

SCOTT D. MADDUX, PHD
CURRICULUM VITAE

Center for Anatomical Sciences
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EDUCATION

2011	Ph.D. in Anthropology University of Iowa, Iowa City, IA
2006	M.A. in Anthropology University of Iowa, Iowa City, IA
2003	B.A. in Anthropology Texas A&M University, College Station, TX

ACADEMIC APPOINTMENTS

2024-present	Interim Director, Center for Anatomical Sciences, University of North Texas Health Science Center
2024-present	Assistant Director, Center for Anatomical Sciences, University of North Texas Health Science Center
2022-present	Associate Professor (tenured), Center for Anatomical Sciences, University of North Texas Health Science Center
2016-2022	Assistant Professor, Center for Anatomical Sciences, University of North Texas Health Science Center
2011-2016	Assistant Teaching Professor, Department of Pathology and Anatomical Sciences, University of Missouri <ul style="list-style-type: none">• Adjunct appointment: Department of Anthropology

PROFESSIONAL APPOINTMENTS

2024-present	Editorial Board Member, American Journal of Biological Anthropology, Hoboken, NJ
2017-2023	President, Texas Association of Biological Anthropologists, Austin, TX
2012-2016	Secretary-Treasurer, Missouri State Anatomical Board, Columbia, MO

2012-2016	Director, Gift of Body Program, Department of Pathology and Anatomical Sciences, University of Missouri
2007-2009	Cadaver Preparation Assistant. Deeded Body Program, Department of Anatomy and Cell Biology, University of Iowa
2003	Collections Assistant. Brazos Valley Museum of Natural History. Bryan, TX

RESEARCH INTERESTS

Human craniofacial anatomy with an emphasis on biological factors driving the appearance of modern human and Neandertal facial morphologies.

Current Projects:

2020-present	Experimentally testing relationships between variation in body size/shape and thermoregulation in living humans
2019-present	Three-dimensional modeling of human upper respiratory airflow patterns using 3D imaging and computation fluid dynamics (CFD) analysis.
2016-present	Ecogeographic variation in human nasal and maxillary sinus morphology
2009-present	Allometric implications of facial and dental size reduction during human evolution

RESEARCH GRANTS AND AWARDS

External

2025	Doctoral Dissertation Research: The role of respiratory morphology in human thermoregulation. National Science Foundation (SBE - Biological Anthropology, #2521817). S.D. Maddux , Principal Investigator; B. Tran, Co-Principal Investigator. \$19,932.
2024	Graduate Research Fellowship. National Science Foundation (EDU/DGE – Graduate Research Fellowship Program [GRFP] #2444956). S.D. Maddux , Principal Investigator; B. Tran, Graduate Fellow. \$159,000.
2024	Doctoral Dissertation Research: Nasal morphological responses to thermal and exertional conditions. National Science Foundation (SBE - Biological Anthropology, #2419511). S.D. Maddux , Principal Investigator; L.A. Ward, Co-Principal Investigator. \$26,139.

- 2023 Bridging clinical and environmental research using environmental chambers. Louisiana Clinical & Translational Sciences Center (LA CaTS – Visiting Scholars Program, #U54-GM104940). A.M. Niclou, Principal Investigator; **S.D. Maddux**, Leanne Redman, Co-Sponsors. \$5,000.
- 2022 Climatic adaptation and the human nose: An experimental investigation in living humans. National Science Foundation (SBE – Postdoctoral Research Fellowship Program, #2203808). E.O. Cho, Principal Investigator; **S.D. Maddux**, Lead Sponsor; C. Ocobock, B. Dennis, Co-Sponsors. \$138,000.
- 2022 REU Supplement: Experimental testing of thermoregulatory principles: Re-evaluating ecogeographic rules in living humans. National Science Foundation (REU - Research Experiences for Undergraduates program, #2149984). Funding for the UNTHSC Summer Opportunities in Anatomy Research (SOAR) internship program. **S.D. Maddux**, Principal Investigator; L.W. Cowgill, C. Ocobock, R. Menegaz, Co-Principal Investigators. \$28,000.
- 2021 Doctoral Dissertation Research: The interactive influence of climate and energetics on human nasal morphology. National Science Foundation (SBE - Biological Anthropology, #2050253). **S.D. Maddux**, Principal Investigator; A.P. Kelly, Co-Principal Investigator. \$24,087.
- 2020 Collaborative Research: Experimental testing of thermoregulatory principles: Re-evaluating ecogeographic rules in living humans. National Science Foundation (SBE - Biological Anthropology, #2020715). **S.D. Maddux**, Principal Investigator (**\$406,591**); L.W. Cowgill (\$45,761), C. Ocobock (\$46,643), Co-Principal Investigators. Total project: \$498,995.
- 2018 Summer Opportunities in Anatomy Research (SOAR) Program. American Association of Anatomists Innovations Program Grant. R.A. Menegaz, Principal Investigator; **S.D. Maddux**, M.N. Muchlinski, Co-Principal Investigators. \$49,990.
- 2009 Assessing the reliability of infraorbital variables in phylogenetic analyses of later *Homo*. Wenner-Gren Foundation Dissertation Fieldwork Grant (#7969). **S.D. Maddux**, Principal Investigator. \$18,353.
- 2009 Assessing the reliability of infraorbital characters in phylogenetic analyses of Pleistocene *Homo*. Leakey Foundation General Research Grant. **S.D. Maddux**, Principal Investigator. \$12,612.
- Internal**
- 2024 Exploring the role and impact of body composition differences in the thermoregulation of female and male human participants. UNTHSC Department of Physiology and Anatomy SEED Grant. E.O. Cho, Principal Investigator. **S.D. Maddux**, L.W. Cowgill, Co-Principal investigators. \$14,484.

- 2023 A Critical Evaluation of Domestication Syndrome in the Russian Silver Farm-Fox Experiments. UNTHSC Preclinical Imaging Facility Grant Program. **S.D. Maddux**, Principal Investigator. J. Willman, E. Handler, Co-Principal investigators. \$4,000.
- 2022 Nasal morphology and respiratory airflow physiology in asthma: Implications for health disparities among African American women. 2nd-year Pilot Project Grant, UNTHSC Texas Center for Health Disparities (#RI40241). **S.D. Maddux**, Principal Investigator. \$25,000.
- 2021 Nasal morphology and respiratory airflow physiology in asthma: Implications for health disparities among African American women. 1st-year Pilot Project Grant, UNTHSC Texas Center for Health Disparities (#RF00241). **S.D. Maddux**, Principal Investigator. \$73,000.
- 2013 Redesign of Human Anatomy lecture and laboratories (PAS 2201 & 2203) using enhanced educational technologies. Course Redesign Grant, Educational Technologies, University of Missouri. C.V. Ward, Principal Investigator. **S.D. Maddux**, K.A. Aldridge, C.A. Holliday, K.M. Middleton, J. Harper-Judd, Co-Principal Investigators. \$78,000.00
- 2013 Investigating parallel patterns of skeletal gracilization in canid domestication and human evolution: A test of the 'self-domestication' hypothesis. University of Missouri Research Council Grant (URC-13-086). **S.D. Maddux**, Principal Investigator. \$6,975.
- 2010 Assessing the reliability of infraorbital characters in phylogenetic analyses of Pleistocene *Homo*. University of Iowa Graduate College Summer Fellowship. **S.D. Maddux**, Principal Investigator. \$3,000.
- 2009 A quantitative assessment of infraorbital morphology in *Homo*: Testing for character independence and evolutionary significance. University of Iowa T. Anne Cleary Award for International Research. **S.D. Maddux**, Principal Investigator. \$5,000.
- 2009 Assessing infraorbital size and shape in fossil humans. University of Iowa ECGPS Research Grant. **S.D. Maddux**, Principal Investigator. \$992.
- 2008 Assessing infraorbital allometry in *Homo*. University of Iowa Stanley Graduate Award for International Research. **S.D. Maddux**, Principal Investigator. \$2,000.
- 2005 The canine fossa: Defining a modern trait and analyzing variation in the - infraorbital region in modern *Homo*. University of Iowa Department of Anthropology Research Grant, **S.D. Maddux**, Principal Investigator. \$2,165.

