mexico Health Sciences Center (primary appointment)
Spring 2023 Affiliate Assistant Professor, Department of Anthropology, University of New Mexico
Fall 2022-2023 Research Assistant Professor, Museum Studies, University of New Mexico
 Adjunct Assistant Professor, College of Population Health, University of New Mexico
2019-Fall 2022 Assistant Professor (advanced, declined by me), Department of Sociology and Anthropology, University of Mississippi
 Visiting Assistant Professor of Biological Anthropology, Department of Sociology and Anthropology, University of Mississippi
2019-2023 Adjunct Assistant Professor, Department of Anthropology, University of New Mexico

Employment

2018-2022 Office of Archaeological Studies, Santa Fe.
Dental morphological and metric data collection, review and update of dental pathology data
2018-2019 Bioarchaeologist, Maxwell Museum, Laboratory of Human Osteology
Skeletal analysis of Pottery Mound human remains for NAGPRA grant
2017-2019 Adjunct Faculty, University of Saint Francis
Osteology instructor for Gross Anatomy course, Physician Assistant Studies
Summer 2018 Faculty Assistant, University of New Mexico
Chaco Culture National Historic Park; archaeological excavation, site survey, site condition assessments
Fall 2017 Bioarchaeologist, Maxwell Museum, Laboratory of Human Osteology
Skeletal analysis of burials from Cascada Seca site, New Mexico, reports, repatriation (NAGPRA)
Spring 2016 Archaeologist, Office of Contract Archaeology
Ceramic analysis and reconstruction, Lake Roberts (Mimbres)
2015-2019 Curatorial Assistant, Maxwell Museum
Bureau of Land Management, NAGPRA coordination, skeletal analysis, repatriation
Summer 2014 Maxwell Museum, Student Employee
Data entry (Oracle)
2008-2009 Statistical Research, Inc.
Data entry (Access) for over 1,000 skeletons excavated from the Joint Courts Complex, Tucson, AZ

Courses Taught

University of New Mexico, College of Population Health

Fall 2024

PH 102, Global Health Challenges, 41 enrolled
PH 201, Fundamentals of One Health, 25 enrolled
PH 533, Research Methods, 8 enrolled
ANTH 497, Independent Study – stress and growth stunting, 1 enrolled
PH 596, Professional paper, 1 enrolled

Fall 2023

PH 102, Global Health Challenges, 38 enrolled
PH 533, Research Methods, 8 enrolled

Spring 2023

PH 101, Intro to Population Health, 38 enrolled

Fall 2022

PH 102, Global Health Challenges, 31 enrolled
PH 533, Research Methods, 8 enrolled
MSST 400/500, Practicum Museum Methods, 7 enrolled

University of Mississippi

Spring 2022

ANTH 311/398, Paleopathology, 8 enrolled
ANTH 622, Readings in Paleopathology, 2 enrolled
ANTH 342 – Osteology Directed Study, 1 enrolled
ANTH 697, Thesis, 1 enrolled
ANTH 101, Introduction to Anthropology, 35 enrolled
HON 401/402, 2 enrolled

Fall 2021

ANTH 311, Forensic Anthropology, 18 enrolled
ANTH 607, Graduate Seminar in Biocultural Anthropology, 4 enrolled
ANTH 527, Quantitative Anthropology, 4 enrolled
HON 401, Senior Honors Research, 2 enrolled

Spring 2021

ANTH 311, The Evolution of Human Health and Disease, 10 enrolled
ANTH 101, Introduction to Anthropology (remote), 64 enrolled
ANTH 101, Introduction to Anthropology (WEB), 41 enrolled
HON 401, Senior Honors Research, 1 enrolled

Fall 2020

ANTH 101, Introduction to Anthropology (online), 30 enrolled
ANTH 311, Southwest Archaeology, 4 enrolled
HON 401, Senior Honors Research, 2 enrolled
ANTH 607, Graduate Seminar in Biocultural Anthropology, 4 enrolled
ANTH 697, Thesis, 1 enrolled

