

MEGAN F. COLE

University of New Mexico
Department of Anthropology
MSC 01 1040
500 University Blvd NE
Albuquerque, NM 87106

Email: megancole@unm.edu
Website: <https://anthropology.unm.edu/people/grad-students/profile/megan-cole.html>
Twitter: https://twitter.com/megan_f_cole

EDUCATION

- 2020-present PhD Candidate, University of New Mexico Department of Anthropology
Graduate Student Researcher, Kibale Chimpanzee Project
Advisor: Melissa Emery Thompson
- 2020 MS (*with Distinction*), University of New Mexico Department of Anthropology
- 2013 BS (*with High Honors*), University of Michigan, Ann Arbor
Double major in Evolutionary Anthropology and Environmental Studies
Minor in Ecology and Evolutionary Biology
Senior honors thesis: "Intergroup encounters in Honduran mantled howler monkeys (*Alouatta palliata*)"
Advisor: Jacinta Beehner

ACADEMIC APPOINTMENTS AND EMPLOYMENT

- 2018-present Graduate Assistant, University of New Mexico Department of Anthropology
Graduate Research Fellow, National Science Foundation
- 2016-2018 Lab Manager, Cognitive Evolution Group (PI: Alexandra Rosati)
University of Michigan Department of Psychology (from Sept. 2017)
Harvard University Department of Human Evolutionary Biology (2016-2017)
- 2015 Research Associate, Center for Zoo Animal Welfare (Supervisor: Stephanie Allard)
Detroit Zoological Society
- 2013-2014 Research Assistant, Comparative Analysis of Baboon Sociality Project (Supervisor: Eila Roberts)
Uaso Ngiro Baboon Project (2014)
Filoha Hamadryas Project (2013)

RESEARCH INTERESTS

Primate social behavior, physiology, life history, temperament, cooperation, collective action, social cognition, health & energetics

GRANTS AND AWARDS

External

- 2023 Best student presentation prize, Southwestern Association of Biological Anthropologists Annual Meeting
\$200 prize
- 2023 Student presentation honorable mention, American Association of Biological Anthropologists Annual Meeting
- 2022-2024 Doctoral Dissertation Research Improvement Grant, National Science Foundation
Proposal: “Doctoral Dissertation Research: Exploring the evolutionary origins of prestige in wild primates”
\$15,150 for dissertation research
- 2020-2021 Research Grant, Leakey Foundation
Proposal: “Are there multiple paths to social influence in wild chimpanzees?”
\$15,000 for dissertation research. Declined.
- 2019-2024 Graduate Research Fellowship, National Science Foundation
Proposal: “Behavioral aging in wild chimpanzees (*Pan troglodytes*): A test of social selectivity”
\$46,000/year (\$138,000 total) for stipend and education allowance
- 2018 Best student poster prize, Southwestern Association of Biological Anthropologists Annual Meeting
\$100 prize
- 2018 Graduate Research Fellowship Honorable Mention, National Science Foundation
Proposal: “Reproductive aging in wild female chimpanzees (*Pan troglodytes*)”

Internal

- 2021 New Mexico Research Grant, UNM Graduate & Professional Student Association
\$3,000 for dissertation research
- 2021 Professional Development Grant, UNM Graduate & Professional Student Association
\$145 for conference travel
- 2018-2021 Student Research Grant, UNM Graduate & Professional Student Association
\$500/award (\$2,000 total) for conference travel, dissertation pilot research, and dissertation research
- 2020 Frieda D. Butler Award, UNM Department of Anthropology
\$500 scholarship to outstanding master’s level student
Public talk: “Healthy cardiovascular profiles across the lifespan in wild-born chimpanzees (*Pan troglodytes*)”

- 2019 Rogers Research Award, UNM Office of Graduate Studies
\$1,200 for dissertation pilot research
- 2019 Student Conference Award, UNM Career Services
\$600 for conference travel
- 2018-2020 Harvey C. and Sarah M. Moore Fellowship, UNM Department of Anthropology
\$5,000/year (\$15,000 total) for recruitment of incoming graduate students
- 2012 Individual Academic Enrichment Fund, UM School of Natural Resources and Environment
\$500 for senior honors thesis research
- 2012 Undergraduate Fellowship Award, UM Department of Anthropology
\$1000 for senior honors thesis research
- 2010-2012 Nondegree Honors Award, UM Honors College (equivalent to Dean's list)