RESEARCH PUBLICATIONS

Journal Articles

- in review Kim, S., L.N. Butaric, **S.D. Maddux**. Sex-based variation in maxillary sinus anatomy: Implications for sinusitis susceptibility. Submitted to *Clinical Anatomy*.
- accepted Holliday, T., C. Ocobock, L.W. Cowgill, **S.D. Maddux**. Neandertal Cold Adaptation: Technological, Anatomical, and Physiological Responses to Cold Stress in one of our Closest Fossil Relatives. Submitted to *American Journal of Human Biology*.
- 2025 Bradley, L.J, K.E. Meyer, T.C. Robertson, M.S. Kerr, **S.D. Maddux**, A.J. Heck, R.R. Reeves, E.K. Handler. Differences in academic performance due to active learning techniques in an online graduate anatomy course. Submitted to *Anatomical Sciences Education*. 18(9): 972-984
- 2023 Bradley, L.J, K.E. Meyer, T.C. Robertson, M.S. Kerr, **S.D. Maddux**, A.J. Heck, R.R. Reeves, E.K. Handler. A mixed method analysis of student satisfaction with active learning techniques in an online graduate anatomy course: Consideration of demographics and previous course enrollment. *Anatomical Sciences Education*. 16(5): 907-925.
- 2023 Kelly, A.P., C. Ocobock, L.N. Butaric, **S.D. Maddux**. Metabolic demands and sexual dimorphism in human nasal morphology: A test of the respiratory-energetics hypothesis. *American Journal of Biological Anthropology*. 180(3): 415-586.
- 2022 Kim, S., L.A. Ward, L.N. Butaric, **S.D. Maddux**. Human maxillary sinus size, shape, and surface area: Implications for structural and functional hypotheses. *American Journal of Biological Anthropology*. 179:640-654.
- 2022 Butaric, L.N., C. Nicholas, K. Kravchuk, **S.D. Maddux**. Ontogenetic variation in human nasal morphology. *Anatomical Record*. 305: 1910-1937
- 2022 Kim, S., L.A. Ward, L.N. Butaric, **S.D. Maddux**. Ancestry-based variation in maxillary sinus anatomy: Implications for health disparities in sinusitis. *Anatomical Record*. 305:18-36.
- 2019 Marks, T.H., **S.D. Maddux**, L.N. Butaric, R.G. Franciscus. Climatic adaptation in human inferior nasal turbinate morphology: Evidence from Arctic and Equatorial populations. *American Journal of Physical Anthropology*. 169:498-512.
- 2018 Ward, C.V., **S.D. Maddux**, E.R. Middleton. Three-dimensional anatomy of the anthropoid bony pelvis. *American Journal of Physical Anthropology*. 166: 3-25.

- 2017 **Maddux, S.D.**, T.R. Yokley, L.N. Butaric, R.G. Franciscus. Ecogeographic variation across morphofunctional units of the human nose. *American Journal of Physical Anthropology*. 162: 103-119.
- 2017 **Maddux, S.D.**, L.N. Butaric. Zygomaticomaxillary morphology and maxillary sinus form and function: How spatial constraints influence pneumatization patterns among modern humans. *Anatomical Record*. 300: 209-225.
- 2016 **Maddux, S.D.**, T.R. Yokley, B.M. Svoma, R.G. Franciscus. Absolute humidity and the human nose: A re-analysis of climate zones and their influence on nasal form and function. *American Journal of Physical Anthropology*. 161: 309-320.
- 2016 Butaric, L.N., **S.D. Maddux**. Morphological covariation between the maxillary sinus and midfacial skeleton among sub-Saharan and circumpolar modern humans. *American Journal of Physical Anthropology*. 160: 483-497.
- 2016 Polanski, J.M., H.E. Marsh, **S.D. Maddux**. Dental size reduction in Indonesian *Homo erectus*: Implications for the PU-198 premolar and the appearance of *Homo sapiens* on Java. *Journal of Human Evolution*. 90: 49-54.
- 2015 **Maddux, S.D.**, A.N. Sporleder, C.E. Burns. Geographic variation in zygomaticomaxillary suture morphology and its use in ancestry estimation. *Journal of Forensic Sciences*. 60(4): 966-973.
- 2015 **Maddux, S.D.**, C.V. Ward, F.H. Brown, J.M. Plavcan, F.K. Manthi. A 750,000 year old hominin molar from the site of Nadung'a, West Turkana, Kenya. *Journal of Human Evolution*. 80(3): 179-183.
- 2013 Moffett, E.A., **S.D. Maddux**, C.V. Ward. Sexual dimorphism in relative sacral breadth among catarrhine primates. *American Journal of Physical Anthropology*. 152(4): 435-446.
- 2012 Wu, X., **S.D. Maddux**, L. Pan, E. Trinkaus. Nasal floor variation among eastern Eurasian Pleistocene *Homo*. *Anthropological Science*. 120(3): 217-226.
- 2010 Holton, N.E., R.G. Franciscus, M.A. Nieves, S.D. Marshall, S.B. Reimer, T.E. Southard, J.C. Keller, **S.D. Maddux**. Sutural growth restriction and modern human facial evolution: an experimental study in a pig model. *Journal of Anatomy*. 216(1): 41-61.
- 2009 **Maddux, S.D.**, R.G. Franciscus. Allometric scaling of infraorbital surface topography in *Homo*. *Journal of Human Evolution*. 56(2): 161-174.

Journal Articles (in preparation)

- in prep. Cho, E.O., L.N. Butaric, R.G. Franciscus, **S.D. Maddux**. Climate and the modern human nose: Reassessing the adaptive role of nasal projection. For submission to *American Journal of Biological Anthropology*.

Books

- in press Cowgill, L.W., **S.D. Maddux** (editors). *Neandertal Skeletal Anatomy: Form, Function and Paleobiology*. New York: Cambridge University Press.

Book Chapters

- in press **Maddux, S.D.**, R.G. Franciscus. The Facial Skeleton. In *Neandertal Skeletal Anatomy: Form, Function and Paleobiology*. Cowgill, L.W. & S.D. Maddux (editors). New York: Cambridge University Press.
- 2010 **Maddux, S.D.** Experimental insights into the evaluation of knapping skill in Pliocene hominids. In *Pushing the Envelope: Experimental Directions in the Archaeology of Stone Tools*. Grant S. McCall (editor). pp. 1-18. New York: Nova Science Publishers.

Book Reviews

- 2013 **Maddux, S.D.** Review of "Race? Debunking a Scientific Myth" by Ian Tattersall and Rob Desalle. *American Journal of Physical Anthropology*. 150(1): 166.
- 2007 Ciochon, R.L., **S.D. Maddux**. Review of "The First Boat People" by Steve Webb. *American Anthropologist*. 109: 318.

Published Abstracts (10 most recent, 68 total)

- 2025 Butaric, L.N., C.N. Nicholas, **S.D. Maddux**. Upper respiratory ontogeny and integration among human subadults. *American Journal of Biological Anthropology* 186(S79): 23
- 2025 Hoskins, M., M.A. Goodstein, C. Counts, L.A. Ward, E.O. Cho, L. Cowgill, **S.D. Maddux**. 3D scanning and precision anthropometry of human body surface area: Implications for thermoregulatory research. *American Journal of Biological Anthropology* 186(S79): 75-76
- 2025 Kelly, A.P., I. Nebeker, F. Savoldi, J. Tsoi, M. Rivera, A. Yeung, **S.D. Maddux**. Effect of climate and energetics with Southeast Asian nasal morphology. *American Journal of Biological Anthropology* 186(S79):84

