

MARIANNE J. COOPER

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EDUCATION

- 2024 **Ph.D.**, Biological Anthropology, University at Buffalo, NY
Dissertation: "The Impact of Obstetrics on Cranial & Pelvic Morphological Evolution in Anthropoid Primates: An Evolutionary Quantitative Genetics Analysis"
- 2021 **M.A.**, Biological Anthropology, University at Buffalo, NY
Project: "An Analysis of Morphological Evolution in the Catarrhine Appendicular Skeleton Using Methods from Quantitative Genetics"
- 2018 **B.A.**, Anthropology, Portland State University, OR
- 2008 **M.S.**, Management, University of Florida, FL
- 2005 **B.A.**, Classical Studies, University of Florida, FL

ACADEMIC POSITIONS

- 2024-present Postdoctoral Research Scholar, Western Washington University, Bellingham, WA
Research Associate, Buffalo Human Evolutionary Morphology Lab, University at Buffalo, NY
- 2019-24 Graduate Teaching Assistant, Lab Instructor, and Instructor, University at Buffalo, NY

RELEVANT PROFESSIONAL POSITIONS

- 2016-19 Museum Educator (On-Call Educator for Life Sciences, Paleontology, Food Sciences, and Chemistry Labs), Oregon Museum of Science and Industry, Portland, OR
- 2013-16 Volunteer Coordinator, Oregon Museum of Science and Industry, Portland, OR
- 2010-11 Grant Specialist, Department of Physical Therapy, University of Florida, Gainesville, FL
- 2009-10 Grant Resource Specialist and Proposal Process Coordinator, Institute of Food and Agricultural Sciences, University of Florida, Gainesville, FL
- 2008-09 Education Assistant, Florida Museum of Natural History, Gainesville, FL

GRANTS & AWARDS

- 2025-26 Mini Grant Program, Western Washington University, Bellingham, WA, "Fossil primate skull study at UC Museum of Paleontology collections (Berkeley, CA)" (\$1962)
- PILOT Project Grant Program, Western Washington University, Bellingham, WA, "Application of evolvability indices to primate cranio-pelvic evolution" (\$5000)
- 2023-26 Doctoral Dissertation Research Improvement Grant, National Science Foundation, "Selection pressures on skull and pelvis proportions at birth," [BCS 2234455](#) (\$32,087)
- 2023-24 Morris E. and Lucille Opler Dissertation Research Scholarship, Department of Anthropology, University at Buffalo, NY (\$7000)
- College of Arts and Sciences Dissertation Fellowship, University at Buffalo, NY (\$7500)
- 2022-23 Mark Diamond Research Fund, Graduate Student Association, University at Buffalo, NY (\$1815)
- 2022 Richard Gilder Graduate School Collections Study Grant, American Museum of Natural History, New York City, NY (\$500)
- Fall 2022 Graduate Student Conference Travel Grant, Department of Anthropology, University at Buffalo, NY (\$500)
- 2019-24 Tuition Scholarship Fund, University at Buffalo, NY
- 2019-23 Presidential Fellowship, University at Buffalo, NY (\$7500/year)

PUBLICATIONS AND PUBLISHED ABSTRACTS

Cooper, M.J. & von Cramon-Taubadel, N. 2025. An evolutionary quantitative genetic analysis of the impact of cephalopelvic disproportion on cranial and pelvic co-evolution in anthropoids. *American Journal of Biological Anthropology*. 188(1):e70109
<https://doi.org/10.1002/ajpa.70109>

Accepted/In press

Cooper, M.J., Conaway, M., & von Cramon-Taubadel, N. A quantitative genetics analysis of evolution in the hominoid appendicular skeleton. In press at *Evolution*.

In Revision

Cooper, M.J., Conaway, M., & von Cramon-Taubadel, N. Form or shape? Examining the effect of size adjustment on evolutionary analyses of catarrhine appendicular morphology. In review at the *American Journal of Biological Anthropology*.

In Preparation

Cooper, M.J., Oliver, H., & von Cramon-Taubadel, N. Captivity and covariance: Exploring the impact of environmental differences in evolutionary analyses of the cranium in wild and captive *Macaca fascicularis*.

Cooper, M.J. The impact of obstetrics on the evolution of variation in sacral vertebral number in primates.

Cooper, M.J., O'Brien, T.D., & Potter, A. Revisiting heterozygous advantage for phenylketonuria carriers.

