# JOSHUA ROBERT ROBINSON

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**RESEARCH INTERESTS:** Paleoecological reconstructions of Plio-Pleistocene hominin sites; Development and contexts of social and exchange networks in the African Middle and Later Stone Ages; Environmental and climatic conditions of the hunter-to-herder transition; Hominoid and hominid evolution; Adaptive radiation of platyrrhines during the Miocene

## **EDUCATION AND PROFESSIONAL HISTORY**

#### ACADEMIC EXPERIENCE

- 2019- Lecturer, Archaeology Program, Boston University
- 2017-2019 Instructor, Department of Anthropology and South Carolina Honors College, University of South Carolina, Columbia
- 2015-2017 John Templeton Foundation Postdoctoral Research Associate, Institute of Human Origins, School of Human Evolution and Social Change, Arizona State University

#### **EDUCATION**

- 2014 Ph.D., Anthropology, Emory University, Atlanta, Georgia.
   Dissertation: *The Paleoenvironmental Context of Middle and Later Stone Age Behavior* and Social Networks in Sub-Saharan Africa.
   Chairs: John D. Kingston and Dietrich W. Stout
- 2012 M.A., Anthropology, Emory University, Atlanta, Georgia. Highest Honors; Advisor: John D. Kingston
- 2009 Anthropology, University of Florida, Gainesville, Florida.
  Geography, University of Florida, Gainesville, Florida.
  summa cum laude with distinction in all subjects
  Honors Thesis: Adult Sex Assessment at the Middle Archaic Harris Creek Site, Tick Island, Florida: An Integrated Osteological Approach
  Advisor: John Krigbaum

#### **SCHOLARSHIP**

#### **RESEARCH GRANTS AND FELLOWSHIPS**

### Funded

2019-2021 The Leakey Foundation Research Grant (\$13,996) "Multiproxy paleoecology of ~ 2.35 Ma early *Homo* from Ethiopia" PIs: **J.R. Robinson**, John Rowan, Ignacio A. Lazagabaster

- 2017-2018 The Rust Family Foundation Archaeology Grant Program (RFF-2017-31; \$4720.00) "Contextualizing Middle Stone Age human behavioral and cognitive development: Insights from herbivore isotope ecology at Sibudu, KwaZulu-Natal, South Africa" PI: **J.R. Robinson**
- 2012-2014 National Science Foundation (BCS-ARCH-DDIG) (\$20,000) "Developing a paleoenvironmental context for Middle Stone Age behavioral transitions: a multi-site approach" PIs: **J.R. Robinson**, D.W. Stout
- 2011 Palaeontological Scientific Trust (South Africa; ZAR\$15,000/US\$2275) "Reconstructing Paleoenvironments at Sibudu Cave using Isotopic Data" PIs: **J.R. Robinson**, J.L. Clark, L. Wadley

## PEER REVIEWED PUBLICATIONS

\*Indicates dual first-author

In review

15. **Robinson, J.R.** On the ground: Investigating habitat heterogeneity of late Pleistocene archaeological sites in eastern Africa from stable isotopes. Submitted to: *Journal of Paleolithic Archaeology*.

14. **Robinson, J.R.**, & Kingston, J.D. Burned by the fire: Isotopic effects of experimental combustion of faunal tooth enamel. Submitted to: *Journal of Archaeological Science: Reports*.

13. **Robinson, J.R.**, Rowan, J., Barr, W.A., & Sponheimer, M. Stable carbon isotopes of African herbivores are poor predictors of woody cover. Submitted to: *Proceedings of the National Academy of Sciences*.

2019 12. Robinson, J.R. A Holocene paleoenvironmental record based on ungulate stable isotopes from Lukenya Hill, Kenya. *Journal of Archaeological Science: Reports*, 28, 102016. DOI: 10.1016/j.jasrep.2019.102016

11. Du, A.\*, **Robinson, J.R.**\*, Lazagabaster, I.A., Rowan, J, & Behrensmeyer, A.K. Stable carbon isotopes from paleosol carbonate and herbivore enamel document differing paleovegetation signals in the eastern African Plio-Pleistocene. *Review of Palaeobotany and Palynology*, 261, 41-52. DOI: 10.1016/j.revpalbo.2018.11.003 Contribution to Special Issue on Paleofloras, Paleovegetation, and Human Evolution