PUBLICATIONS AND PRESENTATIONS

Refereed Journal Articles

- In prep* **Cole, M.F.**, Fox, S.A., Muller, M.N., Otali, E., Machanda, Z., Wrangham, R.W., Emery Thompson, M. Individual differences in baseline cortisol predicts grooming network size in wild chimpanzees. Target journal: *Hormones and Behavior*.
- In review* **Cole, M.F.**, Barnes, P., Rukundo, J., Emery Thompson, M. Rosati, A.G. Age-related physiological dysregulation progresses slowly in semi-free-ranging chimpanzees. *Evolution, Medicine, and Public Health*.
- In review* Rosati, A.G., Felsche, E., **Cole, M.F.**, Atencia, R., Rukundo, J. Flexible information-seeking in chimpanzees. *Cognition*.
- In review* Sabbi, K.H., Kurilla, S.E., Monroe, I.G., Zhang, Y., Menante, A., **Cole, M.F.**, Otali, E., Kobusingye, M., Emery Thompson, M., Muller, M.N., Wrangham, R.W., and Machanda, Z.P. Seasonal variation in adult social play reveals a hidden cost of motherhood for wild chimpanzees. *Current Biology*.
- 2023 Dunay, E., Rukundo, J., Atencia, R., **Cole, M.F.**, Cantwell, A., Emery Thompson, M. Rosati, A.G., Goldberg, T.L. Viruses in saliva from sanctuary chimpanzees (*Pan troglodytes*) in Republic of Congo and Uganda. *PLoS ONE*. 18(6): e0288007
<https://doi.org/10.1371/journal.pone.0288007>
- 2022 Dunay, E., Owens, L., Dunn, C.D., Rukundo, J., Atencia, R., **Cole, M.F.**, Cantwell, A., Emery Thompson, M. Rosati, A.G., Goldberg, T.L. Viruses in sanctuary chimpanzees across Africa. *American Journal of Primatology*: e23452.
<https://onlinelibrary.wiley.com/doi/10.1002/ajp.23452>

- 2020 **Cole, M.F.**, Cantwell, A., Rukundo, J., Ajarova, L., Fernandez-Navarro, S., Atencia, R., & Rosati, A.G. Healthy cardiovascular biomarkers across the lifespan in wild-born chimpanzees (*Pan troglodytes*). *Philosophical Transactions of the Royal Society B*. 375: 20190609. <https://royalsocietypublishing.org/doi/abs/10.1098/rstb.2019.0609>

Invited Talks

- 2023 Tufts University Biology Department
2023 Boston University Evolutionary Endocrinology course
2023 University of Michigan Evolution and Human Adaptation Program
2021 Frieda D. Butler Memorial Lecture. University of New Mexico Department of Anthropology, Anthropology Colloquia Speaker Series.

Refereed Conference Abstracts

- 2023 **Cole, M.F.**, Fox, S.A., Muller, M.N., Oтали, E., Machanda, Z., Wrangham, R.W., Emery Thompson, M. Trait-level cortisol predicts grooming partner diversity in wild chimpanzees. 8th Annual Meeting of the Southwestern Association of Biological Anthropologists. Tucson, Arizona (podium). ***Awarded best student presentation prize.***
- 2023 **Cole, M.F.**, Fox, S.A., Muller, M.N., Oтали, E., Machanda, Z., Wrangham, R.W., Emery Thompson, M. Trait-level cortisol predicts grooming behavior in wild chimpanzees (*Pan troglodytes*). 29th Congress of the International Primatological Society. Kuching, Malaysia (podium).
- 2023 Sabbi, K.H., Kurilla, S., Monroe, I., **Cole, M.F.**, Menante, A., MacKenzie, C.C., Zhang, S., Oтали, E., Muller, M.N., Emery Thompson, M., Wrangham, R.W., Machanda, Z. Seasonal fluctuations in adult social play differ for mothers versus others among wild East African chimpanzees (*Pan troglodytes schweinfurthii*). 29th Congress of the International Primatological Society. Kuching, Malaysia (podium).
- 2023 **Cole, M.F.**, Fox, S.A., Muller, M.N., Oтали, E., Machanda, Z., Wrangham, R.W., Emery Thompson, M. Individual differences in baseline cortisol and cortisol reactivity among wild chimpanzees (*Pan troglodytes*) at Kanyawara. 92nd Annual Meeting of the American Association of Biological Anthropologists. Reno, Nevada (poster). ***Awarded student presentation honorable mention.***
- 2022 Sabbi, K.H., Kurilla, S., Monroe, I., **Cole, M.F.**, Menante, A., MacKenzie, C.C., Zhang, S., Oтали, E., Muller, M.N., Emery Thompson, M., Wrangham, R.W., Machanda, Z. Grown-Ups Can Have Fun, Too: Social Play Among Wild Adult Chimpanzees (*Pan troglodytes schweinfurthii*). 18th Annual Midwest Primate Interest Group Conference. Ann Arbor, MI (podium).
- 2022 Sabbi, K.H., Kurilla, S., Monroe, I., **Cole, M.F.**, Menante, A., MacKenzie, C.C., Zhang, S., Oтали, E., Muller, M.N., Emery Thompson, M., Wrangham, R.W., Machanda, Z. Grown-Ups Can Have Fun, Too: Social Play Among Wild Adult Chimpanzees (*Pan troglodytes schweinfurthii*). 44th Meeting of the American Society of Primatologists. Denver, Colorado (podium).