Published Abstracts and Poster Presentations

Cooper, M. J., Landon, C. B., Joy, K. B., Humphrey, M., Brasil, M. F., & Monson, T. A. 2026. Evolutionary flexibility in the orbital region in extant papionins. 95th annual conference of the American Association of Biological Anthropologists, Denver, CO. *American Journal of Biological Anthropology*, 189 (S81), 32

Monson, T. A., Weitz, A. P., & **Cooper, M. J.** Orbital variation and the evolution of apes. 2026. 95th annual conference of the American Association of Biological Anthropologists, Denver, CO. *American Journal of Biological Anthropology*, 189 (S81), 130

Cooper, M. J., Humphrey, M., Brasil, M. F., & Monson, T. A. 2026. A comparison of variance-covariance matrices in fossil and extant papionins. Poster presented at the 2026 Paleoanthropology Society Meeting.

Cooper, M. J., & von Cramon-Taubadel, N. 2025. Abstract. Assessing obstetric selection in the cranium and pelvis of anthropoid primates using methods from evolutionary quantitative genetics. 94th annual conference of the American Association of Biological Anthropologists, Baltimore, MD. *American Journal of Biological Anthropology*, 186 (S79), 34.

Cooper, M. J., Conaway, M., & von Cramon-Taubadel, N. 2024. Abstract. Form or shape? How data standardization affects results of quantitative genetic analyses of the primate appendicular skeleton. 2024 annual meeting of the Paleoanthropology Society, Los Angeles, CA. *PaleoAnthropology*, 2024 (1), 154.

Cooper, M. J. & von Cramon-Taubadel, N. 2024. Abstract. An analysis of cranial and pelvic covariation, with implications for the evolution of cephalopelvic disproportion in non-human primates. 93rd annual conference of the American Association of Biological Anthropologists, Los Angeles, CA. *American Journal of Biological Anthropology*, 183 (S77), 33.

Cooper, M.J., Simons, E., & von Cramon-Taubadel, N. 2023. Abstract. A quantitative genetic analysis of selection in the non-human hominid cranium over four ontogenetic stages. 92nd annual conference of the American Association of Biological Anthropologists, Reno, NV, April 19-22. *American Journal of Biological Anthropology*, 180 (S75), 37.

Doherty, L., **Cooper, M.J.**, Nekaris, K.A.I., Blair, M.E., von Cramon-Taubadel, N., Poindexter, S.A. 2023. Poster presentation. Characterizing separate slow loris species via

- landmark-based cranial morphology. Presented by first author at the Joint Meeting of the Northeastern Evolutionary Primatologists and the Mid-Atlantic Biological Anthropology Interest Group, Richmond, VA.
- Cooper, M.J.**, Conaway, M., & von Cramon-Taubadel, N. 2022. Abstract. An analysis of morphological evolution in catarrhine appendicular skeleton using methods from quantitative genetics. 91st annual conference of the American Association for Biological Anthropologists, Denver, CO, March 23-26. *American Journal of Biological Anthropology*, 177 (S77), 36.
- Pinkston, E. F. E., **Cooper, M.J.**, & von Cramon-Taubadel, N. 2022. Abstract. The efficacy of *a priori* grouping in cold adaptation studies. 91st annual conference of the American Association for Biological Anthropologists, Denver, CO, March 23-26. *American Journal of Biological Anthropology*, 177 (S77), 144.
- Cooper, M.J.**, Conaway, M., & von Cramon-Taubadel, N. 2021. Abstract. An analysis of morphological evolution in the hominid lower limb using methods from quantitative genetics. European Society for the study of Human Evolution 2021 Meeting, Online, September 22-26. *PaleoAnthropology*, 2021 (1), 164.
- Cooper, M.J.**, Simons, E., & von Cramon-Taubadel, N. 2021. Abstract. A geometric morphometric analysis of cranial ontogenetic integration in non-human hominids. 90th annual conference of the American Association for Physical Anthropologists, Online, April 7-28. *American Journal of Physical Anthropology*, 174 (S71), 22.
- Potter, A., & **Cooper, M.J.** 2019. Abstract. Revisiting Heterozygous Advantage for Phenylketonuria Carriers. 88th annual conference of the American Association for Physical Anthropologists, Cleveland, OH, March 27-30. *American Journal of Physical Anthropology*, 168 (S68), 194.

TEACHING EXPERIENCE

Instructor of Record

- 2026 Instructor for early undergraduate students, **Introduction to Biological Anthropology** (ANTH 215, Winter and Spring quarters), Western Washington University, Bellingham, WA
- 2022 Instructor for early undergraduate students, **Introduction to Biological Anthropology** (APY 107), University at Buffalo, NY
- Lab instructor for advanced undergraduate students, **Comparative Primate Anatomy, Lab C** (APY346), University at Buffalo, NY
- 2021 Lab instructor for advanced undergraduate students, **Comparative Primate Anatomy, Lab C** (APY346, remote course), University at Buffalo, NY