- 2025 Tran, B., L.A. Ward, A. Reif, C. Boettger, L.W. Cowgill, C. Ocobock, E.O. Cho, **S.D. Maddux**. Experimentally re-evaluating respiratory contributions to total body heat loss. *American Journal of Biological Anthropology* 186(S79): 167
- 2025 Ward, L.A., **S.D. Maddux**, L.W. Cowgill, C. Ocobock, E.O. Cho. Experimentally assessing associations between nasal morphology, climate, and minute ventilation. *American Journal of Biological Anthropology* 186(S79): 175
- 2024 Tran, B., L.A. Ward, H.H.K. Patabendige, V.C. Nair, E.O. Cho, T.R. Yokley, B.H. Dennis, **S.D. Maddux**. Asymmetrical heat and moisture exchange during the nasal cycle: Investigating the influence of mucosal congestion on human nasal form and function. *American Journal of Biological Anthropology* 183(S77): 181
- Joint AAA-AABA “Anatomy in Anthropology” Student Presentation Award
- 2024 Ward, L.A., H.H.K. Patabendige, V.C. Nair, D.R. Mitchell, E.O. Cho, T.R. Yokley, B.H. Dennis, **S.D. Maddux**. Deconstructing human nasal adaptation: An iterative assessment of morphological influences on intranasal air conditioning in two and three dimensions. *American Journal of Biological Anthropology* 183(S77): 192
- AABA Outstanding Student Presentation Award
- 2024 Goodstein, M., A. Reif, L.A. Ward, E.O. Cho, C. Ocobock, L. Cowgill, **S.D. Maddux**. Quantifying human body surface area: A comparison of photogrammetry and CT scanning to estimation techniques. *American Journal of Biological Anthropology* 183(S77): 61
- 2024 Reif, A., M. Goodstein, L.A. Ward, E.O. Cho, C. Ocobock, L. Cowgill, **S.D. Maddux**. Variation in body composition in relation to evolutionary models of human thermoregulation. *American Journal of Biological Anthropology* 183(S77): 146
- 2024 Thompson, I., B. Perchalski, **S.D. Maddux**, L.A. Gonzales. Identification of ecological, locomotor, and morphological indicators of semi-terrestriality in anthropoid primates. *American Journal of Biological Anthropology* 183(S77): 178-179

Local Conference Presentations (10 most recent)

- 2022 McCullough J.D., Ward L., Cho E., **S.D. Maddux**. Investigating associations between asthma and nasal abnormalities: A computed tomography (CT) approach. American College of Osteopathic Surgeons Medical Student Section Fall Conference, Austin, TX. September 16-17.
- 2022 Loreda A., Oliver H., Ward L., Cho E.O., **S.D. Maddux**. Assessing covariation of neurocranial and nasal morphology in relation to climate. SRIP Research Appreciation Day, UNTHSC. July 14.

- 2022 Oliver H., Loreda A., Ward L., Cho E., **S.D. Maddux**. Ecogeographic variation in neurocranial anatomy: Implications for climatic adaptation in brain size and shape. SRIP Research Appreciation Day, UNTHSC. July 14.
- 2020 Das, S., S. Kim, **S.D. Maddux**. Assessing semi-automated tools for aligning cranial CT scans to the Frankfort horizontal plane in 3D morphometric research. March 27. *UNTHSC Research Appreciation Day*. Fort Worth, TX.
- 2020 Kelly, A.P., **S.D. Maddux**. The interactive influence of climatic and energetic factors on human nasal morphology. March 27. *UNTHSC Research Appreciation Day*. Fort Worth, TX.
- 2020 Thai, E., H. Amaranayaka, S. Patil, T. Yokley, B. Dennis, **S.D. Maddux**. The Influence of Ecogeographic Variation in Human Nasal Morphology on Thermal Conditioning of Inspired Air. March 27. *UNTHSC Research Appreciation Day*. Fort Worth, TX.
- 2020 Kim, S., L.N. Butaric, A. Rosales, **S.D. Maddux**. Variation in maxillary sinus anatomy: Implications of ostium positioning on health disparities in sinusitis. March 27. *UNTHSC Research Appreciation Day*. Fort Worth, TX.
- 2020 Tadlock P., A.P. Kelly, **S.D. Maddux**. Modern Day Osteometrics: Testing the Concordance of Postcranial Measurements Collected Manually vs. Digital Methods. March 27. *UNTHSC Research Appreciation Day*. Fort Worth, TX.
- 2020 Das, S., S. Kim, **S.D. Maddux**. Assessing semi-automated tools for aligning cranial CT scans to the Frankfort horizontal plane in 3D morphometric research. March 27. *UNTHSC Research Appreciation Day*. Fort Worth, TX.
- 2019 Kim, S., Butaric, L.N., A. Rosales, **S.D. Maddux**. Variation in maxillary sinus anatomy: Implications of ostium positioning on health disparities in sinusitis. Poster. March 29. *UNTHSC Research Appreciation Day*. Fort Worth, TX.
- 1st place, GSBS student poster award

RESEARCH MENTORING

Postdoctoral Fellow Advising

- 2021-2023 Elizabeth Cho, Center for Anatomical Sciences, University of North Texas Health Science Center, Fort Worth, TX.
- Project: Climatic adaptation and the human nose: An experimental investigation in living humans
 - Funding: National Science Foundation, SBE Postdoctoral Research Fellowship (NSF #2203808)

- 2021-2022 Elizabeth Cho, Center for Anatomical Sciences, University of North Texas Health Science Center, Fort Worth, TX.
- Project: Nasal morphology and respiratory airflow physiology in asthma: Implications for health disparities among African American women.
 - Funding: Texas Center for Health Disparities (#RF00241)

Ph.D. Student Advising (Major Professor)

- 2025-present Caroline Counts, Center for Anatomical Sciences, University of North Texas Health Science Center, Fort Worth, TX. Research: Role of body composition dynamics on human thermoregulation. Co-major Professor: Elizabeth Cho.

- 2022-present Baonhu Tran, Center for Anatomical Sciences, University of North Texas Health Science Center, Fort Worth, TX. Research: Expiratory heat shedding in whole-body thermoregulation.
- National Science Foundation, Graduate Research Fellow (\$159,000)
 - National Science Foundation, Doctoral Dissertation Research Grant #2419511 (\$19,932)
 - Wenner-Gren Foundation, Dissertation Fieldwork Grant #10923 (\$15,300)
 - Leakey Foundation, Research Grant #202510616 (\$14,750)

- 2021-present Lyndee Ward, Center for Anatomical Sciences, University of North Texas Health Science Center, Fort Worth, TX. Research: Nasal anatomy and upper respiratory airflow patterns.
- National Science Foundation, Doctoral Dissertation Research Grant #2419511 (\$26,139)
 - Leakey Foundation, Research Grant, #S202410528 (\$20,000)
 - National Institutes of Health, Artificial Intelligence/Machine Learning Consortium (AIM-AHEAD) & “All of Us” Research Program, Joint Training Fellowship #3OT2OD032581-01S1-552 (\$8,000)

- 2017-2023 Alexa P. Kelly, Center for Anatomical Sciences, University of North Texas HSC, Fort Worth, TX. Research: Interactive influence of climatic and metabolic pressures on human nasal morphology.
- National Science Foundation, Doctoral Dissertation Research Grant #2050253 (\$24,087)
 - Wenner-Gren Foundation, Dissertation Fieldwork Grant #10009 (\$19,980)
 - Current: Assistant Professor (tenure-track), School of Osteopathic Medicine, Campbell University, Lillington, NC

- 2017-2022 Suhhyun ‘Sarah’ Kim, Center for Anatomical Sciences, University of North Texas HSC, Fort Worth, TX. D.O.-Ph.D. student. Dissertation: “Three-dimensional variation in maxillary sinus anatomy: Implications for health disparities in sinonasal disease”.
- Cancer Prevention and Research Institute of Texas, Osteopathic Scholars in Cancer Research Fellowship (\$98,000)

- Current: Resident Physician, Anatomic & Clinical Pathology, University of Washington Medical Center, Seattle, WA.

2013-2016 Sarah Peacock, Dept. of Pathology & Anatomical Sciences, University of Missouri, Columbia, MO. Research: Ecogeographic variation in day length, melatonin levels, and bone biology. Co-Advisors: K. Aldridge & K. Middleton

- University of Missouri - Life Sciences Fellow & Gus T. Ridgel Fellow
- Current: Assistant Teaching Professor, Department of Biology, Northeastern University, Boston, MA

Master's Student Advising (Major Professor)

2024-2025 Raul Tejada, Center for Anatomical Sciences, University of North Texas Health Science Center, Fort Worth, TX. Research: Thermoregulatory physiology of the hand.

2023-2025 Caroline Counts, Center for Anatomical Sciences, University of North Texas Health Science Center, Fort Worth, TX. Research: Comparison of computed tomography (CT) and dual-energy x-ray absorptiometry (DEXA) in assessing whole-body composition dynamics. Co-major Professor: E. Cho.

2023-2024 Chloe Boettger, Center for Anatomical Sciences, University of North Texas Health Science Center, Fort Worth, TX. Research: Thermoregulatory anatomy and physiology.