- 2022 Sabbi, K.H., **Cole, M.F.**, Kurilla, S.E., Menante, A., Monroe, I.G., Emery Thompson, M., Muller, M.N., Oтали, E., Wrangham, R.W., Machanda, Z.P. Playing with purpose: sex differences in social play among wild adult chimpanzees (*Pan troglodytes schweinfurthii*). 91st Annual Meeting of the American Association of Biological Anthropologists. Denver, Colorado (podium).
- 2022 **Cole, M.F.**, Fox, S.A., Machanda, Z.P., Oтали, E., Muller, M.N., Wrangham, R.W., & Emery Thompson, M. Urinary T3 levels in wild chimpanzees (*Pan troglodytes*) at Kibale National Park, Uganda. 28th Congress of the International Primatological Society. Quito, Ecuador (podium). ***Withdrawn due to COVID-19.***
- 2022 Emery Thompson, M., **Cole, M.F.**, & Rosati, A.G. The ecological context of chimpanzee (*Pan troglodytes*) health. 28th Congress of the International Primatological Society. Quito, Ecuador (podium).
- 2021 Dunay, E., Owens, L.A., Dunn, C.D., Rukundo, J., Cole, **M.F.**, Emery Thompson, M., Rosati, A.G., Goldberg, T.L. Viral surveillance in sanctuary chimpanzees (*Pan troglodytes*) in Africa. 17th Annual Midwest Primate Interest Group Conference. Chicago, Illinois (podium).
- 2020 **Cole, M.F.**, Emery Thompson, M., Rukundo, J., Fernandez-Navarro, S., Atencia, R., Goldberg, T. L., & Rosati, A.G. Healthy blood lipid profiles in wild-born chimpanzees (*Pan troglodytes*) are associated with low adiposity and inflammation. 89th Annual Meeting of the American Association of Physical Anthropologists. Los Angeles, California (podium). ***Conference cancelled due to COVID-19.***
- 2019 **Cole, M.F.**, Emery Thompson, M., Rukundo, J., Fernandez-Navarro, S., Atencia, R., Goldberg, T. L., & Rosati, A.G. Healthy blood lipid profiles in wild-born chimpanzees (*Pan troglodytes*) are associated with low adiposity and inflammation. 7th Annual Meeting of the Southwestern Association of Biological Anthropologists. Tempe, Arizona (podium).
- 2019 **Cole, M.F.** & Rosati, A.G. Biomarkers of cardiac health across the lifespan in wild-born chimpanzees. 88th Annual Meeting of the American Association of Physical Anthropologists. Cleveland, Ohio (podium).
- 2018 **Cole, M.F.** & Rosati, A.G. Biomarkers of cardiac health in sanctuary versus laboratory-living chimpanzees. 6th Annual Meeting of the Southwestern Association of Biological Anthropologists. Las Vegas, Nevada (poster). ***Awarded best student poster prize.***

Other Contributed Presentations

- 2015 Cole, M.F. The effects of temperature and dominance on behavior and use of space in Japanese macaques (*Macaca fuscata*). Detroit Zoological Society. Royal Oak, Michigan (podium).

- 2013 Cole, M.F. Intergroup encounters in Honduran mantled howler monkeys (*Alouatta palliata*). University of Michigan Department of Anthropology Honors Symposium. Ann Arbor, Michigan (poster).