Teaching Assistant

- 2023 Teaching assistant for advanced undergraduate students, **Forensic Anthropological Osteology** (APY 348), University at Buffalo, NY
- 2021 Teaching assistant for advanced undergraduate students, **Forensic Anthropological Osteology** (APY 348), University at Buffalo, NY
- 2020 Teaching assistant for early undergraduate students, **Introduction to Biological Anthropology** (APY 107, remote course), University at Buffalo, NY
- Teaching assistant for early undergraduate students, **Introduction to Anthropology** (APY 105), University at Buffalo, NY
- 2019 Teaching assistant for early undergraduate students, **Introduction to Biological Anthropology** (APY 107), University at Buffalo, NY

Invited Talks

- 2025 “**Vision, Evolution, and the Human Cranium,**” presented on October 24 at the Integrative Human Evolution Symposium: The Evolution of Vision, Western Washington University, Bellingham, WA.
- 2024 “**Evolutionary Processes Affecting the Primate Skeleton,**” presented on February 8 to the Department of Anthropology, SUNY Oneonta, Oneonta, NY

Guest Lectures

- 2025 **Human Osteology** (ANTH 420/520), Western Washington University, Bellingham, WA.
“Current Research in Biological Anthropology.” November 5, 2025
- Cultural and Biological Aspects of Pregnancy and Childbirth (FAIR 338P)**, Fairhaven College of Interdisciplinary Studies, Western Washington University, Bellingham, WA.
“The ‘Obstetric Dilemma’ and Human Pregnancy.” February 13, 2025
- 2024 **Human Evolution/Primate Evolution** (ANTH 423/523), Western Washington University, Bellingham, WA.
“Current Research in Biological Anthropology.” December 4, 2024
- 2023 **Anatomy and Physiology II** (BIO 104), Villa Maria College, Buffalo, NY
“Heredity.” December 7, 2023
- 2022 **Introduction to Biological Anthropology** (APY 107), University at Buffalo, NY
“Genetics.” February 17, 2022. (Online)
- 2020 **Introduction to Biological Anthropology** (APY 107), University at Buffalo, NY
“The Genus *Homo*, Part II.” October 19, 2020 (Online)
“The Genus *Homo*, Part I.” October 12, 2020 (Online)
“Paleoanthropology: The Hominin Fossil Record.” September 28, 2020 (Online)

- Introduction to Anthropology** (APY 105), University at Buffalo, NY
 “Primates and Primatology.” February 28, 2020
 “Hominin Evolution.” March 4, 2020
 “Modern Humans, Neandertals, and the Upper Paleolithic.” March 6, 2020
- 2019 **Introduction to Biological Anthropology** (APY 107), University at Buffalo, NY
 “Neandertals and Modern Humans.” October 8, 2019
 “Heterozygous Advantage in PKU Carriers.” November 5, 2019

STUDENT MENTORING

Undergraduate

- Undergraduate Research Assistant supervision, Western Washington University
 - Fall 2024-present: 2 students
- Undergraduate Teaching Assistant supervision and training, University at Buffalo
 - Fall 2023: 2 students, Forensic Anthropological Osteology (APY 348)
 - Spring 2021: 3 students, Comparative Primate Anatomy, Lab C (APY 346)
 - Fall 2021: 1 student, Forensic Anthropological Osteology (APY 348)
- Undergraduate Student Intern supervision (APY 496)
 - Spring 2023: 6 students; Buffalo Human Evolutionary Morphology Lab Database Internship (2 students) and University at Buffalo Primate Skeletal Collection Internship (4 students)

Graduate

- Research supervision: 1 MA student (Western Washington University)
- Data collection methods training: 2 MA students and 2 Ph.D. students (University at Buffalo), 3 MA students (MA, Western Washington University)

RESEARCH EXPERIENCE

- 2024-present Postdoctoral research investigating orbital morphology in primates (United States, Belgian, German, and Swiss primate skeletal collections); supervision of undergraduate and graduate students affiliated with the WWU Primate Evolution Lab
- 2022-24 Dissertation research investigating anthropoid primate cranial and pelvic skeletal morphology (United States, Belgian, and German primate skeletal collections)
- 2023 Buffalo Human Evolutionary Morphology Lab internship program (APY 496) development; supervision of interns in BHEML and the UB Primate Skeletal Collection
- 2021 Pilot study completed on postcranial skeletal evolution in catarrhine primates

PROFESSIONAL AFFILIATIONS

- American Association of Biological Anthropologists
- European Society for the Study of Human Evolution
- Society for the Study of Evolution
- Paleoanthropology Society

REVIEWER FOR

- The American Journal of Biological Anthropology
- The Anatomical Record
- Nature Communications
- Scientific Reports

SYMPOSIA ORGANIZED

- 2026 A Sense of Structure: Sensory Systems and Primate Evolution. Co-organizer with Tesla A. Monson and Marianne F. Brasil. 2026 meeting of the American Association of Biological Anthropologists, Denver, CO, March 19, 2026.
- 2025 Integrative Human Evolution Symposium: The Evolution of Vision. Co-organizer with Tesla A. Monson (lead organizer) and Marianne F. Brasil. Western Washington University, Bellingham, WA, October 24, 2025.

