SCOTT D. MADDUX, PH.D.

CURRICULUM VITAE

Center for Anatomical Sciences Univ. of North Texas Health Science Center 3500 Camp Bowie Boulevard Fort Worth, TX 76107 817-735-2075 (office) 817-735-2126 (fax) scott.maddux@unthsc.edu www.unthsc.edu/anatomicalsciences

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

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 Adjunct Assistant Professor, Dept. of Anthropology, Univ. of Missouri
2008-2011	Instructor, Math & Science Department, Kirkwood Community College

PROFESSIONAL APPOINTMENTS

 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 	2017-2020	President, Texas Association of Biological Anthropologists, Austin, TX
Sciences, University of Missouri2007-2009Cadaver Preparation Assistant. Deeded Body Program, Department of Anatomy and Cell Biology, University of Iowa	2012-2016	Secretary-Treasurer, Missouri State Anatomical Board, Columbia, MO
Anatomy and Cell Biology, University of Iowa	2012-2016	
2003 Collections Assistant. Brazos Valley Museum of Natural History. Bryan, TX	2007-2009	
	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:

2019-present	Three-dimensional modeling of upper respiratory tract airflow patterns using 3D imaging and computation fluid dynamics (CFD) analysis.
2016-present	Ecogeographic variation in human nasal and maxillary sinus morphology
2013-present	The domesticated silver fox as an animal model for investigating craniofacial evolution (with the Institute of Cytology and Genetics, Novosibirsk, Russia)
2009-present	Allometric implications of facial and dental size reduction during human evolution

RESEARCH GRANTS AND AWARDS

External

in review	"Turbulent childhoods: The ontogeny of nasal morphology and airflow- patterns in humans from climatically diverse environments". National Science Foundation (SBE - Biological Anthropology). C. Nicholas, Principal Investigator; S.D. Maddux, L.N. Butaric, Co-Principal Investigators. \$476,575.00 <i>submitted July 21, 2022</i> .
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. \$138,000.00.
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. \$28,000.00
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. \$24,087.00.

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: \$498,995.00
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. \$49,990.00
2009	"Assessing the reliability of infraorbital variables in phylogenetic analyses of later <i>Homo</i> ." Wenner-Gren Foundation Dissertation Fieldwork Grant. S.D. Maddux , Principal Investigator. \$18,353.00
2009	"Assessing the reliability of infraorbital characters in phylogenetic analyses of Pleistocene <i>Homo</i> ." Leakey Foundation General Research Grant. S.D. Maddux , Principal Investigator. \$12,612.70
Internal	
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. S.D. Maddux , Principal Investigator. \$25,000.00
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. S.D. Maddux , Principal Investigator. \$73,000.00
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. S.D. Maddux , Principal Investigator. \$6,975.00
2010	"Assessing the reliability of infraorbital characters in phylogenetic analyses of Pleistocene <i>Homo</i> ." University of Iowa Graduate College Summer Fellowship. S.D. Maddux , Principal Investigator. \$3,000.00
2009	"A quantitative assessment of infraorbital morphology in <i>Homo</i> : Testing for character independence and evolutionary significance." University of Iowa T. Anne Cleary Award for International Research. S.D. Maddux , Principal Investigator. \$5,000.00
2009	"Assessing infraorbital size and shape in fossil humans." University of Iowa ECGPS Research Grant. S.D. Maddux , Principal Investigator. \$992.00

- 2008 "Assessing infraorbital allometry in *Homo.*" University of Iowa Stanley Graduate Award for International Research. **S.D. Maddux**, Principal Investigator. \$2,000.00
- 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. \$2,165.00

RESEARCH PUBLICATIONS

Journal Articles

accepted	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." <i>American Journal of Biological Anthropology</i>
2022	Butaric, L.N., C. Nicholas, K. Kravchuk, S.D. Maddux . "Ontogenetic variation in human nasal morphology." <i>Anatomical Record.</i> 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." <i>Anatomical Record</i> . 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." <i>American Journal of Physical Anthropology</i> . 169:498-512.
2018	Ward, C.V., S.D. Maddux, E.R. Middleton. "Three-dimensional anatomy of the anthropoid bony pelvis." <i>American Journal of Physical Anthropology.</i> 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." <i>American Journal of Physical Anthropology.</i> 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." <i>Anatomical Record</i> . 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." <i>American Journal of Physical Anthropology.</i> 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." <i>American Journal of Physical Anthropology.</i> 160: 483-497.