2021-2022 Clay Carey, Center for Anatomical Sciences, University of North Texas Health Science Center, Fort Worth, TX. Research: Comparison of computed tomography (CT) and dual-energy x-ray absorptiometry (DEXA) in assessing appendicular body composition and surface area-to-volume ratios.

2020-2021 Lyndee (Higgs) Ward, Center for Anatomical Sciences, University of North Texas Health Science Center, Fort Worth, TX. "Assessing Ecogeographical Variation in the Nasal Passages Utilizing 3D Semilandmarks"

- Dean's Award for Scholarly Research, 2021
- Outstanding Student Award – Medical Sciences Research Track, 2021
- Interdisciplinary Research Award, UNTHSC Research Appreciation Day, 2021
- 2nd place, SARS Research Presentation Award, UNTHSC Research Appreciation Day, 2021

2020-2021 Caroline Grace, Boston University, Boston, MA. "Investigating Ecogeographic Variation in Superior and Functional Ethmoidal Breadth in Internal Nasal Dimensions" *Due to the shutdown of the BU campus during the Covid-19 pandemic, I served as the thesis advisor for this MS student who conducted all her research in my lab in Fort Worth.*

- 2019-2020 Elizabeth Thai, Center for Anatomical Sciences, University of North Texas Health Science Center, Fort Worth, TX. "Evaluating Ecogeographic Variation in Human Nasal Passages Using *In-Silico* Decongestion of the Nasal Cycle".
- 1st place, TCOM First-year Medical Student Research Presentation Award, UNTHSC Research Appreciation Day, 2021

Ph.D. Student Dissertation Committees (Research Member)

- 2022-present Indya Thompson, Center for Anatomical Sciences, University of North Texas HSC, Fort Worth, TX. 1st year Ph.D. student. Research: Upper Limb biomechanics in Miocene primates. Committee Chair: L.A. Gonzales.
- 2021-2025 Courtney Miller, Center for Anatomical Sciences, University of North Texas HSC, Fort Worth, TX. 1st year Ph.D. student. Research: Bone-muscle interaction during growth and development. Committee Chair: R.A. Menegaz.
- 2021-2024 Rauchelle Richey, Department of Physiology and Anatomy, University of North Texas HSC, Fort Worth, TX. 1st year Ph.D. student. Research: Effects of passive heat therapy on hypertension. Committee Chair: S. Romero.
- 2016-2020 Emma Wood, Dept. of Anthropology, University of Iowa, Iowa City, IA. Ph.D. Research: Evolutionary convergence in skeletal morphology in domesticated canids and modern humans. Committee Chair: R.G. Franciscus.
- 2016-2019 Tarah Marks, Dept. of Anthropology, University of Iowa, Iowa City, IA. Ph.D. Research: Ecogeographic variation in modern human nasal turbinate morphology. Committee Chair: R.G. Franciscus.
- 2016-2018 Cara Fisher, Center for Anatomical Sciences, University of North Texas Health Science Center, Fort Worth, TX. Ph.D. Research: Biomechanics of ankle joint fractures. Committee Chair: R. Reeves.
- 2012-2013 Ashley Hammond, Dept. of Pathology & Anatomical Sciences, University of Missouri, Columbia, MO. Dissertation: Novel 3D analysis of hip joint mobility and the evolution of locomotor abilities in Miocene hominoids. Committee Chair: C.V. Ward.

Master's Student Research Committees (Research Member)

- 2024-2025 Joanna Bui, Center for Anatomical Sciences, University of North Texas Health Science Center, Fort Worth, TX. Research: Thermoregulatory physiology of the hand. Committee Chair: E. Cho
- 2022-2023 Megan McCorkle, Clinical Research Management, University of North Texas Health Science Center, Fort Worth, TX. Research: Clinical Research at The STAR. Committee Chair: S. Mathews.

- 2020-2021 Sarah Aldeeb, Center for Anatomical Sciences, University of North Texas Health Science Center, Fort Worth, TX. Research: Sexual dimorphism of enamel-dentine proportions in human populations. Committee Chair: E.K. Wood.
- 2020-2021 Andrew Su, Center for Anatomical Sciences, University of North Texas Health Science Center, Fort Worth, TX. Research: A mouse model of craniofacial growth and development in *Ontogenesis Imperfecta*. Committee Chair: R.A. Menegaz.
- 2019-2020 Jeffrey Rossiter, Center for Anatomical Sciences, University of North Texas Health Science Center, Fort Worth, TX. "The Effect of Dietary Loading on Physiological Cross-Sectional Area (PCSA) in Rat Masseters". Committee Chair: R.A. Menegaz.
- 2019- 2020 Ashley Steele, Center for Anatomical Sciences, University of North Texas Health Science Center, Fort Worth, TX. "Craniofacial morphology of juvenile mice with *Ontogenesis Imperfecta*". Committee Chair: R.A. Menegaz.
- 2018-2019 Alexandra McBride, Center for Anatomical Sciences, University of North Texas Health Science Center, Fort Worth, TX. "Craniofacial Bone Mineral Density in Mice with *Osteogenesis Imperfecta* (OI)". Committee Chair: R.A. Menegaz.
- 2017-2018 Summer Ladd, Center for Anatomical Sciences, University of North Texas Health Science Center, Fort Worth, TX. "The effect of diet on craniofacial growth in an *osteogenesis imperfecta* Mouse Model". Committee Chair: R.A. Menegaz.

Ph.D. Student Dissertation Committees (University Member)

- 2019-2022 Danielle Reid, Dept. of Cell Biology, Immunology, and Microbiology, University of North Texas Health Science Center, Fort Worth, TX. Ph.D. Research: Alzheimer's disease in Mexican Americans. Committee Chair: N. Phillips.
- 2018-2022 Jessica Proulx, Dept. of Cell Biology, Immunology, and Microbiology, University of North Texas Health Science Center, Fort Worth, TX. Ph.D. Research: HIV-related dementia. Committee Chair: A. Ghorpade.

Master's Student Research Committees (University Member)

- 2018-2019 Kimberly Gonzales, University of North Texas Health Science Center, Fort Worth, TX. "Validation of HemaSpot™ Devices for the Collection and Long-Term, Room Temperature Storage of Biological Fluids from Forensic Reference". Committee Chair: J. Warren.
- 2017-2018 Talisa Silzer, Center for Medical Genetics, University of North Texas Health Science Center, Fort Worth, TX. "The intersection of type 2 diabetes and

cognitive impairment in Mexican Americans: Insights from the mitochondria". Committee Chair: N. Phillips.

- 2017-2018 Brianna Foley, University of North Texas Health Science Center, Fort Worth, TX. "Use of Mock Microbial Community for Validation of Extraction and Amplification Techniques in 16S Microbial Community Profiling". Committee Chair: M. Allen.
- 2017 Brendan Paulman, Clinical Research Management, University of North Texas Health Science Center, Fort Worth, TX. "A Pilot Study into the Impact of Remote Monitoring on the Trial Site". Committee Chair: S. Mathews.

Ph.D. Student Comprehensive Exam Committees

- 2023 Indya Thompson, Center for Anatomical Sciences, University of North Texas Health Science Center, Fort Worth, TX. Ph.D. Research: Exam Committee: R.A. Menegaz (Chair), **S.D. Maddux**, B. Perchalski, R. Patterson.
- 2021 Courtney Miller, Center for Anatomical Sciences, University of North Texas Health Science Center, Fort Worth, TX. Ph.D. Research: Exam Committee: L. Gonzales (Chair), **S.D. Maddux**, E. Handler, R. Patterson.
- 2021 Taylor Robertson, Center for Anatomical Sciences, University of North Texas Health Science Center, Fort Worth, TX. Ph.D. Research: Exam Committee: R.A. Menegaz (Chair), **S.D. Maddux**, E. Handler, R. Patterson.
- 2020 Libby Bradley, Center for Anatomical Sciences, University of North Texas Health Science Center, Fort Worth, TX. Ph.D. Research: Andragogical analysis of cooperative learning in anatomy education. Exam Committee: R.A. Menegaz (Chair), **S.D. Maddux**, S. Moudy.
- 2020 Graci Finco, Center for Anatomical Sciences, University of North Texas Health Science Center, Fort Worth, TX. Ph.D. Research: Locomotor biomechanics in trans-tibial amputees with prosthetic limbs. Exam Committee: R.A. Menegaz (Chair), **S.D. Maddux**, S. Moudy.
- 2017 Emma Wood, Dept. of Anthropology, University of Iowa, Iowa City, IA. Ph.D. Research: Dental morphology in domesticated silver foxes. Exam Committee: R.G. Franciscus (Chair), R.L. Ciochon, A. Kitchens, N.E. Holton, **S.D. Maddux**.
- 2017 Tarah Marks, Dept. of Anthropology, University of Iowa, Iowa City, IA. Ph.D. Research: Ecogeographic variation in modern human nasal turbinate morphology. Exam Committee: R.G. Franciscus (Chair), R.L. Ciochon, A. Kitchens, J.H. Buchholz, **S.D. Maddux**, L.N. Butaric.
- 2016 Cara Fisher, Center for Anatomical Sciences, University of North Texas Health Science Center, Fort Worth, TX. Ph.D. Research: Biomechanics of ankle joint fractures. Exam Committee: **S.D. Maddux (Chair)**, A. Rosales, L. Hodges, R. Berg.

