

Andrew T. Ozga

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Education:

2015 Ph.D. Anthropology, Health and Human Biology Program: University of Oklahoma, Norman, OK
Doctoral Dissertation: Viral Metagenomics and Anthropology in the Americas
Chair: Dr. Cecil M. Lewis, Jr.

2009 M.A. Anthropology: Ball State University, Muncie, IN
Master's Thesis: Diffuse Idiopathic Skeletal Hyperostosis in a Late Nineteenth Early Twentieth Century Almshouse Cemetery
Chair: Dr. Evelyn J. Bowers

2007 B.A. Anthropology: Marquette University, Milwaukee, WI
Senior Thesis: Diffuse Idiopathic Skeletal Hyperostosis in an Almshouse Cemetery

Employment Experience:

Nova Southeastern University

2024-Current Associate Professor of Biological Sciences
2019-2024 Assistant Professor of Biological Sciences

Arizona State University

2017-2019 Postdoctoral Research Fellow in the Center for Evolution and Medicine,
Dr. Anne Stone, Dr. Arvind Varsani

2015-2017 Postdoctoral Research Associate at the Institute of Human Origins, Dr. Anne Stone

University of Oklahoma

2013-2015 LMAMR Research Scientist, Dr. Cecil M. Lewis, Jr., Dr. Christina Warinner

Academic Appointments (NSU):

2025-Present NSU Biology Graduate Admissions Committee Member
2023-Present Sigma Xi President (Local NSU Chapter)
2021-Present NSU Faculty Advisory Committee Member

Academic Appointments (outside NSU):

2025-Present Sigma Xi Committee on Qualifications and Membership (National Chapter)
2025-Present AAAG (American Association of Anthropological Genetics) Executive Committee Member
2020-Present *Microorganisms* Reviewer Board Member

Funding/R&D Leadership:

2025 NSU President's Research Grant "Elasmobranchii oral microbiome diversity within Southeast Florida: Implications of shark zoonotic and antibiotic resistant pathogens associated with human attack events" (\$8,000)
2020-2023 Co-Investigator on "CHOMPER: Calculus and Hominid Oral Metagenomes for Pathogen Evolution Research" NSF BCS-2045308 (\$422,196)
2020-2023 Co-Investigator on NSU President's Fund Research and Development Grant "Comprehensive assessment of environmental associations and the salivary microbiome" (\$15,000)
2020-2023 Principal Investigator on NSU President's Fund Research and Development Grant "Oral microbial ecologies of South Floridians: Impact of health and environment" (\$15,000)
2020-2021 Co-Principal Investigator on "eRNA analysis of SARS-CoV-2 prevalence and variants in south Florida wastewater" Broward County, FL. (\$182,000)
2020 XSEDE Computing Allocation (NSF): "Introduction to Bioinformatics Fall 2020: Full Genome, Transcriptome, Metabolome Analysis" (\$4,000)

Advising experience (NSU):

Masters Committee member

2025-Current Paisley Samuel (PhD in Marine Sciences): Title An eDNA Assessment of Microbial & Eukaryotic Community Structure and Function Across CyanoHAB Conditions in Lake Okeechobee, Florida (Projected 2029)

Masters Committee member

2026-Current Claire Fusiek (Masters of Science in Marine Sciences): Title TBD (Projected 2028)
2026-Current Jonas Guilliano (Masters of Science in Biological Sciences): Characterization of Polyhydroxyalkanoate (PHA) Plastic Degradation via Bacterial Biofilm Culturing and Molecular Analyses (Projected 2028)
2025-Current Tiffany Rakela (Masters of Science in Health Professions): Graded Quorum-Sensing Activation Regulates Metabolic Adaptation in *Pseudomonas aeruginosa* PA14 During Environmental (Projected 2027)

- 2025-Current John Ortiz (Masters of Science in Marine Sciences): Population Dynamics of *Lontra canadensis* on the Indian River Lagoon, Florida (Projected 2027)
- 2024-Current Amanda Finnefrock (Masters of Science in Biological Sciences): TBD (Projected 2026) [Advisor]
- 2024-Current Amanda Diaz (Masters of Science in Biological Sciences): TBD (Projected 2026)
- 2023-Current Faith Borak (Masters of Science in Marine Sciences): The Effects of Extreme Heat Events, Ocean Acidification, and Hypoxia on Sulfur Cycling in the Marine Sponge *Cinachyrella* spp. (Projected 2026)
- 2024-2025 Athena Capetanakis (Masters of Science in Biological Sciences): TBD (Projected 2026)
- 2022-2025 Stacy Brown (Masters of Science in Marine Sciences): Microbial Community and Water Quality Assessment of *Crassostrea virginica* Habitats in Southeast Florida.
- 2020-2024 Sharlene Demehri (Masters of Science in the College of Dental Medicine): The Bacteriology of Supragingival Plaque of Adults in South Florida: Trends in Colonization.
- 2020-2022 Anny Ho (Masters of Science in Biology): Impact of intracellular ceramides on the promotion of neuroinflammation as the hallmark features of Alzheimer's disease.

Advising Experience (outside NSU):

Ph.D Committee Member

- 2023-Current Lateefa Abel (Ph.D. in Anthropology at University of Tennessee Knoxville): Oral microbiomes from ancient Peruvians (1536-1750CE) in Lambayeque Valley. Projected completion 2026. With Dr, Graciela Cabana (Univ of Tenn) and Dr. Haagen Klaus (George Mason Univ).