2018 10. **Robinson, J.R.**, & Wadley, L. Stable isotope evidence for (mostly) stable local environments during the South African Middle Stone Age from Sibudu, KwaZulu-Natal. *Journal of Archaeological Science*, 100, 32-44. DOI: 10.1016/j.jas.2018.10.002

9. Lazagabaster, I.A., Souron, A., Rowan, J., **Robinson, J.R.**, Campisano, C.J., & Reed, K.E. Fossil Suidae (Mammalia, Artiodactyla) from Lee Adoyta, Ledi-Geraru, lower Awash Valley, Ethiopia: Implications for late Pliocene turnover and paleoecology. *Palaeogeography, Palaeoclimatology, Palaeoecology*, 504, 186-200. DOI: 10.1016/j.palaeo.2018.05.029

2017 8. **Robinson, J.R.**, Rowan, J., Campisano, C.J., Wynn, J.G., & Reed, K.E. Late Pliocene environmental change during the transition from *Australopithecus* to *Homo. Nature Ecology and Evolution*, 0159. DOI: 10.1038/s41559-017-0159

7. **Robinson, J.R.** Thinking locally: Environmental reconstruction of Middle and Later Stone Age archaeological sites in Ethiopia, Kenya, and Zambia based on ungulate stable isotopes. *Journal of Human Evolution*, 106, 19-37. DOI: 10.1016/j.jhevol.2017.01.013

6. **Robinson, J.R.** & Rowan, J. Holocene paleoenvironmental change in southeastern Africa (Makwe Rockshelter, Zambia): implications for the spread of pastoralism. *Quaternary Science Reviews*, 156, 57-68. DOI: 10.1016/j.quascirev.2016.11.030

5. Rowan, J., Locke, E.M., **Robinson, J.R.**, Campisano, C.J., Wynn, J.G., & Reed, K.E. Fossil Giraffidae (Mammalia, Artiodactyla) from Lee Adoyta, Ledi-Geraru and Late Pliocene dietary evolution in giraffids from the lower Awash Valley, Ethiopia. *Journal of Mammalian Evolution*, 24, 359-371. DOI: 10.1007/s10914-016-9343-z

- 2016 4. Robinson, J.R., Rowan, J., Faith, J.T., & Fleagle, J.G. Paleoenvironmental change in the late Middle Pleistocene – Holocene Kibish Formation, southern Ethiopia: evidence from ungulate isotopic ecology. *Palaeogeography, Palaeoclimatology, Palaeoecology* 450, 50-59. DOI: 10.1016/j.palaeo.2016.02.049
- 2012 3. Stutz, A.J., Nilsson Stutz, L.G., Clark, J.L., Arpin, T., Rech, J.A., & Robinson, J.R. Mughr el-Hamamah. *American Journal of Archaeology*, 116(4): 697-699.
- 2011 2. Mummert, A., Esche, E., **Robinson, J.R.**, & Armelagos, G.J. Stature and robusticity during the agricultural transition: Evidence from the bioarchaeological record. *Economics & Human Biology* 9(3), 284-301. DOI: 10.1016/j.ehb.2011.03.004
- 2010 1. Esche, E., Mummert, A., **Robinson, J.R.**, & Armelagos G.J. Cancer in Egypt and Nubia. *Anthropologie-International Journal of the Science of Man* 48(2-3), 133-140. www.jstor.org/stable/26292903

#### **PROFESSIONAL PRESENTATIONS**

Symposium Proposals and Session Chairs:

2018 1. Beasley, M., & **Robinson, J.R.** Ventilating Silos: Framing biological anthropology's public message on global climate change. Podium session for American Association of Physical Anthropologists 2018 meetings in Austin, TX.

Invited Workshops and Colloquia:

2016 1. Robinson, J.R., Lazagabaster, I.A., Locke, E.M., Rowan, J., Smail, I.E., Campisano, C.J., Wynn, J.G., & Reed, K.E. Origins of the genus *Homo* and expansion of C4-dominated environments in the latest Pliocene in the Ledi-Geraru Paleoanthropology Research Project Area (Lower Awash Valley, Ethiopia). Institute of Human Origins, Evolutionary Foundations of Human Uniqueness Science Workshop 2, Arizona State University.

