REBECCA W. COOK, PH.D.

Curriculum Vitae

Center for Anatomical Sciences University of North Texas Health Science Center 3500 Camp Bowie Boulevard Fort Worth, Texas (859) 351-9814 rebecca.cook@unthsc.edu

EDUCATION

2018 – 2024	Ph.D. Department of Evolutionary Anthropology Duke University, Durham, NC
2011 – 2015	B.A. Anthropology & Sociology Centre College, Danville, KY

ACADEMIC APPOINTMENTS

2024 – present Assistant Professor, Center for Anatomical Sciences, University of North Texas Health Science Center

RESEARCH INTERESTS

- Finite element analysis
- Anatomical variation
- Osteology
- Hominin paleontology

- Biomechanics
- Motion capture/ gait analysis
- Biomechanical effects of orthopaedic oncology surgical interventions

TEACHING EXPERIENCE

Laboratory Instructor

2018 - 2022Introduction to Evolutionary Anthropology, Duke University2020 - 2022Human Gross Anatomy, Duke University School of Medicine2020 - 2022The Human Body, Duke University2019Primate Anatomy

Teaching Assistant

2023	Bodies of Evidence
2020	Physiology and Anatomy

Students Mentored

2023 – 2024	Rachel Poutre (Duke University), Undergraduate Honors Thesis
2022 – 2024	Louise Adillon (Duke University)
2022 – 2023	Jessica Voss (Duke University)
2022 – 2023	Mason Dermott (Campbell University), M.A. Student
2022 – 2023	Ron Carr (Duke University), Undergraduate Honors Thesis
2022 – 2023	Maddie Jenner (Duke University)
2020 – 2021	Jay Chandar (Duke University), Undergraduate Honors Thesis
2019 – 2021	Lizzy Nist (Duke University), Undergraduate Honors Thesis
2019 – 2020	Kristen Murphy (Duke University)
2018 – 2019	Eva Broadway (University of North Carolina – Chapel Hill)

PUBLICATIONS

- **Cook RW**, Vazzana A, Sorrentino R, Benazzi S, Smith AL, Strait D, Ledogar JA. (2021). The cranial biomechanics and feeding performance of *Homo floresiensis*. Interface Focus 11:20200083
- Walker CS, Cofran ZD, Grabowski M, Marchi D, Cook RW, Churchill SE, Tommy KA, Throckmorton Z, Ross AH, Hawks J, Yapuncich GS, Van Arsdale AP, Rentzeperis FI, Berger LR, DeSilva JM. (2019). Morphology and evolution of the *Homo naledi* femora from Lesedi. *American Journal of Biological (formerly Physical) Anthropology 170*(1), 5-23.
- Ledogar JA, Benazzi S, Smith AL, Dechow PC, Wang Q, **Cook RW**, Neaux D, Ross CF, Grosse IR, Wright BW, Weber GW, Byron C, Wroe S, Strait DS. Feeding biomechanics and the origin of *Homo.* (Manuscript submitted).

MANUSCRIPTS IN PREPARATION

Cook RW, Truitt K, Wilson M, Little-Letsinger S, Schmitt D. A comparison of methods for calculation of kinematic and kinetic data in human gait. (To be submitted as a technical note to *Journal of Applied Biomechanics*).

Cook RW, Churchill SE. A 3D geometric morphometrics reconstruction of the KNM-ER 3228 os coxae.

- **Cook RW**, Yapuncich GS, Thompson IJ, Walker CS, Churchill SE. A comparison of lateral iliac flare measurement methods and their correlation with lesser gluteal moment arms.
- Little-Letsinger SE, **Cook RW**, Wilson M, Truitt K, Schmitt D. Musculoskeletal loading in stiff and compliant gaits: Implications for the origin of bipedalism. (To be submitted to the *Journal of Experimental Biology*).

Kenyon-Flatt B, Cook RW, Rossillo AM, Renier van der Merwe, Throckmorton Z, Berger LR, Walker

CS. Fossilized remains of two immature *Australopithecus sediba* specimens from the Malapa site, South Africa.