- 2015 Sarah Peacock, Dept. of Pathology & Anatomical Sciences, University of Missouri, Columbia, MO. Ph.D. Research: Ecogeographic variation in day length, melatonin levels, and bone biology in modern humans. Committee Exam Committee: **S.D. Maddux (Co-Chair)**, K. Aldridge (Co-Chair), C.V. Ward, C. Holliday, K. Middleton.
- 2013 Elizabeth Moffett, Dept. of Pathology & Anatomical Sciences, University of Missouri, Columbia, MO. Research focus: Obstetric implications of sexual dimorphism in sacral dimensions among catarrhine primates. Exam Committee: C.V. Ward (Chair), **S.D. Maddux**, K. Aldridge, C. Holliday.

Ph.D. Student Research Rotations

- 2020-2021 Selina Tucker, Graduate School of Biomedical Sciences, University of North Texas HSC, Fort Worth, TX. Ph.D. Research: *In Silico* assessment of surface-area-to-volume ratios of the lower limbs using whole-body CT scans.
- 2017-2018 Alexa Pennavaria, Center for Anatomical Sciences, University of North Texas HSC, Fort Worth, TX. Ph.D. Research: Evolutionary and functional morphology of the human craniofacial complex.
- 2012-2013 Elizabeth Moffett, Dept. of Pathology & Anatomical Sciences, University of Missouri, Columbia, MO. Research focus: Obstetric implications of sexual dimorphism in sacral dimensions among catarrhine primates.
 - University of Missouri - Life Sciences Fellow.

Master's Student Research Rotations

- 2019-2020 Parker Tadlock, Master of Medical Sciences student. University of North Texas Health Science Center, Fort Worth, TX. Research focus: Respiratory-energetics hypothesis and nasal morphology in North African and Middle Eastern populations.

Medical Student Research

- 2022-present Jason McCullough, 2nd year Osteopathic Medical Student. University of North Texas Health Science Center, Fort Worth, TX. Research focus: Nasal anatomy and airflow patterns in asthmatics.
- 2021-present Amanda Warner, 2nd year Osteopathic Medical Student. University of North Texas Health Science Center, Fort Worth, TX. Research focus: 3D digital reconstruction of cranial remains.
- 2019-2020 Siddarth Das, 2nd year Osteopathic Medical Student. University of North Texas Health Science Center, Fort Worth, TX. Research focus: Digital alignment of crania in 3D space.

- 2018-2019 Patrick Prazak, 2nd year Osteopathic Medical Student. University of North Texas Health Science Center, Fort Worth, TX. Research focus: Energetic demands on human nasal form and function.
- TCOM honors research student award, Research Appreciation Day, 2019.
- 2018-2019 Jonathan Pineda, 2nd year Osteopathic Medical Student. University of North Texas Health Science Center, Fort Worth, TX. Research focus: Climatic adaptation and covariation between brain and nasal morphology.

Undergraduate Student Research

- 2023-present Michelle Hoskins, Anthropology major. University of Texas at Arlington, Arlington, TX. Research focus: 3D laser scanning protocols for accurately quantifying human body surface area.
- UNTHSC Summer Opportunities in Anatomy Research (SOAR) Intern. Mentor: **S.D. Maddux**
 - 2025 NSF Graduate Research Fellowship Program (GRFP) awardee
- 2023-present Ana Reif, Ecology, Evolution, and Environmental Biology major. Columbia University, New York, NY. Research focus: Thermoregulatory implications of variation in body composition on surface area-to-volume relationships.
- UNTHSC Summer Opportunities in Anatomy Research (SOAR) Intern. Mentor: **S.D. Maddux**
- 2023-present Miranda Goodstein, Anthropology major. Tufts University, Boston, MA. Research focus: Photogrammetry and CT scanning as methods for accurately quantifying human body surface area.
- UNTHSC Summer Opportunities in Anatomy Research (SOAR) Intern. Mentor: **S.D. Maddux**
- 2022-2023 Hannah Oliver, Anthropology major. Stony Brook University, Stony Brook, NY. Research focus: Ecogeographic variation in human brain morphology.
- UNTHSC Summer Opportunities in Anatomy Research (SOAR) Intern. Mentor: **S.D. Maddux**
- 2022-2023 Alyssa Loreda, Anthropology major. Texas State University, San Marcos, TX. Research focus: Patterns of covariation in nasal and neurocranial morphology.
- UNTHSC Summer Opportunities in Anatomy Research (SOAR) Intern. Mentor: **S.D. Maddux**
- 2021-2022 Baonhu Tran, Anthropology major. University of Texas at Arlington, Arlington, TX. Research focus: 3D modeling of the human nasal cycle.
- Finalist, Undergraduate Student Awards competition, American Association for Anatomy, Experimental Biology 2020
 - 2022 NSF Graduate Research Fellowship Program (GRFP) awardee
 - Currently: PhD student, Structural Anatomy & Rehabilitation Sciences, UNTHSC

- 2019-2020 Amber Cooper, Anthropology major. University of Arkansas, Fayetteville, AR. Research focus: Convergent nasal anatomy among equatorial populations from Africa and Melanesia.
- UNTHSC Summer Opportunities in Anatomy Research (SOAR) Intern. Mentor: **S.D. Maddux**
 - Outstanding Undergraduate Research Award. 2019 Annual meeting of the Texas Association of Biological Anthropologists, Waco, TX
 - Finalist, Undergraduate Student Awards competition, American Association for Anatomy, Experimental Biology 2020
- 2019-2020 Janessa Bushman, Biology major. Salt Lake Community College, Salt Lake, UT. Research focus: Dietary and biomechanical influences on hard palate/nasal floor anatomy.
- UNTHSC Summer Opportunities in Anatomy Research (SOAR) Intern. Co-Mentors: **S.D. Maddux** and R. Menegaz
- 2018-2019 Cecelia Schaefer, Anthropology major. University of Texas at Austin, Austin, TX. Research focus: Three-dimensional anatomy of the human ethmoid and upper nasal cavity.
- UNTHSC Summer Opportunities in Anatomy Research (SOAR) Intern. Mentor: **S.D. Maddux**
- 2012-2015 Casey Burns, Biological Sciences major. University of Missouri, Columbia, MO. Research focus: Zygomaxillary suture morphology in recent and fossil *Homo*.
- University of Missouri's 2013 Mary McCarty Outstanding Junior in Biological Sciences. Mentor: **S.D. Maddux**
 - 2nd Place in the Undergraduate Genetics/Evolution division of the University of Missouri Life Sciences Week. Project: "Zygomaxillary suture morphology in Pleistocene and Holocene *Homo*." Mentor: **S.D. Maddux**
- 2012-2015 Jin Yan, Radiological Sciences major. University of Missouri, Columbia, MO. Research focus: Skeletal morphology of wild and domesticated canids with implications for the "self-domestication hypothesis" of modern human origins.
- 2012-2014 Jamin Shih, Anthropology & Psychology major. University of Missouri, Columbia, MO. Research focus: Forensic osteology of the University of Missouri Anatomy Skeletal Collection.
- Currently: PhD student, Interdisciplinary Humanities Graduate Program (Anthropology), University of California, Merced.
- 2012-2014 Alexandria Sporleder, Biochemistry major. University of Missouri, Columbia, MO. Research focus: Forensic utility of the human zygomaxillary suture in osteological estimation of ancestry.
- Currently: Resident Physician (DO), Family medicine, Community Family Medicine Practice, Greenwood, IN.