RESEARCH EXPERIENCE

- 2019-present Kibale National Park, Uganda
2 months of pilot dissertation data collection with wild chimpanzees. Conduct focal follows and collect urine samples for endocrine analysis.
Role: Graduate student researcher
- 2018-present Comparative Human and Primate Physiology Laboratory, UNM
Analyze steroid hormones and markers of energetics and immune function using enzyme-linked immune assay (ELISA) and radioimmunoassay (RIA) methods.
Role: Graduate student researcher
- 2017-2018 Duke Lemur Center, Durham, North Carolina
2 months of field research with multiple species. Assisted in research examining cognition and behavior, including studies on social cognition & decision-making.
Role: Cognitive Evolution Group lab manager
- 2016-2018 Ngamba Island Chimpanzee Sanctuary, Uganda
3 months of field research with semi-free-ranging chimpanzees. Conducted research on health, cognition, and behavior. Assisted in veterinary health checks, including processing biological samples and conducting point-of-care testing.
Role: Cognitive Evolution Group lab manager
- 2016-2018 Cayo Santiago Field Station, Puerto Rico
2 months of field research with semi-free-ranging rhesus macaques. Assisted in research examining cognition and behavior.
Role: Cognitive Evolution Group lab manager
- 2015 Detroit Zoological Society
7 months of research with a variety of species. Assisted in research examining captive animal welfare; conducted independent project with Japanese macaques.
Role: Research associate
- 2014 Uaso Ngiro Baboon Project, Laikipia, Kenya (Director: Shirley Strum)
6 months of field research with Anubis baboons examining social behavior. Conducted focal follows, collected fecal samples, and maintained database.
Role: Research assistant
- 2013 Filoha Hamadryas Project, Awash NP, Ethiopia (Director: Larissa Swedell)
9 months of field research with Hamadryas baboons examining social behavior. Conducted focal follows, collected fecal samples, and maintained database.
Role: Research assistant

- 2012-2013 Core Assay Facility, UM Psychology (Director: Jacinta Beehner)
Processed, extracted, and analyzed salivary and fecal hormones using
radioimmunoassay (RIA) methods
Role: Laboratory assistant
- 2012 Operation Wallacea, Rancho Manacal, Honduras
Collected demographic, behavioral, vocal, and geospatial data on howler monkeys
for honors thesis project.
Role: Undergraduate student researcher
- 2011-2012 African Drylands Research Group, UM SNRE (PI: Bilal Butt)
Conducted spatial and statistical analyses of wildlife-livestock interactions, performed
literature reviews and created Access database.
Role: Research assistant

TEACHING AND MENTORSHIP

Teaching Assistantship (Instructor of record)

- Fall 2023 ANTH 1135L: Introduction to Biological Anthropology Laboratory

Graduate Assistantship

- Spring 2024 ANTH 1135: Evolution and Human Emergence (online). Instructor: Sherry Nelson
Spring 2020 ANTH 150: Evolution and Human Emergence. Instructor: Sherry Nelson
Fall 2019 ANTH 360: Human Behavioral Ecology. Instructor: Martin Muller
Spring 2019 ANTH 360: Human Behavioral Ecology (online). Instructor: Martin Muller
Fall 2018 ANTH 150: Evolution and Human Emergence (online). Instructor: Martin Muller

Guest Lectures

- 2019 “Cooperation.” Human Behavioral Ecology. Instructor: Martin Muller (UNM)
2018 “Conducting Research on non-human animals.” Advanced Laboratory in
Developmental Psychology. Instructor: Margaret Echelbarger (UM)

*Mentored 3 graduate and 1 undergraduate students on basic laboratory protocols and ELISA
(enzyme-linked immunosorbent assay) techniques

SERVICE

Professional and Community Service (Selected)

- 2023 Review committee graduate student, Mid-probationary review for Joshua Shapero
2023-present Ad hoc reviewer for Leakey Foundation, *Primates*
2023-present Committee Member, UNM Evolutionary Anthropology Journal Club
2022 “What research on nonhuman primates can tell us about human evolution.”
Manzano High School. Albuquerque, NM. (talk)
2021-present Contributor, Primate Learning in Action
2018-2021 Events coordinator, UNM Advancing Women in Science
2019 Panelist, UNM Undergraduate Anthropology Society “Speed Mentoring”
2019 Panelist, UNM Anthropology Graduate Student Union Conference “Undergrad
Research in Anthro: A How-To Guide”
2017 Workshop leader, Females Excelling More in Math, Engineering and Science
(FEMMES). Ann Arbor, MI

- 2016 “Chimpanzee conservation and welfare.” Beaumont Elementary School. Waterford, MI (talk).
- 2015 “Chimpanzee conservation and welfare.” Stone Lodge Retirement Home. Sisters, OR (talk).

Media Coverage

[National Geographic](#): What wild chimps can teach humans about healthy aging

[UNM News](#): Chimpanzee research may shed new light on human aging

[UMich News](#): Researchers find cardiovascular health similarities between chimpanzees, humans

Professional Membership

- 2023-present International Society for Evolution, Medicine, and Public Health
- 2020-present International Primatological Society
- 2018-present American Association of Biological Anthropology