PROFESSIONAL AND COMMUNITY SERVICE

- 2025-26 **Scientific Program Committee Member**, 95th Annual Meeting of the American Association of Biological Anthropologists, Denver, CO
- 2024 **Student Volunteer**, 93rd Annual Meeting of the American Association of Biological Anthropologists, Los Angeles, CA
- 2021-24 **Graduate Ambassador**, College of Arts and Sciences, University at Buffalo, NY
- 2023 **Anthropology Department Open House Volunteer**, Buffalo Human Evolutionary Morphology Lab, University at Buffalo, NY
- Student Volunteer**, 92nd Annual Meeting of the American Association of Biological Anthropologists, Reno, NV
- Anthropology Day Volunteer**, Buffalo Human Evolutionary Morphology Lab, University at Buffalo, NY
- 2021-23 **Graduate Representative to the Faculty**, Anthropology Graduate Student Association, University at Buffalo, NY

- 2021-22 **Grant Application Reviewer**, Mark Diamond Research Fund, University at Buffalo, NY
- 2020 **Biological Anthropology Subcommittee Member** for PhD Excellence Initiative, Anthropology Graduate Student Association, University at Buffalo, NY
- Associate Editor**, *Artifacts Bones Discourse Student Journal*, University at Buffalo, NY

MUSEUM RESEARCH EXPERIENCE

- American Museum of Natural History, New York, NY
 - Mammalogy Collection: July and August 2022; April 2023; August 2023; July and August 2024, March 2025
 - Anthropology Collection: August 2022
- Field Museum of Natural History, Chicago, IL
 - Mammalogy Collection: August 2023; January and February 2025
- Museum of Comparative Zoology, Cambridge, MA
 - Mammalogy Collection: November 2022, May 2023, February and March 2025
- Museum Für Naturekunde, Berlin, Germany
 - Mammalogy Collection: May 2023, September 2025
- Neil C. Tappen Collection, Department of Anthropology, University of Minnesota, Minneapolis, MN
 - Anthropology Collection: August 2023
- Powell-Cotton Museum, Birchington, United Kingdom
 - Natural History Collection: March 2026
- Royal Museum of Central Africa, Tervuren, Belgium
 - Mammalogy Collection: June 2023, September 2025
- Royal Belgian Institute of Natural Sciences, Brussels, Belgium
 - Mammalogy Collection: June 2023
- Senckenberg Forschungsinstitut Mammalogie, Frankfurt, Germany
 - Mammalogy Collection: August 2025
- Smithsonian National Museum of Natural History, Washington, DC
 - Mammalogy Collection: February and March 2023; August and September 2024
- Zoologische Staatssammlung München, Munich, Germany
 - Mammalogy Collection: June 2023
- University at Buffalo Primate Skeletal Collection, Buffalo, NY
 - Primate Collection: August 2019-October 2024
- University of California Museum of Paleontology, Berkeley, CA
 - Vertebrate Collection: February 2026
- Universität Zürich, Zurich, Switzerland
 - Evolutionary Anthropology Collection: August 2025

TECHNICAL SKILLS

- Hardware: HDI 120 Structured Light Scanner, Polyga S1 Compact Wide Structured Light Scanner, Metron RX Macro Structured Light Scanner, Artec 3D Spider Structured Light Scanner, NeoScan N80 Micro-CT Scanner, MicroScribe digitizer
- Imaging software: FlexScan, Artec Studio, MeshLab, Slicer, Geomagic Design X
- Landmarking software: ViewBox, SlicerMorph, Checkpoint
- Analytical software: R, R Studio, MorphoJ
- Collections management: care and curation of skeletal specimens, specimen photography
- Online course management: Blackboard Learning System, D2L Learning System, Canvas Learning System
- Data management: organization and maintenance of the Buffalo Human Evolutionary Morphology Lab digital scan collection (over 10,000 scans), organization and maintenance of Primate Evolution Lab digital scan collection (over 1,800 scans)

ADDITIONAL TRAINING

- 2023 Introduction to Bayesian Inference in Practice, Transmitting Science (Online)
Instructors: Dr. Daniele Silvestro and Tobias Andermann
- SlicerMorph Workshop, American Association of Biological Anthropologists
Instructor: Dr. Chi Zhang
- 2022 Mapping Trait Evolution, Transmitting Science (Online)
Instructor: Dr. Jeroen B. Smaers
- Evolutionary Quantitative Genetics Workshop, Friday Harbor Laboratories,
University of Washington (Online)
Instructors: Dr. Joe Felsenstein and Dr. Stevan J. Arnold