RESEARCH LECTURES

- 2021 "Evolutionary Anatomy of the Human Upper Respiratory Tract". Sam Houston State University – College of Osteopathic Medicine, Conroe, TX. 10/13/2021
- 2018 "What does the fox say? Insights on human craniofacial evolution from domesticated canids. Texas A&M University – College of Dentistry, Dallas, TX. 7/24/2018
- 2017 "What does the fox say? Insights on human craniofacial evolution from domesticated canids. Jilin University, Changchun, China. 5/22/2017
- 2016 "What does the fox say? Insights on human craniofacial evolution from domesticated canids. Des Moines University, Des Moines, IA. 5/6/2016
- 2016 "What does the fox say? Insights on human craniofacial evolution from domesticated canids. University of North Texas Health Science Center, Fort Worth, TX. 3/10/2016
- 2013 "Behavioral selection and morphology during canid domestication and human evolution." Institute of Cytology and Genetics, Novosibirsk, Russia 7/25/2013
- 2013 "Dogs and modern humans: An example of convergent evolution?" Department of Biology, William Woods University, Fulton, MO. 3/1/2013
- 2012 "Zygomaticoalveolar crest curvature in recent and fossil *Homo*: Implications for Neandertal facial biomechanics." University of Missouri, Pathology & Anatomical Sciences Grand Rounds. 2/13/2012
- 2011 "A quantitative assessment of zygomaticoalveolar crest curvature in recent and fossil *Homo*." Department of Anthropology, Washington University, St. Louis. 11/30/2011

RESEARCH FIELDWORK

- 2013-2017 **Russia:** Domesticated Silver Fox Research Center, Institute of Cytology and Genetics, Novosibirsk.
- 2017 **United States:** University of Pennsylvania Museum of Archaeology and Anthropology, Philadelphia; American Museum of Natural History, New York.
- 2012 **United States:** Zoology (Canid) Collections, Field Museum of Natural History, Chicago.
- 2010 **Australia:** Roonka Collection, South Australia Museum, Adelaide.

France: Musee de l'Homme, Paris; Institute de Paleontologie Humaine, Paris; Musee National de Prehistoire, Les Eyzies-de-Tayac; Université Bordeaux I, Talence.

Spain: Gran Dolina (Atapuerca) Human Fossil Collection, Centro National de Investigacion Sobre la Evolución Humana, Burgos. Museo de la Evolución Humana, Burgos. Sima de los Huesos (Atapuerca) Human Fossil & Cast Collection, Universidad Complutense de Madrid, Madrid.

United States: Paleoanthropology Laboratory, Washington University, St. Louis.

2009

Austria: Natural History Museum, Vienna.

Belgium: Institut Royal des Sciences Naturelles de Belgique, Brussels.

China: Institute of Vertebrate Paleontology and Paleoanthropology, Beijing.

Czech Republic: Moravian Museum, Brno.

Ethiopia: National Museum, Addis Ababa.

France: Institute de Paleontologie Humaine, Paris.

Germany: Museum für Vor- und Frühgeschichte, Berlin; Rheinisches Landesmuseum, Bonn; Staatliches Museum für Naturkunde, Stuttgart.

Greece: Aristotle University of Thessaloniki, Thessaloniki.

Israel: Rockefeller Museum, Jerusalem; University of Tel Aviv, Tel Aviv.

Italy: Museo Fiorentino di Preistoria, Florence; Museo Nazionale Preistorico Etnografico "L.Pigorini", Rome; Università di Roma "La Sapienza," Rome; University of Sienna, Sienna; Museo dei Balzi Rossi, Ventimiglia.

Japan: National Museum of Natural and Science, Tokyo.

Romania: Institutul de Speologie "Emil Racovita", Bucharest.

Russia: Laboratory of Anthropological Reconstruction, Moscow.

South Africa: National Museum, Bloemfontein; Iziko South African Museum, Cape Town; University of Cape Town, Cape Town; East London Museum, East London; Florisbad Research Station, Florisbad; P.V.T. Fossil Laboratory, University of Witwatersrand, Johannesburg; Raymond Dart Collection, University of Witwatersrand, Johannesburg; Ditsong National Museum of Natural History (Transvaal Museum), Pretoria.

The Netherlands: Nationaal Natuurhistorisch Museum, Leiden.

United Kingdom: Natural History Museum, London.

United States: UI-Stanford Collection, University of Iowa, Iowa City;
American Museum of Natural History, New York; National Museum of Natural
History, Washington, D.C.

2007 **United States:** Human Origins & Physical Anthropology Collections, National
Museum of Natural History, Washington, D.C.

2005 **Austria:** Anthropology Cranial Collection, Natural History Museum, Vienna.
Khoi San Cranial Collection, Institute of Anthropology, Vienna.

TEACHING INTERESTS

Human Anatomy, Osteology, Human Evolution, Biological Anthropology, Forensics, Quantitative
Methods

TEACHING AWARDS

2024 Golden Apple Award for Teaching. School of Biomedical Sciences.
University of North Texas Health Science Center, Fort Worth, TX.

TEACHING EXPERIENCE

Professional School Courses (Course Director)

2017-present MEDE 7811: Musculoskeletal and Skin Systems 1 (Osteopathic medical
students). University of North Texas Health Science Center. Course
director, lecturer, and anatomy laboratory co-instructor.

2015-2016 Human Gross Anatomy (Physical and occupational therapy students).
University of Missouri. Course Director and lead instructor for all lectures and
labs in unit 3 (head, neck, thorax and abdomen) and unit 4 (pelvis and lower
limb).

2013-2016 Advanced Regional Gross Anatomy (4th year Allopathic medical students).
University of Missouri. Course Director and lead instructor for all anatomical
regions.

Professional School Courses

2019-2022 Musculoskeletal System (Allopathic medical students). TCU & UNTHSC
School of Medicine. Laboratory co-instructor.

2019-2022 Metabolism and Life Cycle (Allopathic medical students). TCU & UNTHSC
School of Medicine. Laboratory co-instructor.

2019-2022	Homeostasis (Allopathic medical students). TCU & UNTHSC School of Medicine. Laboratory co-instructor.
2019-2022	Foundations in Medicine (Allopathic medical students). TCU & UNTHSC School of Medicine. Laboratory co-instructor.
2016-present	MEDE 7811: Musculoskeletal and Skin Systems 1 (Osteopathic medical students). University of North Texas Health Science Center. Lecturer & laboratory co-instructor.
2016-present	MEDE 7812: Nervous System 1 (Osteopathic medical students). University of North Texas Health Science Center. Laboratory co-instructor.
2016-present	MEDE 7615: Cardiopulmonary System 1 (Osteopathic medical students). University of North Texas Health Science Center. Laboratory co-instructor.
2016-present	MEDE 7611: Gastrointestinal & Renal Systems 1 (Osteopathic medical students). University of North Texas Health Science Center. Laboratory co-instructor.
2016-present	MEDE 7715: Reproductive & Endocrine Systems 1 (Osteopathic medical students). University of North Texas Health Science Center. Laboratory co-instructor.
2016-present	SARS 5401: Gross Anatomy (Graduate students). University of North Texas Health Science Center. Lecturer & laboratory co-instructor.
2016-present	MPAS 5401 & 5208: Clinical Anatomy 1 & 2 (Physician assistant students). University of North Texas Health Science Center. Laboratory co-instructor.
2016-present	DPHT 7200 & 7400: Clinical Anatomy 1 & 2 (Physical therapy students). University of North Texas Health Science Center. Laboratory co-instructor.
2011-2016	Clinical-Oriented Gross Anatomy (1 st year medical students). University of Missouri. Co-instructor for all labs.

Graduate Seminar Courses

2016-present	Structural Anatomy and Rehabilitation Sciences Journal Club (PHAN 6150). University of North Texas Health Science Center. Course Director.
2016-present	Structural Anatomy and Rehabilitation Sciences Seminar (PHAN 5140). University of North Texas Health Science Center. Course Director.
2018	Human Evolution and Medicine (MEDE 7120.026). University of North Texas Health Science Center. Course Director.
2016	Evolution Bootcamp (Bio_Sci 8002). University of Missouri. Co-designer & instructor of team taught seminar.