ABSTRACTS AND PRESENTATIONS

- **Cook RW,** Adegboyega MT, Churchill SE. A 3D geometric morphometrics reconstruction of the KNM-ER 3228 os coxae. *European Society for the Study of Human Evolution Meeting* (2023).
- **Cook RW**, Chandar J, Yapuncich GS, Thompson IJ, Walker CS, Churchill SE. Lateral iliac flare does not correlate with gluteal abductor moment arms in humans. *American Association of Biological Anthropologists Annual Meeting (2023)*.
- Ledogar JA, Benazzi S, Smith A, Dechow P, Wang Q, **Cook RW**, Neaux D, Ross C, Grosse I, Wright B, Weber G, Byron C, Wroe S, Strait D. *Homo* origins mark an adaptive shift characterized by constrained bite force production. *American Association for Anatomy, Anatomy Connected* (2023).
- **Cook RW**, Ledogar JA, Vazzana A, Sorrentino R, Benazzi S, Smith AL, Strait D. (2021) Anthroengineering the "hobbit": Craniofacial feeding biomechanics in *Homo floresiensis*. *American Journal of Biological (formerly Physical) Anthropologists 174*(S71).
- Thompson IJ, **Cook BW**, Cofran ZD, Reyes M, Walker CS. (2020). Estimation of hominine femoral head size from fragmentary remains via sphere-fitting methodology. *American Journal of Biological (formerly Physical) Anthropologists* 171(S69).
- Rossillo AN, **Cook RW**, Fulwood EL. (2019). Walking with hominins and chewing with lemurs in K-12 classrooms: Incorporating 3D digital repositories into state-specific lesson plans. *American Journal of Biological (formerly Physical) Anthropology 162*(S68).
- **Cook RW**, Yapuncich GS, Thompson IJ, Walker CS, Churchill SE. (2018). A comparison of lateral iliac flare measurement methods and their correlation with lesser gluteal moment arms. *American Journal of Biological (formerly Physical) Anthropology 165*(S66).
- Foster AD, **Cook RW**, Withorn B, Vallely J. (2018). Do trabecular properties signal a bipedal loading pattern in a rat model for the quadrupedal to bipedal transition? *American Journal of Biological (formerly Physical) Anthropology 165*(S66)
- **Cook RW** and Walker CS. (2017). The application of 3D scanning & printing: Paleontology research and anatomy education. North Carolina State University College of Veterinary Medicine Dog Olympics.

2023	Research Grant, The Leakey Foundation
2023	Graduate Student Award, Triangle Center for Evolutionary Medicine
2023	Aleane Webb Dissertation Research Fellowship, Duke Graduate School
2023	Conference Travel Award, Duke Graduate School
2019, 2023	International Dissertation Research Travel Award, Duke Graduate School
2019, 2020, 2023	Summer Research Fellowship, Duke Graduate School
2018 – 2023	Undergraduate Mentorship Award, Duke Trinity College of Arts and
	Sciences
2021 – 2022	Provost Internship Award, Duke Graduate School
2020	Departmental Conference Travel Award, Duke Department of Evolutionary
	Anthropology
2020	Women's Weekend Scholarship, Duke Alumni Association
2020	Domestic Dissertation Research Travel Award, Duke Graduate School
2020	NSF Graduate Research Fellowships Program, Honorable Mention
2014	Summer Internship Award, Centre College
2011 – 2015	Founders Scholarship, Centre College

PROFESSIONAL/ FIELD EXPERIENCE AND DEVELOPMENT

2017 – present	Research Associate, Hominoid Evolution Research Group, North Carolina State University College of Veterinary Medicine. PI: Christopher Walker.
	Raleigh, NC
2018 – present	Visiting Researcher, University of the Witwatersrand. Johannesburg, South Africa
2023	Visiting Researcher, National Museums of Kenya. Nairobi, Kenya
2022 – 2023	Assistant, NSF Predictive Intelligence for Pandemic Prevention Phase I
	Development Grant; PI: Charles Nunn. Durham, NC
2022 – 2023	Club EvMed Manager, Triangle Center for Evolutionary Medicine. Durham, NC
2022	Evolutionary Medicine Summer Programs Coordination Intern, Triangle Center
	for Evolutionary Medicine. Durham, NC
2021	Lesson Plan Development Intern, Triangle Center for Evolutionary Medicine.
	Durham, NC
2019	Finite Element Analysis Applied to Life Sciences, Transmitting Science course.
	Sabadell, Spain
2019	Visiting Researcher, Musée de l'Homme. Paris, France
2018	Visiting Researcher, Harvard Museum of Comparative Zoology. Cambridge, MA
2017 – 2018	Research Associate, Jerry M. Wallace School of Osteopathic Medicine,
	Campbell University. Buies Creek, NC
2017	Visiting Researcher, WM Bass Donated Skeletal Collection, University of
	Tennessee. Knoxville, TN
2014	Archaeology Intern, Underwater Archaeology Branch, Naval History and Heritage
	Command. Washington, DC
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2022	Organizer and Panelist, Pathways to the NSF GRFP. Durham, NC (virtual)
2020	Invited Speaker, The Museum of Life and Science. The Story of Us: Who's
	"Human?" Durham, NC (virtual)
2020	Organizer and Panelist, Applying to Graduate School: How to be a Competitive
	PhD Applicant (for underrepresented STEM applicants). Durham, NC
	(virtual)
2019	Invited Darwin Day Scientist. North Carolina Museum of Natural Sciences.
	Raleigh, NC
2018	Invited Lecturer, North Carolina State University Department of Anthropology
2017	Technology Demonstrator, North Carolina State University College of Veterinary
	Medicine Dog Olympics. Raleigh, NC
2017	Technology Demonstrator, North Carolina State University College of Veterinary
	Medicine Open House. Raleigh, NC

PROFESSIONAL AFFILIATIONS

- American Association of Biological Anthropologists
- European Society for the Study of Human Evolution
- European Virtual Anthropology Network Society
- Sigma Xi
- Women in Science & Engineering (WiSE) Duke University