Summer 2020

ANTH 101, Introduction to Anthropology
ANTH 304, Biological Anthropology

Spring 2020

ANTH 101, Introduction to Anthropology, 47 enrolled
ANTH 101, Introduction to Anthropology (online), 27 enrolled
ANTH 311/511, Dental Anthropology, 8 enrolled
ANTH 622, Readings in Anthropology II, 1 enrolled

Fall 2019

ANTH 101, Introduction to Anthropology, 4 enrolled

ANTH 304, Biological Anthropology, 30 enrolled

ANTH 607, Graduate Seminar in Biocultural Anthropology, 5 enrolled

University of St. Francis, Albuquerque, Adjunct Faculty, Winter 2017- Winter 2019

PAMS 601, Anatomy (Osteology portion of course), 35 enrolled

PAMS 601, Anatomy (Osteology portion of course), 35 enrolled

PAMS 601, Anatomy (Osteology portion of course), 40 enrolled

University of New Mexico, Albuquerque, Fall 2013-Summer 2019

ANTH 451, Bioarchaeology, Graduate Assistant

ANTH 101, Introduction to Anthropology, Graduate Assistant

ANTH 151L, Human Evolution Laboratory, Teaching Assistant

ANTH 350, Human Osteology, Graduate Assistant

ANTH 351L, Human Osteology Laboratory, Teaching Assistant

ANTH 150, Evolution and Human Emergence, Graduate Assistant

Student Mentorship

PhD Advisement

2024 Oscar Mendez-Cera, University of New Mexico

2023 Joseph O'Dell, University of New Mexico

PhD Committee Member

2024 Monica Warner, University of New Mexico (Anthropology – Archaeology)

2025 Nikki Appel, University of New Mexico (Anthropology – Evolutionary Anthropology)

Master's Advisement

2023 Pranjali Dahal, University of New Mexico, College of Population Health.

2023 - 2024 Oscar (Kyle) White, University of New Mexico, College of Population Health.

2023 Dr. Maria (Johana) Zambrano, University of New Mexico, College of Population Health (MPH), *Analysis of Medical Mistrust/Trust in Physicians Among Participants Who Underwent a Kidney Transplant*, reader

2023 Cal McGehee, University of Mississippi, Health conditions and their impacts on dental development, chair

2023 Nikki Wilcox, University of Mississippi, reader with Carolyn Freiwald

2022 Mina Brandon, University of Mississippi, co-chair with Carolyn Freiwald

2021 Daniel Shawl, University of Mississippi, *Chronology of the Fatherland Site: the Dating of Mound E of the Grand Village of the Natchez*, chair

2021 Shannon Wooten, University of Mississippi, *Relationships on the Frontier: A Ceramic Analysis of Carter Robinson (44LE12) Mound Sites*, chair

2020 Raychel Durdin, University of Mississippi, *A diagnosis of cribra orbitalia and porotic hyperostosis using cranial vault thickness*. Research funded by the Graduate School's Summer Research Assistantship program, chair

Honors Thesis Advisement

2022 Natalie Clark, University of Mississippi, second reader

2022 Sarah Grevy, University of Mississippi, *A Cross-Cultural Survey of the Funerary Practice of Body Element Removal and Deposition in Mortuary Pottery*, third reader

2022 Cedric (C.J.) Cornelius, University of Mississippi, *Are Enamel Hypoplasias Correlated with Short Stature and Age at Death?*, chair

- 2022** Kanazsha Cooper, University of Mississippi, *Are Enamel Hypoplasias Correlated with Short Stature and Age at Death?*, chair
- 2020** Elizabeth (Libby) Houston, University of Mississippi, *Underlying correlations in dental pathology regarding the remains from East Smithfield and St. Mary Graces*, chair
- 2020** Joseph Upton, University of Mississippi, *Underlying correlations in dental pathology regarding the remains from East Smithfield and St. Mary Graces*, chair

Postdoctoral Mentorship

- 2022-2024** Caitlin Brynn McPherson. co-mentor with Dr. Heather Edgar, University of New Mexico. ASERT IRACDA funded postdoctoral scholar. Research focusing on PMCT, Developmental Origins of Health and Disease, Growth and Development. VELs-Lab, Bridge Lab