2015-2016	Current Issues in Anatomy – Professional Development for Graduate Students (PATH_AS 8010). University of Missouri. Co-instructor of team taught seminar.
2011-2016	Foundations of Evolutionary Biology (PATH_AS 8100). University of Missouri. Co-instructor of team taught seminar.
2011-2016	Foundations of Evolutionary Morphology (PATH_AS 8150). University of Missouri. Co-instructor of team taught seminar.
2011-2016	Current Issues in Anatomy – Readings in Evolutionary Anatomy (PATH_AS 8010). University of Missouri. Co-instructor of team taught seminar.

Undergraduate Courses

2011-2016	Human Anatomy Lecture (PATH_AS 2201). University of Missouri. Course Director and co-lecturer (team taught).
2011-2016	Human Anatomy Laboratory (PATH_AS 2203). University of Missouri. Course Director and co-laboratory instructor (team taught).
2011-2016	Forensic Pathology and Death Investigation (PATH_AS 4220). University of Missouri. Co-lecturer (team taught).
2011-2016	Research and Instructional Techniques (PATH_AS 3460). University of Missouri. Course Director.
2011-2013	Honors Research in Anthropology (ANTHRO 4950H). University of Missouri. Course Director.
Summer 2011	Human Origins (ANTH 1301), University of Iowa. Course Director and sole instructor.
2008-2011	Human Biology (Bio 154) Kirkwood Community College, Cedar Rapids & Iowa City campuses. Course Director and sole instructor.
2010-2011	Anthropology of Death (ANTH 3127), University of Iowa. Graduate assistant.
2007-2008	Introduction to Prehistory (ANTH 1201), University of Iowa. Graduate assistant and sole instructor of associated laboratory sections.
2004-2011	Human Origins (ANTH 1301), University of Iowa. Graduate assistant and sole instructor for associated laboratory sections.

Guest Lectures

2020	Advanced Biomechanics (BMEN 5320), University of North Texas, Denton, "Fluid Biomechanics." Course Instructor: Rita Patterson.
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2019	Graduate Physical Anthropology (ANTH 392J), University of Texas at Austin, "Human adaptation and the Environment." Course Instructor: Rebecca Lewis.
2014-2016	Functional Morphology of the Human Skeleton (ANTHRO 4520/7520), University of Missouri, "Neandertal facial biomechanics." Course Instructor: Libby Cowgill.
2012	Human Biology and Life History (ANTHRO 3540), University of Missouri, "The origins of human anatomical sex differences." Course Instructor: Libby Cowgill.
2010	Human Origins (ANTH 1301), University of Iowa, "The Neandertals." Course Instructor: Nelson Ting.
2010	Human Origins (ANTH 1301), University of Iowa, "Introduction to paleontology." Course Instructor: Nelson Ting.
2005	Human Origins (ANTH 1301), University of Iowa, "The Neandertals." Course Instructor: Russell Ciochon.

OUTREACH INTERESTS

PK-12 science outreach, Evolution-focused public outreach, Anatomy-focused undergraduate education enrichment, Continuing medical education.

OUTREACH ACTIVITIES

2024-present	Summer Academy of Health Sciences, Anatomy workshop director. University of North Texas HSC, Fort Worth, TX
2024-present	Changemakers in Health Summer Camp, Anatomy workshop director. University of North Texas HSC, Fort Worth, TX
2024-present	Black Men in White Coats Youth Summit. Anatomy workshop co-director. University of North Texas HSC, Fort Worth, TX
2024-present	"Human Gross Anatomy Lab." Field Trip for Plano West High School anatomy class. University of North Texas HSC, Fort Worth, TX
2022-present	"Pre-anatomy workshop." UNTHSC Masters in Medical Sciences program. Workshop co-director. University of North Texas HSC, Fort Worth, TX
2019-present	"Anatomy laboratory workshop." Tarrant County College (TCC) Health Science Club, University of North Texas HSC, Fort Worth, TX

2019-present	"Pre-matriculation anatomy workshop" UNTHSC physician assistant program. Workshop co-director. University of North Texas HSC, Fort Worth, TX
2017-present	"Pre-matriculation anatomy workshop" Texas College of Osteopathic Medicine and UNTHSC physical therapy programs. Workshop co-director. University of North Texas HSC, Fort Worth, TX
2017-present	Joint Admission Medical Program (JAMP). Anatomy lecturer and lab instructor. University of North Texas HSC, Fort Worth, TX
2018-2020	"College and Career Day." Outreach speaker. Grapevine Elementary School, Grapevine, TX
2016-2019	Texas Academy of Biomedical Sciences (TABS). Preceptorship mentor. Fort Worth Independent School District & University of North Texas HSC, Fort Worth, TX
2017	Texas Academy of Biomedical Sciences (TABS). Summer Bridge Program. Fort Worth Independent School District & University of North Texas HSC, Fort Worth, TX
2017	Junior Medical School, Anatomy laboratory workshop. University of North Texas HSC, Fort Worth, TX
2013-2016	"Dinosaurs and Cavemen." Community outreach program on evolution. Rock Bridge High School, Columbia, MO
2013-2016	"Human Gross Anatomy Lab." Field Trip for Columbia Career Center - nursing program. University of Missouri, Columbia, MO
2013-2016	"Human Gross Anatomy Lab." Field Trip for Marshall High School anatomy and physiology class. University of Missouri, Columbia, MO
2013-2016	"Human Functional Morphology Lab." Gross anatomy laboratory session for University of Missouri Human Functional Morphology course. University of Missouri, Columbia, MO
2012-2016	"Human Gross Anatomy Lab." Field Trip for Moberly High School anatomy class. University of Missouri, Columbia, MO
2012-2016	"Human Neuroanatomy Lab." Anatomy laboratory session for William Woods University anatomy course. University of Missouri, Columbia, MO
2012-2016	"Human Gross Anatomy Lab." Mini Medical School, High School outreach program. School of Medicine, University of Missouri, Columbia, MO
2012-2015	"Clinical Cadaver Workshop." Professional Outreach to Physical Therapists in Central Missouri. School of Health Professions, University of Missouri, Columbia, MO

2012-2015	"Human Gross Anatomy Lab." Field Trip for Brookfield High School anatomy class. University of Missouri, Columbia, MO
2012-2015	"Human Gross Anatomy Lab." Field Trip for Ashland High School anatomy class. University of Missouri, Columbia, MO
2012-2015	"Human Gross Anatomy Lab." Field Trip for Paris High School anatomy class. University of Missouri, Columbia, MO
2012-2015	"Human Gross Anatomy Lab." Field Trip for Cooper County High School anatomy class. University of Missouri, Columbia, MO
2012-2015	"Human Gross Anatomy Lab." Field Trip for Boonslick High School Technical Education Center. University of Missouri, Columbia, MO
2012-2015	"Human Gross Anatomy Lab." Field Trip for the University of Missouri Pre-Medical Student Society. University of Missouri, Columbia, MO
2012-2015	"Human Gross Anatomy Lab." Mini Medical School, High School outreach program. School of Medicine, University of Missouri, Columbia, MO
2011-2015	"Introduction to Human Gross Anatomy." Outreach seminar for State Fair Community College Radiology Program. University of Missouri, Columbia, MO

SERVICE

Professional Committees

2020-present	Faculty, National Board of Osteopathic Medical Examiners
2017-present	Chair, Conference Program Committee, Texas Association of Biological Anthropologists.
2017-present	Chair, Student Awards Committee, Texas Association of Biological Anthropologists.
2011-present	AAPA Student Presentation Awards Committee, American Association of Physical Anthropologists.
2011-present	Pollitzer Student Travel Award Committee, American Association of Physical Anthropologists.
2016-2017	Conference Program Committee, American Association of Physical Anthropologists.