Conference Presentations:

- 2020 16. **Robinson, J.R.**, Campisano, C.J., Reed, K.E. Middle Pleistocene environments from Markaytoli (lower Awash Valley, Ethiopia) inferred from dental stable isotopes. *American Journal of Physical Anthropology*, 171(S69), 235. DOI: 10.1002/ajpa.24023
- 2019 15. Robinson, J.R. Ecological context of the South African Middle Stone Age from Sibudu, KwaZulu-Natal. American Journal of Physical Anthropology, 168(S68), 206. DOI: 10.1002/ajpa.23802
- 2018 14. **Robinson, J.R.** Assembling an album of primate-environment interrelations: using the past to understand the present in order to address the future. *American Journal of Physical Anthropology*, 165(S66), 227-228. DOI: 10.1002/ajpa.23489
- 2017 13. Reed, K.E., Smail, I.E., Rowan, J., Robinson, J.R., Locke, E.M., Lazagabaster, I.A., & Campisano, C.J. Biogeography, endemism, and functional trait community structure: basinal differences in the Pliocene. *American Journal of Physical Anthropology*, 162(S64), 329. DOI: 10.1002/ajpa.23210

12. Lazagabaster, I.A., **Robinson, J.R.,** Campisano, C.J., & Reed, K.E. Diversity, abundance, and paleoecology of East African Suidae in the context of hominin evolution during the Pliocene. *American Journal of Physical Anthropology*, 162(S64), 258. DOI: 10.1002/ajpa.23210

2016 11. **Robinson, J.R.**, & Rowan, J. A grassy corridor for pastoralist movement in the late Holocene of southeastern Africa. Paper presented at the 4<sup>th</sup> Annual meeting of the Southwestern Association of Biological Anthropologists, Tempe, AZ.

10. **Robinson, J.R.** Thinking locally: spatial and temporal variation in late Quaternary paleoenvironments of sub-Saharan Africa inferred from ungulate isotope ecology. *Journal of Vertebrate Paleontology*, Program and Abstracts, 2016, 213.

9. **Robinson, J.R.**, Rowan, J., Campisano, C.J., Wynn, J.G., & Reed, K.E. Origins of the genus *Homo* and expansion of C4-dominated environments during the latest Pliocene in the Lower Awash Valley, Ethiopia. *Geological Society of America Abstracts with Programs* 48(7) DOI: 10.1130/abs/2016AM-279004

8. Reed, K.E., Campisano, C.J., Lazagabaster, I.A., Locke, E.M., **Robinson, J.R.**, & Smail, I.E. Changes in community ecology from 3.4-2.0 Ma in the lower Awash valley: Implications for hominin paleobiology. *PaleoAnthropology* (PAS 2016 Abstracts).

7. Rowan, J., Locke, E.M., **Robinson, J.R.**, Campisano, C.J., Wynn, J.G., & Reed, K.E. Dietary shifts in the giraffid *Sivatherium* and paleoenvironmental differences between the Afar and Turkana Basins during the late Pliocene. *PaleoAnthropology* (PAS 2016 Abstracts).

- 2015 6. Lazagabaster, I.A., Smail, I., Locke, E.M., Rowan, J., Robinson, J.R., Scott, E., Werdelin, L., & Reed, K.E. The environmental context of early *Homo* at Ledi-Geraru (Afar, Ethiopia) ca. 2.8 Ma: An assessment of the faunal community. Presented at II Bioanthropology Meeting, Coimbra, Portugal.
- 2014 5. Robinson, J.R. Developing a paleoenvironmental context for the Middle Stone Age behavioral transitions: A multi-site approach. *American Journal of Physical Anthropology* 153(S58), 223. DOI: 10.1002/ajpa/22487

4. **Robinson, J.R.** Analyzing a paleoenvironmental context for Middle and Late Stone Age behavioral transitions. *PaleoAnthropology* (PAS 2014 Abstracts).

2011 3. Osigbeme, M., Ramsey, C., Tansey, M., Robinson, J.R., Kingston, J.D., Eisen, A. Interpreting the Life of the Carlos Museum's Old Kingdom Mummy. Presented at the 7<sup>th</sup> World Congress of Mummy Studies, San Diego.

2. Clark, J.L., **Robinson, J.R.** Holes in the Record: Millipedes as a source of disturbance at archaeological sites. *American Journal of Physical Anthropology* 144(S52), 109. DOI: 10.1002/ajpa.21502

2007 1. **Robinson, J.R.** Effects of the Kissimmee River Restoration Project. Paper presented at 43<sup>rd</sup> Annual Meeting of the Florida Society of Geographers, Jacksonville.