2016	Polanski, J.M., H.E. Marsh, S.D. Maddux . "Dental size reduction in Indonesian <i>Homo erectus</i> : Implications for the PU-198 premolar and the appearance of <i>Homo sapiens</i> on Java." <i>Journal of Human Evolution</i> . 90: 49- 54.
2015	Maddux, S.D. , A.N. Sporleder, C.E. Burns. "Geographic variation in zygomaxillary suture morphology and its use in ancestry estimation." <i>Journal of Forensic Sciences</i> . 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." <i>Journal of Human Evolution</i> . 80(3): 179-183.
2013	Moffett, E.A., S.D. Maddux , C.V. Ward. "Sexual dimorphism in relative sacral breadth among catarrhine primates." <i>American Journal of Physical Anthropology.</i> 152(4): 435-446.
2012	Wu, X., S.D. Maddux, L. Pan, E. Trinkaus. "Nasal floor variation among eastern Eurasian Pleistocene <i>Homo.</i> " <i>Anthropological Science</i> . 120(3): 217-226.
2010	Holton, N.E., R.G. Franciscus, M.A. Nieves, S.D. Marshal, 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." <i>Journal of Anatomy</i> . 216(1): 41-61.
2009	Maddux, S.D. , R.G. Franciscus. "Allometric scaling of infraorbital surface topography in <i>Homo." Journal of Human Evolution</i> . 56(2): 161-174.

Journal Articles (in preparation)

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

in prep. Kelly, A.P., C. Ocobock, **S.D. Maddux**. Being Nose-y: The influences of climate and energetics on human nasal anatomy. For submission to *American Journal of Biological Anthropology*.

Books

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

Book Chapters

- in prep. **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. <i>American Journal of Physical Anthropology</i> . 150(1): 166.
2007	Ciochon, R.L., S.D. Maddux . Review of "The First Boat People" by Steve Webb. <i>American Anthropologist</i> . 109: 318.

Published Abstracts (15 most recent, 50 total)

2022	 Kelly, A.P., S.D. Maddux. Nasal morphology and energetic demands: A test of the respiratory energetics hypothesis. <i>Clinical Anatomy</i> 35(6): 46 AACA Sandy C. Marks Jr. Student Poster Presentation Award
2022	Cho, E.O., L.A. Ward, H.H.K. Patabendge, B.H. Dennis, S.D. Maddux . Nasal Morphology and Respiratory Airflow Physiology: Implications for Health Disparities in Asthma. <i>Clinical Anatomy</i> 35(6): 61
2022	Warner, A.A., A.P. Kelly, S.D. Maddux . Virtual Reconstruction of 3D Skeletal Anatomy: A Comparison of Two Methodologies. <i>Clinical Anatomy</i> 35(6): 71
2022	Cho, E.O., L.A. Ward, H.H.K. Patabendge, B.H. Dennis, S.D. Maddux . Variation in Nasal Passage Morphology and Respiratory Airflow Physiology: Implications for Health Disparities Between Asthmatics and Non-Asthmatics. <i>Abstracts of the 2022 Texas Center for Health Disparities Conference</i> (https://tchd2022.dryfta.com/abstract-archive)
2022	 Tran, B., L.A. Ward, E. Thai, S.D. Maddux. An <i>in silico</i> method for modeling the nasal cycle in 3D: Implications for assessing human nasal form and function. <i>The Federation of American Societies for Experimental Biology Journal</i> 36(S1):636.6 Finalist, American Association for Anatomy Undergraduate Student Awards competition at Experimental Biology 2022
2022	Cowgill, L.W., S.D. Maddux , C. Ocobock. Revisiting the thermoregulatory imperative in living humans. <i>American Journal of Biological Anthropology</i> 177(S73):30

