

Education

Ph.D., Evolutionary anthropology, current student

Department of Anthropology, University of New Mexico

Primary advisor: Dr. Martin Muller

B.S., Biology and Religion, *cum laude*

Department of Biology and Department of Religion, Tufts University

Advisors: Dr. Zarin Machanda (biology), Dr. Kenneth Garden (religion)

Research Experience

1. Inkawu Vervet Project, University of Lausanne

Nov. 2022 - May 2023

Field Assistant at Mawana Game Reserve, Kwazulu-Natal, South Africa

- Collected ad libitum data, completed focal follows, and retrieved fecal samples six days a week in two troops of vervet monkeys: Kubu (24 individuals) and Baie Dankie (75 individuals)
- Collaborated with masters students to complete cognitive experiments in the field.
- Taught newly arrived field assistants to identify individuals and navigate territories in my assigned groups.

2. Kibale Chimpanzee Project, Tufts University

May 2021 - May 2022

Research Assistant, Thesis Candidate

Senior thesis: Strategic social aggression among wild chimpanzee males

- Matched 50000+ aggressive events back to daily all occurrence data to create a 7300 datapoint set of grooming interruptions.
- Created a subset of grooming interruptions focusing only on adult male aggressors and grooming dyads comprising 2 adult males.
- Analyzed effects of ordinal and categorical rank, age, and hierarchy environment on rates of aggressive grooming interruption.
- Contextualized results using both the social bonds hypothesis and biological market theory frameworks.

3. Department of Research, North Carolina Zoo

June 2021 - Aug. 2021

Research Intern

- Developed an ethogram used to then complete 150+ hours of observation on a pair of North American river otters.
- From collected data, created monthly activity budgets, evaluated habitat space use by focal individuals, and discerned effects of guest presence.
- Implemented novel enrichment on-habitat to address stereotypes in collaboration with zoo administration.

4. Starks Lab, Tufts University

Sept. 2020 - May 2021

Research Assistant

- Collaborated with a Ph.D. student to create an experimental design and evaluate behavioral responses to heat stress in acorn ants.
 - Maintained study subjects and performed trials weekly; recorded data and organized it for analysis.
 - Synthesized and evaluated findings in two papers and a presentation for a committee.
 - Attended and contributed weekly progress updates to Starks Lab meetings.
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Professional Activities

1. Sabbi, K.H., **Matthews E.J.**, Zhang, S., Muller, M.N., Otali, E., Emery Thompson, M., Wrangham, R.W., and Machanda, Z.P. (2023) Dominance style and strategic sociality among alpha males in a community of wild chimpanzees (*Pan troglodytes schweinfurthii*). **Conference talk, AABA 2023.**

Awards

Lily Glidden Award

May 2022

Department of Biology, Tufts University

Scholarship awarded to students pursuing “paths that lead to their dreams of exploring and understanding the natural world”.

Skills

Data analysis: R (GLMM design and interpretation, plot creation), Microsoft Access, Microsoft Excel

Data collection: Zoo Monitor, CyberTracker