Other Mentoring

- 2024-present** Mina Amirkabirian (undergraduate student, University of New Mexico) – VELs-Lab; anemia, social determinants.
- 2023-2024** Jordan Perez (undergraduate student, University of New Mexico) – VELs-Lab; adipose tissue and food deserts [El Centro de La Raza, El Puente Fellow]
- 2023-present** Sage Templeton (medical student, University of New Mexico) – VELs-Lab; cross-sectional geometry and health
- 2023-present** Rourke Darwin (undergraduate student, University of New Mexico) – VELs-Lab; cross-sectional geometry data collection
- 2024-present** Dina Butcher (undergraduate student, University of New Mexico) – VELs-Lab; early-life temperature stress
- 2024-present** Liza Cardinale (undergraduate student, University of New Mexico) – VELs-Lab; cross-sectional geometry
- 2024-2025** Kaia Allen (undergraduate student, University of New Mexico) – VELs-Lab; cross-sectional geometry
- 2024-2025** Brandon Stanger-Hall (undergraduate student, University of New Mexico) – VELs-Lab; cranial vault thickness, growth stunting
- 2017-present** Emily Moes (graduate student mentor, now faculty mentor, University of New Mexico); skeletal analysis, paleopathological analysis, dental morphology and biodistance analysis
- Summer 2018** Kelly Navickas (Wellesley College); cultural resource management/public archaeology, skeletal analysis, NAGPRA

Synergistic Activities

- 2013-2019** Maxwell Museum, Laboratory of Human Osteology, Research Assistant
Coordination of volunteers, analysis and inventory of human skeletal remains, data analysis
- 2011-2019** Maxwell Museum, Laboratory of Human Osteology, Volunteer
Coordination of volunteers; analysis and inventory of human skeletal remains; data analysis; labeling, inventory and analysis of human skeletal remains; organization of the documented skeletal collection; scanning electron microscopy of teeth from Peru; analysis of teeth to be used for isotope analysis; minimum number of individual counts for large collection of juvenile and adult skeletal remains (commingled)
- Summer 2016** Volunteer work in Bogotá, Colombia
Skeletal analysis and documentation of human skeletal remains from Cementerio Central.
- Fall 2014-2015** Organized and supervised numerous undergraduate volunteers for a project involving cleaning of human skeletal remains from archaeological site in Belize
- 2006-2010** Arizona State Museum, Bioarchaeology Lab, Volunteer

Analysis and inventory of skeletal remains, including cremains; separation of human bones from faunal bones, data entry (Access), excavation of juvenile skeletal remains at Honeybee site

2005-2008 Old Pueblo Archaeology, Volunteer and Contractor
Ceramic analysis and reconstruction, cleaning and labeling artifacts, inventory and cataloging of artifacts, mailing list, field training in Yuma Wash

Service

Reviewer

2024 Frontiers in Nutrition
2024 Science Advances
2024 International Journal of Osteoarchaeology
2024 American Journal of Biological Anthropology (four articles)
2023 The Anatomical Record
2023 Scientific Reports
2023 American Journal of Biological Anthropology
2023 International Journal of Osteoarchaeology
2022 SSM – Population Health
2022 Forensic Science, Medicine, and Pathology
2022 International Journal of Paleopathology
2022 Kiva
2022 Anthropologischer Anzeiger (two articles)
2021 Anthropologischer Anzeiger
2021 The Anatomical Record
2021 Kiva (two articles)
2020 American Antiquity
2020 National Science Foundation
2020 Bioarchaeology International
2019 Bioarchaeology International
2018 Journal of Forensic Sciences
2018 Kiva
2017 Kiva

Symposia, Workshops, and Panels

2024 Joint HBA/AABA invited podium symposium: Terminology, Theory, and Method for the Study of Inequality of Health: Breakthroughs or Barriers? Organized by Heather JH Edgar and **Lexi O'Donnell**. 93rd annual meeting of the American Association of Biological Anthropologists. March 20-23, 2024. Los Angeles, CA.
2024 Panel member: Applying Anthropological Theory and Methods to Public Health and Health Equity. Society for Applied Anthropology, 84th annual meeting, Santa Fe, NM. March 26, 2024.
2024 Invited participant in the NSF-funded, “One Paleopathology” Workshop at the ISEMPH 2024 meetings in Durham, UK. August 5-7th, 2024. Presented a talk entitled “One Paleopathology: Understanding Frailty, Disease Risk, and Porous Cranial Lesions” and was co-facilitator of the “Healthy Environments” breakout group.