2022	Kim, S., L.N. Butaric, S.D. Maddux . Allometric scaling of maxillary sinus volume in modern humans. <i>American Journal of Biological Anthropology</i> 177(S73):97
2022	Tran, B., L.A. Ward, E.Thai, S.D. Maddux . An <i>in silico</i> method for modeling the nasal cycle in 3D: Implications for assessing human nasal form and function. <i>American Journal of Biological Anthropology</i> 177(S73):184
2021	 Kelly, A.P., S.D. Maddux. Energetic Demands and Sexual Dimorphism in Inuit Nasal Morphology. <i>American Journal of Physical Anthropology</i>. 174 (S71): 53 Joint AAA-AAPA "Anatomy in Anthropology" Best Podium Presentation Award
2020	 Kelly, A.P., S.D. Maddux. The interactive influence of climatic and energetic factors on human nasal morphology. <i>The Federation of American Societies for Experimental Biology Journal</i> 34(S1):677.9 Finalist, American Association for Anatomy Graduate Student Awards competition at Experimental Biology 2020
2020	 Cooper, A., S.D. Maddux Human adaptation to tropic environments: a comparison of West African and Melanesian nasal morphology. <i>Federation of American Societies for Experimental Biology (FASEB) Journal</i> 34(S1): 860.5. Finalist, American Association for Anatomy Undergraduate Student Awards competition at Experimental Biology 2020
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. <i>The Federation of American Societies for Experimental Biology Journal</i> 34(S1):1033.1
2020	Kim, S., Butaric, L.N., A. Rosales, S.D. Maddux . Variation in maxillary sinus anatomy: Implications of ostium positioning on health disparities in sinusitis. <i>The Federation of American Societies for Experimental Biology Journal</i> 34(S1):860.4
2020	Wood, E.K., S.D. Maddux, T.E. Southard, A.V. Kharlamova, L.N. Trut, R.G. Franciscus. The effect of behavioral selection on the dentition of Russian silver foxes and its implications for human dental evolution. <i>The Federation of American Societies for Experimental Biology Journal</i> 34(S1):224.4.
2020	Bushman, J., S.D. Maddux , R.A. Menegaz. The effects of diet on hard palate morphology in humans. <i>Federation of American Societies for Experimental Biology (FASEB) Journal</i> 34(S1) 861.1.
2020	Kelly, A.P., C. Ocobock, S.D. Maddux . Being Nose-y: Dissecting out the influences of climate and energetics on human nasal anatomy. <i>American Journal of Physical Anthropology</i> 170(S69):139

2020	Yokley, T.R., A.P. Kelly, S.D. Maddux . Convergent adaptation to climate extremes in bear and human nasal anatomy. <i>American Journal of Physical Anthropology</i> 170(S69):315
2019	 Wood, E.K., S.D. Maddux, T.E. Southard, A.V. Kharlamova, L.N. Trut, R.G. Franciscus. The effect of behavioral selection on the dentition of Russian silver foxes and its implications for human dental evolution. <i>The Federation of American Societies for Experimental Biology Journal</i> 33(S1):452.19. Finalist, American Association for Anatomy Graduate Student Awards competition at Experimental Biology 2019
2019	Kelly, A.P., S.D. Maddux . The interaction of climatic and energetic factors on human nasal morphology. <i>American Journal of Physical Anthropology</i> . 168(S69):122

Local Conference Presentations (10 most recent)

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. <i>UNTHSC Research Appreciation Day.</i> Fort Worth, TX.
2020	Kelly, A.P., S.D. Maddux . The interactive influence of climatic and energetic factors on human nasal morphology. March 27. <i>UNTHSC Research Appreciation Day.</i> 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. <i>UNTHSC Research Appreciation Day.</i> 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. <i>UNTHSC Research Appreciation Day.</i> 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. <i>UNTHSC Research Appreciation Day.</i> 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. <i>UNTHSC Research Appreciation Day.</i> 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

2019	Pineda, J., S.D. Maddux. Anatomical adaptation to climate: Patterns of
	covariation between brain and nasal morphology. Poster. March 29.
	UNTHSC Research Appreciation Day. Fort Worth, TX.

- 2019 Prazak, P., A.P., Kelly, **S.D. Maddux**. Evaluating energetic demands on the human nose within a regional sample. Poster. March 29. *UNTHSC Research Appreciation Day.* Fort Worth, TX.
 - 1st place, TCOM honors student poster award
- 2019 Kelly, A.P., **S.D. Maddux**. The interaction of climatic and energetic factors on human nasal morphology. Anthropology Oral session. March 1. *Texas Academy of Sciences*. Brownswood, TX.

RESEARCH MENTORING

Postdoctoral Fellow Advising

2022-present	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

Ph.D. Student Advising (Major Professor)

- 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 Fellowship Program Awardee (\$138,000)
- 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.

- 2017-present 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)

2017-2022 Suhhyun 'Sarah' Kim, Center for Anatomical Sciences, University of North Texas HSC, Fort Worth, TX. D.O.-Ph.D. student. Dissertation: "Threedimensional variation in maxillary sinus anatomy: Implications for health disparities in sinonasal disease".

- Osteopathic Scholars in Cancer Research Fellow, Cancer Prevention and Research Institute of Texas (\$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)

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" <i>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.</i>

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-present 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.
- 2021-present 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.
- 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.
 - University of Missouri Life Sciences Fellow
 - Funded by the National Science Foundation, Leakey Foundation and Wenner-Gren Foundation.