#### **CURRENT MAJOR RESEARCH PROJECTS**

#### Ledi-Geraru Paleoanthropology Research Project

Paleoenvironmental analysis and geospatial database management and research, Ethiopia

# The Paleoenvironmental Context of Middle and Later Stone Age Behavior and Social Networks in Sub-Saharan Africa

Analysis of zooarchaeological and isotopic data for late Pleistocene and Holocene paleoenvironmental reconstructions and modeling of potential effects on early human behavior, migrations, and social networks, including the origins of pastoralism

# Environmental Contexts of the Adaptive Radiation of Platyrrhines in the Miocene Pinturas Formation (Argentina)

Zooarchaeological and stable isotope analysis of mid-Miocene faunal communities from Patagonia for understanding the origins and spread of New World monkeys

# FIELD AND MUSEUM RESEARCH EXPERIENCE

- 2016-present Paleontological research of the Pinturas Formation Miocene faunal and platyrrhine collections from Argentina
- 2015-present Paleontological and paleoenvironmental research and survey in the Ledi-Geraru region, Afar, Ethiopia (including work at the National Museum of Ethiopia)
- 2012-present Field, museum, and laboratory research of Middle and Later Stone Age sites in Ethiopia, Kenya, and Zambia
- 2011-2018 Reconstructing paleoenvironments at Sibudu Cave, South Africa using isotopic data (museum and laboratory work at the University of the Witwatersrand)
- 2010-2011 Excavations at the late Paleolithic archaeological site of Mughr el-Hamamah, Jordan (team member and graduate student assistant); PI: Aaron J. Stutz
- 2008-2009 Tick Island Skeletal Demography; age and sex determination of the fragmentary and co-mingled human skeletal remains from Tick Island, Florida curated at the Florida Museum of Natural History

Human Osteology Intern, Anthropology Department, Florida Museum of Natural History

2007-2008 St. Johns River Archaeology Summer Field School: Silver Glen Run, Florida; University of Florida field school supervised by Kenneth Sassaman

GIS analysis of the Kissimmee River Restoration Project (with Youliang Qiu, Department of Geography, University of Florida)

2006-2009 Herbarium Technician, Herbarium, Florida Museum of Natural History

# **TEACHING EXPERIENCE**

(\* indicates developed course)

# Lecturer, Archaeology Program, Boston University

- AR 100: Great Discoveries in Archaeology (~200 students Fall 2019, 2020; ~ 15 students Summer 2020). Large lecture course covering major discoveries in archaeology and discussing archaeological issues, such as looting, nationalism, and decolonization as archaeological theory. Supervision of four archaeology graduate students (Fall semesters) teaching fellows in discussion sections.
- *AR 280: Eating and Drinking in the Ancient World* (~30 students; Spring, 2020). Writing intensive course that surveys the archaeological evidence for the diets of human societies from the earliest humans to the present. An emphasis is placed on understanding the social contexts of food and drink.

- *AR 290: Archaeology of Environmental Change*\* (~20 students; Fall 2019, 2020). Discussion course examining human impacts on the global landscape over the past 100,000 years through migration, hunting, disease, agriculture, and other cultural activities.
- AR 307: Archaeological Science (~15 students; Fall 2019). Lab course introducing students to a variety of natural and earth science approaches in modern archaeology, including dating, reconstructing past environments, and the analysis of mineral and biological remains. Lab sections provide hands-on experience with different analysis techniques. Supervision of two archaeology graduate student teaching fellows running lab sections.
- AR506: Regional Archaeology and Geographic Information Systems\* (~ 5 students; Fall 2020). Applied graduate course on geospatial approaches to archaeology. Methods include archaeological and environmental data manipulation in ArcGIS and R, and using geospatial methods for testing hypotheses and modeling the archaeological record.
- AR894/AN794: Scientific Applications in Anthropological Archaeology\* (~ 12 students; Spring 2020). Graduate seminar exploring news ways of addressing archaeological research questions through the application of cutting-edge scientific techniques. Students are expected to complete either a practical or theoretical project over the course of the semester.

# Instructor, South Carolina Honors College and Department of Anthropology, University of South Carolina:

- ANTH 161: Human Origins: An Introduction to Biological Anthropology (~15-20 students per section; 14 sections across Fall 2017, Spring 2018, Fall 2018, Spring 2019). Introduction to biological anthropology taught to honors students in a small-course format with a weekly laboratory session in addition to lecture.
- ANTH 361: Becoming Human\* (~18 students; Spring 2018). Upper level human evolution discussion course including both classic and cutting-edge studies of the discoveries and interpretations of the human fossil record.