Student Education

2021 Weekly biological anthropology methods workshops

Departmental and University Service

- 2024** Assisted Maxwell Museum of Anthropology, Laboratory of Human Osteology with donor death certificates.
- 2023** Member of the Diversity, Equity, Inclusion, and Accessibility Committee, College of Population Health [Vice Chair 2023-present], University of New Mexico
- 2024** Member of the PhD Admissions Committee, College of Population Health [Vice Chair], University of New Mexico
- 2023** Member of the Diversity, Equity, Inclusion, and Accessibility Committee, College of Population Health, University of New Mexico
- 2022** Hiring committee (two positions), University of Mississippi
- 2020** Online transition team, assisting other faculty members transition courses online during the COVID-19 pandemic, University of Mississippi

Public Education

- 2024** Invited Presenter (Lexi O'Donnell & Ethan C. Hill, tandem presentation), *Skeletal and Metabolic Manifestations of Early Life Stress: Learning from Loss to Protect Young Lives*. All Faiths Children's Advocacy Center. August 20, 2024. Albuquerque, NM.
- 2024** Invited Presenter, *How Climate Change Alters Your Biology: Stress and the Skeleton*. (Lexi O'Donnell & Ethan C. Hill). Presentation: Early Childhood Coalition. May 21, 2024.
- 2024** Presenter, *How Climate Change Alters Your Biology: Stress and the Skeleton*. (Lexi O'Donnell & Ethan C. Hill). Workshop Health Professions Symposium. April 13, 2024.
- 2024** Invited Presenter (Lexi O'Donnell & Ethan C. Hill, tandem presentation), *Skeletal and Metabolic Manifestations of Early Life Stress: Learning from Loss to Protect Young Lives*. Alta Mira Specialized Family Services, Inc. April 11, 2024. Albuquerque, NM.
- 2023** Invited Presenter (Lexi O'Donnell & Ethan C. Hill, tandem presentation), *Skeletal and Metabolic Manifestations of Early Life Stress: Learning from Loss to Protect Young Lives*. Cuidando Los Niños, Building Futures Conference: Strengthening early childhood education for families experiencing homelessness. Indian Pueblo Cultural Center, Albuquerque, NM. August 11, 2023.
- 2023** Presenter, *How Culture Alters Your Biology: Stress and the Skeleton*. Workshop Health Professions Symposium. April 15, 2023.
- 2021** Guest discussant <https://www.twitch.tv/jacksfacts> (May 20, 2021)
- 2021** Guest discussant in *Human Osteology*, University of Mississippi (April 2021), Invited by Dr. Carolyn Freiwald.
- 2020** Guest discussant in course on *Human Variation*, University of New Mexico (November 2020), invited by Dr. Heather Edgar.
- 2020** Virtual Skeletal Biology Research in the Time of COVID-19, invited to discuss O'Donnell and Colleagues (2020) - AJPA article on respiratory infection and porous cranial vault lesions.
- 2020** Contributor, COVID-19: Concepts of Sickness and Wellness, the Maxwell Museum of Anthropology, University of New Mexico.
- 2018** Educational outreach, Office of Archaeological Studies, development of educational materials.