Master's Student Research Committees (Research Member)

2022-present 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-present 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-present 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 HemaSpotTM 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

- 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: Respiratoryenergetics 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

2022-present	 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-present	 Alyssa Loredo, 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. UNTHSC Summer Opportunities in Anatomy Research (SOAR) Intern. Mentor: S.D. Maddux Finalist, Undergraduate Student Awards competition, American Association for Anatomy, Experimental Biology 2020 2022 NSF Graduate Research Fellowship Program (GRFP) awardee
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 <i>Homo</i>. 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, Biochemstry 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 <i>Homo</i> : 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 GRANTS AND AWARDS

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

TEACHING RESEARCH PRESENTATIONS

2015 Maddux S.D., C.V. Ward, K.M. Middleton, K. Aldridge, C. Holliday, M. Jorgensen, J. Harper-Judd. New Educational Approaches in the MU Human Anatomy Laboratory. University of Missouri School of Medicine Education Day, Columbia, Missouri.
 2014 Maddux S.D., C.V. Ward, K.M. Middleton, K. Aldridge, C. Holliday, J. Harper-Judd, M. Jorgensen, L.N. Butaric, S. Wetzel. The role of the gift of body donors as medical educators. University of Missouri School of Medicine Education Day, Columbia, Missouri.
 2014 Harper-Judd, J., C.V. Ward, K. Aldridge, C.M. Holliday, S.D. Maddux, K. Middleton, M. Jorgensen, L.N. Butaric. Undergraduate human anatomy course redesign. University of Missouri School of Medicine Education Day, Columbia, Missouri.

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-present Musculoskeletal System (Allopathic medical students). TCU & UNTHSC School of Medicine. Laboratory co-instructor.
- 2019-present Metabolism and Life Cycle (Allopathic medical students). TCU & UNTHSC School of Medicine. Laboratory co-instructor.
- 2019-present Homeostasis (Allopathic medical students). TCU & UNTHSC School of Medicine. Laboratory co-instructor.
- 2019-present 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 (1st year medical students). University of Missouri. Co-instructor for all labs.

Graduate Seminar Courses

Structural Anatomy and Rehabilitation Sciences Journal Club (PHAN 6150). 2016-present 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

Guest Lectures

Advanced Biomechanics (BMEN 5320), University of North Texas, Denton, "Fluid Biomechanics." Course Instructor: Rita Patterson.
Graduate Physical Anthropology (ANTH 392J), University of Texas at Austin, "Human adaptation and the Environment." Course Instructor: Rebecca Lewis.
Functional Morphology of the Human Skeleton (ANTHRO 4520/7520), University of Missouri, "Neandertal facial biomechanics." Course Instructor: Libby Cowgill.

instructor for associated laboratory sections.

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

Tarrant County College (TCC) Health Science Club, Anatomy laboratory workshop. University of North Texas HSC, Fort Worth, TX
"Pre-matriculation anatomy workshop" UNTHSC physician assistant program. Workshop co-director. University of North Texas HSC, Fort Worth, TX
"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
TCU nurse anesthetist program, Anatomy laboratory workshop. University of North Texas HSC, Fort Worth, TX
Joint Admission Medical Program (JAMP). Anatomy lecturer and lab instructor. University of North Texas HSC, Fort Worth, TX
"College and Career Day." Outreach speaker. Grapevine Elementary School, Grapevine, TX
Texas Academy of Biomedical Sciences (TABS). Preceptorship mentor. Fort Worth Independent School District & University of North Texas HSC, Fort Worth, TX
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.

Grant Reviewer/Panelist

2019-present	National Science Foundation (Reviewer/Panelist)
2013-present	The Leakey Foundation (Reviewer)

Manuscript Reviewer

2022-present	American Journal of Biological Anthropology
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)

2021-2022 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

2022-present	Faculty mentor, Human Anatomy Society, University of North Texas HSC, Fort Worth, TX
2019-present	Academic Council, Office of the President, University of North Texas HSC, Fort Worth, TX
2021-present	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

2022-present	Yorio Scholarship Committee, School of Biomedical Sciences, University of
	North Texas HSC, Fort Worth, TX

- 2021-present Admissions Committee, 2nd-year research track, Master of Science in Medical Sciences Program, University of North Texas HSC, Fort Worth, TX
- 2017-present Admissions Committee, Master of Science in Medical Sciences Program, University of North Texas HSC, Fort Worth, TX
- 2017-present Faculty Advisor, Master of Science in Medical Sciences Program, University of North Texas HSC, Fort Worth, TX
 - 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
- 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

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

- 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 Wood), 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

- 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