Professional Workshops

2025 Instructor, High Impact Practices (HIPs) in Teaching Workshop.
Anthropologists Outside of Anthropology Departments, Contingent and
Teaching-Focused Faculty (AACT) Task Force. American Association of
Biological Anthropologists. Baltimore, MD. 3/13/2025

Grant Reviewer/Panelist

2024 National Science Foundation, Panelist, Biological Anthropology Program

2023 National Science Foundation, Panelist, Biological Anthropology Program

2022 The Leakey Foundation, Ad hoc Reviewer

2021 National Science Foundation, Panelist, Graduate Research Fellowship
Program (GFRP).

2020 National Science Foundation, Panelist, Graduate Research Fellowship
Program (GFRP).

2019 National Science Foundation, Panelist, Graduate Research Fellowship
Program (GFRP).

2013 The Leakey Foundation, Ad hoc Reviewer

Manuscript Reviewer

2022-present American Journal of Biological Anthropology

2022-present International Journal of Osteoarchaeology

2020-present Proceeding of the Royal Society B: Biological Sciences

2019-present Journal of Experimental Biology

2017-present Bulletins et Mémoires de la Société d'Anthropologie de Paris

2016-present PLoSOne

2016-present The Anatomical Record

2016-present Anthropological Science

2012-present Journal of Human Evolution

2014-2021 American Journal of Physical Anthropology

Promotion & Tenure Reviewer (External)

2023-2024	Assistant-to-Associate Professor promotion & tenure case, Department of Life Sciences, College of Science, Texas A&M University at Corpus Christi, Corpus Christi, TX.
2022-2023	Assistant-to-Associate Professor promotion & tenure case, Department of Medical Education, Paul L. Foster School of Medicine, Texas Tech University Health Science Center, El Paso, TX.
2021-2022	Instructor-to-Assistant Professor promotion case, Department of Medical Education, Paul L. Foster School of Medicine, Texas Tech University Health Science Center, El Paso, TX.

University Service

2025-present	Research Strategy Council, Division of Research and Innovation, University of North Texas HSC, Fort Worth, TX
2025-present	Student Conduct Committee, Division of Student Affairs, University of North Texas HSC, Fort Worth, TX
2023-present	Faculty Judge, Research Appreciation Day (RAD), University of North Texas HSC, Fort Worth, TX
2022-present	Faculty Mentor, Human Anatomy Society, University of North Texas HSC, Fort Worth, TX
2023-2024	Graduate Education Task Force, Office of the Provost, University of North Texas HSC, Fort Worth, TX
2019-2024	Academic Council, Office of the President, University of North Texas HSC, Fort Worth, TX
2021-2024	Chair, Early Career Development Council (ECDC), University of North Texas HSC, Fort Worth, TX
2019-2021	GSBS Representative, Early Career Development Council (ECDC), University of North Texas HSC, Fort Worth, TX
2019-2020	ECDC Writing Accountability Group (WAG) leader, University of North Texas HSC, Fort Worth, TX

College Service

2024	Anatomy Laboratory Tour, School of Biomedical Sciences Preview Day (Feb. 15), University of North Texas HSC, Fort Worth, TX
2023-present	Communications Advisory Group, School of Biomedical Sciences, University of North Texas HSC, Fort Worth, TX

2017-present	<p>Faculty Advisor, Master of Science in Medical Sciences Program, University of North Texas HSC, Fort Worth, TX</p> <ul style="list-style-type: none"> • 2025-2026: 10 student advisees • 2024-2025: 10 student advisees • 2023-2024: 10 student advisees • 2022-2023: 10 student advisees • 2021-2022: 25 student advisees • 2020-2021: 29 student advisees • 2019-2020: 30 student advisees • 2018-2019: 36 student advisees • 2017-2018: 34 student advisees
2022-2023	Yorio Scholarship Committee, School of Biomedical Sciences, University of North Texas HSC, Fort Worth, TX
2021	Admissions Committee, 2 nd -year research track, Master of Science in Medical Sciences Program, University of North Texas HSC, Fort Worth, TX
2017-2023	Admissions Committee, Master of Science in Medical Sciences Program, University of North Texas HSC, Fort Worth, TX
2018-2019	GSBS Employer Survey Committee (ad hoc), Graduate School of Biomedical Sciences, University of North Texas HSC, Fort Worth, TX
2014-2015	Education Committee, Evolutionary Studies Program, University of Missouri, Columbia, MO
2014-2015	Student Awards Judge, Undergraduate Research Forum. University of Missouri, Columbia, MO
2013-2015	Student Awards Judge, Life Sciences Research Day. University of Missouri, Columbia, MO
2013-2014	Faculty Mentor, Life Sciences Research Day. University of Missouri, Columbia, MO
2013-2014	Faculty Mentor, Undergraduate Research Forum. University of Missouri, Columbia, MO
2012-2013	Faculty Mentor, Health Sciences Research Day. University of Missouri, Columbia, MO
2010	Research Grant Reviewer, Executive Council of Graduate and Professional Students, University of Iowa, Iowa City, IA
2008	Graduate Mentor, Honors Networking Dinner, University of Iowa Honors Program, University of Iowa, Iowa City, IA

Departmental Service

2024-present	Departmental Steering Committee, Department of Physiology & Anatomy, University of North Texas HSC, Fort Worth, TX
2023-present	Junior Faculty Mentorship Committee (Kate Lesciotto), Department of Physiology & Anatomy, University of North Texas HSC, Fort Worth, TX
2021-present	Strategic Planning Group for Research, Department of Physiology and Anatomy, University of North Texas HSC, Fort Worth, TX
2021-present	Course Review Committee, Department of Physiology and Anatomy, University of North Texas HSC, Fort Worth, TX
2018-present	Faculty Advisor, Summer Opportunities in Anatomy Research (SOAR), Center for Anatomical Sciences, University of North Texas HSC, Fort Worth, TX
2018-present	Admissions Committee, Summer Opportunities in Anatomy Research (SOAR), Center for Anatomical Sciences, University of North Texas HSC, Fort Worth, TX
2018-present	Student Travel Awards Committee, Center for Anatomical Sciences, University of North Texas HSC, Fort Worth, TX
2016-present	Anatomy Education Committee, Center for Anatomical Sciences, University of North Texas HSC, Fort Worth, TX
2016-present	Webmaster, Center for Anatomical Sciences, University of North Texas HSC, Fort Worth, TX
2023	Tenure-track transfer review committee (ad hoc), Department of Physiology and Anatomy, University of North Texas HSC, Fort Worth, TX
2022-2023	Chair, Anatomy Faculty Search Committee (hire: Elizabeth Cho), Center for Anatomical Sciences, University of North Texas HSC, Fort Worth, TX
2019-2020	Chair, Anatomy/TCOM Faculty Search Committee (cancelled due to Covid-19), Center for Anatomical Sciences, University of North Texas HSC, Fort Worth, TX
2019-2020	Chair, Anatomy Faculty Search Committee (hire: Lauren Gonzales), Center for Anatomical Sciences, University of North Texas HSC, Fort Worth, TX
2018-2019	Chair, Anatomy Faculty Search Committee (hire: Emma Handler), Center for Anatomical Sciences, University of North Texas HSC, Fort Worth, TX
2017-2018	Chair, Anatomy Education Committee, Center for Anatomical Sciences, University of North Texas HSC, Fort Worth, TX

2016-2017	Anatomy Faculty Search Committee (hire: Rachel Menegaz), Center for Anatomical Sciences, University of North Texas HSC, Fort Worth, TX
2007-2008	President, Anthropology Graduate Student Association, Department of Anthropology, University of Iowa, Iowa City, IA

PROFESSIONAL DEVELOPMENT

2022	"Leading Work Teams" Training. University of North Texas System, Office of Culture, Organizational Development, and Engagement. May 17, 2022.
2020-2021	Steps Toward Academic Research (STAR) Leadership Program (NIH grant writing training & pilot project support). Texas Center for Health Disparities, University of North Texas HSC, Fort Worth, TX
2020-2021	Department of Physiology and Anatomy Leadership Workshop. Professional Development Institute, University of North Texas, Denton, TX.
2020	3D Morphometrics and Image Analysis Workshop (1-week intensive short course). University of Washington Friday Harbor Marine Laboratories, San Juan Island, WA
2020	Online Learning Workshop, Center for Innovative Learning & Graduate School of Biomedical Sciences, University of North Texas HSC, Fort Worth, TX
2018	AAAS-DoSER Science Communication and Engagement with Religious Publics Workshop. American Association for the Advancement of Science - Dialogue Science Ethics and Religion Program, Austin, TX
2016-2017	Academy of Medical Science Educators (AMSE). Texas College of Osteopathic Medicine, University of North Texas HSC, Fort Worth, TX
2016-2017	INSPIRE leadership program, Office of People Development, University of North Texas HSC, Fort Worth, TX

SOCIETIES

2024-present	Human Biology Association
2016-present	European Society for the Study of Human Evolution
2016-present	Texas Association of Biological Anthropologists
2014-present	American Association of Anatomists
2008-present	Paleoanthropology Society

2005-present American Association of Physical Anthropologists