Consulting

- 2022** Consult on unidentified remains for Lafayette County Coroner [Rocky Kennedy] (MS)

Invited Lectures and Talks

- Spring 2024** *Moving Forward: Incorporating medical imaging and documented samples to further our understanding of Porous Cranial Lesions (PCLs)*. Paleopathology Association (PPA) | Porous

- Skeletal Lesions (PSL): achievements and future directions. Notes from the PSLMeet in Coimbra, 2023. 184 attendees (live).
- Fall 2023** *Understanding Skeletal Manifestations of Lived Experience*. Invited lightning talk and participation in workshop, Research and Discovery Week (Main Campus, Vice President for Research Office): OMI Data Brainstorming Event with FRDO (November 9th, 2023).
- Summer 2023** *Porous cranial lesions now and then: Reappraising the role of anemia in the formation of cribra orbitalia and porotic hyperostosis with contemporary data*. **Keynote speaker:** Porous Skeletal Lesions (PSL) 2023, University of Coimbra. Coimbra, Portugal. July 6-8, 2023.
- Fall 2022** *A biocultural view of early-life stress and developmental plasticity*. Invited Lecture. Anthropology of Disease, Dr. Heather Edgar. November 17, 2022.
- Fall 2022** *A biocultural view of early-life stress*. Invited Lecture, College of Population Health, University of New Mexico. Presented September 9, 2022.
- Spring 2022** *The Tales Our Teeth Tell: Living and Moving During the AD 1000s-1400s in New Mexico*. Invited lecture, San Juan Basin Archaeological Society. Presented April 14, 2022.
Our Teeth Tell Tales: Living and Moving During the AD 1000s-1400s in New Mexico. Invited webinar, Crow Canyon Archaeological Center, Discover Archaeology Webinar Series. Presented March 3, 2022.
Past and Present: A Biocultural View of Health and Migration. Presented at the University of Mississippi, University, MS. February 24, 2022.
- Spring 2020** *Now & Then: Reappraising the Causes of Skeletal Indicators of Health and Stress in the Past Using Present-day Autopsy Data*. Presented at the University of Mississippi, University, MS. Presented February 21, 2020.
- Fall 2020** *Archaeological Science: Our Teeth Tell (Migration) Tales: Biological Distance and the Fate of the Gallina in the American Southwest*. Ssippin' Science Podcast.
Archaeological Science: Our Teeth Tell (Migration) Tales: Biological Distance and the Fate of the Gallina in the American Southwest. Oxford Science Café, September 15, 2020. Part of the Migration 2020 Virtual Events Programming.
Bioarchaeology. Presented September 22, 2020. Scott Kirk, available on YouTube, "Short Videos on Archaeology."
- Fall 2018** *Trends in Health, Stress and Migration in the U.S. Southwest*. Presented at the University of Idaho, Moscow, ID.
Pathology, presented in Forensic Anthropology (ANTH 251). Instructor: Katelyn Rusk.
Migration and Its Impacts on Health in the American Southwest presented in Paleopathology (ANTH 454/554). Instructor: Dr. Heather Edgar.
- Fall 2017** *Pathology*, presented in Forensic Anthropology (ANTH 251). Instructor: Katelyn Rusk.
Bioarchaeology, presented in Forensic Anthropology (ANTH 251). Instructor: Katelyn Rusk.
Bioarchaeology, presented in World Archaeology (ANTH 220). Instructor: Dr. Wirt Wills.
Social Determinants of Health and Wealth in a Freed Slave Cemetery presented in World Archaeology (ANTH 220). Instructor: Dr. Wirt Wills.
- Spring 2016** *Osteology*, week-long lecture/lab course presented to Advanced Archaeology Lab class. Instructor: Dr. Patricia Crown.
- Fall 2016** *Pathology*, presented in Forensic Anthropology (ANTH 251). Instructor: Katelyn Rusk.
Bioarchaeology, presented in Forensic Anthropology (ANTH 251). Instructor: Katelyn Rusk.
- Fall 2015** *Pathology*, presented in Forensic Anthropology (ANTH 251). Instructor: Katelyn Rusk.
Bioarchaeology, presented in Forensic Anthropology (ANTH 251). Instructor: Katelyn Rusk.

Skills and Proficiencies

Data analysis: Stata, R, SAS, MS Excel

Other software: Horos, MS Access

Human skeletal analysis (adult and juvenile)

Dental analysis including pathology, morphology, and metrics

Paleopathological analysis, paleopathology from computed tomography (CT scan) and radiography

Professional Development

Trainings

2022	HRRC IRB Members & Staff (University of New Mexico Health Sciences Center (expires May 2025)
2019	e-learning Training (eTC) – online instruction endorsement (6 week-long course)