Peer Reviewed Publications:

- 2024 Demehri S+, Vardur S, Godoy C, Lopez JV, Samuel P+, Kawai T, **Ozga AT**. Supragingival plaque microbiomes in a diverse South Florida population. *Microorganisms*. 12(9): 1921. <https://doi.org/10.3390/microorganisms12091921>
- 2023 Dolan S, **Ozga AT**, Manin A, Stone AC. Turkey Domestication and Husbandry in the Mimbres Valley, New Mexico: Insights from Pottery Iconography,
- 2021 **Ozga AT** and C Ottoni. Dental calculus as a proxy for animal microbiomes. *Quaternary International*. <https://doi.org/10.1016/j.quaint.2021.06.012>
- 2021 Perri AR, Mitchell KJ, Mouton A, Canetero SA, Hulme-Beaman A, Haile J, Jamieson A, Meachen J, Lin AT, Ameen C, Bover P, Brace S, Carmagnini A, Caroe C, Castruita JAS, Chatters JC, Dobney K, dos Reis M, Wvin A, Gaubert P, Goplakrihnan S, Gower G, Heinger H, Helgen K, Kapp J, Linderholm A, **Ozga AT**, Presslee S, Salis A, Saremi NF, Schubert B, Skerry K, Thompson M, Collins MJ, Sindin M-H S, Gilbert MTP, Stone AC, Shapiro B, Van Valkenburge B, Wayne R, Larson G, Frantz L, Cooper A. Dire wolves were the last of an ancient New World canid lineage. *Nature*. <https://doi.org/10.1038/s41586-020-03082-x>
- 2021 **Ozga AT**, Webster TH, Gilby IC, Wilson Sayres MA, Li Y, Hahn BH, Nockerts

- RS, Wilson MA, Pusey AE, Stone AC. Urine as a high quality source of host genomic DNA from wild populations. *Molecular Ecology Resources*.
<https://doi.org/10.1111/1755-0998.13260>
- 2019 **Ozga AT**, Nockerts R, Wilson, M, Gilby IC, Pusey A, Stone AC. Oral microbiome variation in chimpanzees from Gombe National Park. *Scientific Reports*:17354. <https://doi.org/10.1038/s41598-019-53802-1>
- 2016 **Ozga AT**, Sankaranarayanan K, Tito RY, Obregon-Tito AJ, Foster M, Tallbull G, Spicer P, Warinner C, Lewis Jr. CM. Oral microbiome diversity among the Cheyenne and Arapaho of Oklahoma. *American Journal of Physical Anthropology* 161: 321-327. <https://doi.org/10.1002/ajpa.23033>
- 2016 **Ozga AT**, Nieves-Colon MA, Honap TP, Sankaranarayanan K, Hofman C, Milner G, Lewis Jr. CM, Stone AC, Warinner CW. Successful enrichment and recovery of whole mitochondrial genomes from ancient human dental calculus. *American Journal of Physical Anthropology* 160, 2: 220-228.
<https://doi.org/10.1002/ajpa.22960>
- 2015 **Ozga AT**, Tito RY, Kemp BM, Matternes HB, Obregon-Tito AJ, Neal L, Lewis CM. Origins of an Unmarked Georgia Cemetery Using Ancient DNA Analysis. *Human Biology* 87.2, Spring 2015.
<https://doi.org/10.13110/humanbiology.87.2.0109>
- 2015 Obregon-Tito AJ, Tito RY, Metcalf J, Sankaranarayanan K, Clemente JC, Ursell LK, Xu ZZ, Van Truren W, Knight R, Gaffney PM, Spicer P, Lawson P, Marin-Reyes L, Trujillo-Villarreal O, Foster M, Guja-Poma E, Troncoso-Corzo L, Amiel J, Warinner C, **Ozga AT**, Lewis CM. Subsistence strategies in traditional societies distinguish gut microbiomes. *Nature Communications*. 6, 6505.
<https://doi.org/10.1038/ncomms7505>

*NSU Undergraduate Students

+NSU Graduate Students

Synergistic Activities:

- Contributions to curricular development: Design of the following courses in 2022 and 2024 respectively. Courses were approved by the University wide curricular committee and have been taught by Dr. Ozga annually since their creation.
 - BIOL3100 Biological Anthropology
 - An undergraduate lecture and reading based course in the fundamentals of primate and human evolution across a number of disciplines within biological anthropology.
 - MSBI 5910 Metagenomics
 - A graduate discussion and project based course covering the seminal works in the field of metagenomics and allows students to design and craft a publication ready final research paper using previously published data.
- Contributions to research:
 - Graduate
 - As seen above, I have mentored both MS and PhD students acting as chair or co-chair of their committees.
 - Undergraduate

- In 2025/2026 a new practicum research course taught by Dr. Ozga was introduced which allowed students to design a research project from the ground up. From idea to sample collection to data analysis eventually leading to a forthcoming manuscript. These students also presented this work recently at the Florida ASM conference.
 - *Kim H*, Shah J*, Rajesh R*, Mathoun S*, Borja C*, Naami N*, Monteiro J*, Jois T*, Adabala V*, Ganzman A*, Peyton K*, **Ozga AT**. The impact of mouthwash on oral microbiome diversity in university students. American Society of Microbiology – Florida. Fort Myers, FL.*
- Contributions to outreach:
 - Sigma Xi mentorship program for American Heritage High School in West Palm Beach, FL.
 - Dr. Ozga is an active reviewer of manuscripts for publication as well as a grant reviewer for NSF and the Leakey foundation.