# Graduate Teaching Fellow, Emory University Office of Sustainability Initiatives and Center for Community Partnerships:

- *IDS 206: Foundations of Sustainability*\* (~20 students; Fall 2014). Introductory course for Department of Anthropology's Sustainability Minor.
- *REL 380R/ANT 386/SOC 389: Internships in Sustainability*\* (3-5 students; Fall 2013, Spring 2014). Small group discussions on community-based experiences with students in semester long engaged internships.

# Graduate Teaching Instructor, Department of Anthropology, Emory University:

ANT 200/NBB 201: Foundations of Behavior (~200 students; Spring 2012). Introductory course for neuroscience and neurobiology anthropology track.

- ANT 201: Concepts and Methods in Biological Anthropology (~30-120 students; Spring 2011, Spring 2013). Introduction to biological anthropology with small lecture size and in-class activities (Spring 2013) and large lecture format with smaller lab breakout sections (Spring 2011).
- ANT 204: Introduction to Archaeology (~75 students; Fall 2011). Introduction to archaeology with in-class lab activities.
- ANT 312: Human Osteology and Skeletal Biology (~15-20 students; Spring 2011). Intensive hands-on training in identification of human skeletal elements with supplementary lectures in bone biology and development.
- ANT 382/ENV385: Ecological Context of Human Evolution\* (~15 students; Spring 2012). Redesigned upper-level undergraduate course with readings on major topics and techniques in the study of paleoecology of human evolution.

# SEMINARS AND TRAINING

- 2018-2019 University of South Carolina Center for Teaching Excellence: Teaching Towards Inclusive Excellence
- 2017-2018 University of South Carolina Center for Teaching Excellence: New Faculty Academy
- 2013 Emory University Laney Graduate School Proposal Writing Institute
- 2012-2013 Emory University Piedmont TATTO Fellow in Sustainability, Teaching, and Curriculum

#### SELECT AWARDS AND TEACHING FELLOWSHIPS

2014 American Association of Physical Anthropologists Pollitzer Travel Award (\$500)

Paleoanthropology Society Conference Student Travel Award for Presentation (\$300)

2013 Emory University Office of Sustainability Initiatives/Center for Community Partnerships Graduate Student Teaching and Outreach Fellow, 2013-2015

Emory University Dean's Teaching Fellowship, 2013-2014 (rejected in favor of OSI/CFCP position)

- 2011 American Association of Physical Anthropologists Pollitzer Travel Award (\$500)
- 2009 University of Florida Valedictorian

2007 Florida Society of Geographers Best Undergraduate Paper, 43<sup>rd</sup> Annual Meeting, Jacksonville, Florida: "Effects of the Kissimmee River Restoration Project."

# **SERVICE**

2014	Organizer and Presenter: Imagining America National Conference, Atlanta, Georgia (hosted by Emory University)
2013	Sustainability Outreach and Programming Coordinator: Latino Youth Leadership Conference hosted at Emory University
2012-2014	Graduate Student Member: Emory College Dean's Climate Action Plan Committee
2012-2014	Emory University Center for Community Partnerships Project SHINE community outreach and volunteer coordinator for service-based learning
2012-2013	Graduate Student Member: Emory University's Undergraduate Learning Assessment Committee
2009-2012	Student Representative: Department of Anthropology Graduate Concerns Committee

Ad Hoc Reviewer: *Nature Ecology and Evolution; Palaeogeography, Palaeoclimatology, Palaeoecology; Historical Biology; The Leakey Foundation; Oxford University Press* 

# **MEDIA INTERVIEWS**

2017 For: Late Pliocene environmental change during the transition from *Australopithecus* to *Homo. Nature Ecology and Evolution.* 

First Humans Stuck to Vegan Diet as Grasses Spread in Africa. Inverse Science. <u>https://www.inverse.com/article/31625-human-evolution-meet-eating-vegan-africa-grassland-hunting</u>

#### **MENTORING**

**Undergraduate Honors Theses Advised:** Monique Osigbeme (2011)

#### **PROFESSIONAL AFFILIATIONS**

American Association of Physical Anthropologists Paleoanthropology Society Society for Vertebrate Paleontology Society for American Archaeology Geological Society of America