Zoë Tierra Rossman

University of New Mexico ztrossman@unm.edu

Education

University of New Mexico 2019-present

Doctor of Philosophy in Biology Advisor: Dr. Felisa Smith

Anticipated graduation: Fall 2024

University of New Mexico 2019-2022

Master of Science in Biology Advisor: Dr. Felisa Smith

University of California, Davis 2013-2017

Bachelor of Science with High Honors Evolution, Ecology, and Biodiversity

Research Experience

Research Assistant: UNM Center for Stable Isotopes

2020

Analyzed samples submitted to the UNM CSI for bulk stable isotope analysis, and correcting output data to send back to researchers

Researcher: UC Davis Dept. of Population Health & Reproduction

2015-2019

Designed and conducted studies on yawning behavior and interspecific and intraspecific contagious yawning behavior in a group of captive African elephants. Designed and conducted a study on elephant-initiated interactions with humans.

Field Assistant: African Elephant Research Unit

2017

Assisted in observations of self-directed behaviors and collection of saliva samples for cortisol analysis from a group of captive African elephants.

Student Researcher: UC Davis Dept. of Wildlife, Fish, & Conservation Biol.

2014-2015

Examined the evolutionary origins of panda coloration. Scored the coloration patterns of over 200 terrestrial carnivores and collected information on independent variables using NASA TERRA/MODIS and IUCN data on QGIS.

Student Researcher: UC Davis Dept. of Wildlife, Fish, & Conservation Biol.

2013-2014

Used Google Earth and GE Grids to map Eastern Africa for anthropogenic land conversion to determine prospective wildlife corridors.

Teaching Experience

Instructor of Record UNM BIOL 402-22/502-22 (BioBLOG)

Fall 2022

Guest Lecturer: UNM BIOL 303 (Ecology & Evolution) – "Ecosystem Processes" March 3, 2020 Lectured for two upper-division ecology and evolution sections on ecosystem processes.

Teaching Assistant: UNM BIOL 304 (Plant and Animal Form & Function)

Fall 2019

Taught two upper-division lab sections on plant and animal physiology. Lectured and oversaw a variety of lab activities weekly. Taught skills such as graphing and statistical analyses using Microsoft Excel.

Publications

- **Rossman ZT**, Padfield C, Young D, Hart BL, and Hart LA (2020). Contagious yawning in African Elephants (*Loxodonta africana*): Responses to Other Elephants and Familiar Humans. Front. Vet. Sci. 7:252. doi: 10.3389/fvets.2020.00252.
- **Rossman ZT**, Padfield C, Young D, and Hart LA (2017). Elephant-Initiated Interactions with Humans: Individual Differences and Specific Preferences in Captive African Elephants (*Loxodonta africana*). Front. Vet. Sci. 4:60. doi: 10.3389/fvets.2017.00060.
- Rossman ZT, Hart B, Greco B, Young D, Padfield C, Weidner L, Gates J, and Hart LA (2017). When Yawning Occurs in Elephants. Front. Vet. Sci. 4:22. doi: 10.3389/fvets.2017.00022.
- Caro T, Walker H, **Rossman Z**, Hendrix M, and Stankowich T (2017). Why is the giant panda black and white?. Behav. Ecol. arx008. doi: 10.1093/beheco/arx008
- Jacobson A, Dhanota J, Godfrey J, Jacobson H, **Rossman Z**, Stanish A, Walker H, and Riggio J (2015). A novel approach to mapping land conversion: an application to East Africa. Environmental Modelling & Software 72:1-9. doi: 10.1016/j.envsoft.2015.06.011

Presentations

- **Rossman ZT**, Gehrt S, Newsome SD. "Niche partitioning and individual diet specialization in a community of urban carnivores." International Urban Wildlife Conference, June 2020 (oral presentation).
- **Rossman ZT**, Gehrt S, Newsome SD. "Niche partitioning and individual diet specialization in a community of urban carnivores." IsoEcol, May 2020 (poster presentation).
- **Rossman ZT**, Gehrt S, Newsome SD. "Niche partitioning and individual diet specialization in a community of urban carnivores." UNM Center for Stable Isotopes Brown Bag Seminar Series, October 19, 2020 (oral presentation).
- **Rossman ZT.** "When yawning occurs in elephants." Presented at the UC Davis Undergraduate Research Conference, April 29, 2017 (oral presentation).
- **Rossman ZT**. "Elephant-initiated interactions with humans: individual differences and specific preferences." Presented at the UC Davis Undergraduate Research Conference, April 9, 2016 (oral presentation) and at the UC Davis Veterinary Medicine Undergraduate Research Symposium, April 15, 2016 (oral presentation).

Science Communication

KKOB "The Weekend with Terry Travis." Coyotes Among Us. July 9, 2022.

New Mexico PBS "Our Land." Living in Harmony with Urban Wildlife. December 12, 2021.

Sky Island Alliance Seminar Series: <u>Living Well and Coexisting with Urban Wildlife.</u> November 4, 2021

UNM BioBlog Wile E. Coyote in the City. September 21, 2021

Skype a Scientist: 9th grade biology, September 16, 2021; 5th grade science, January 17, 2022.

Anthropo Scene Podcast Coyote Not So Ugly. July 7, 2021

Sonoran Desert Museum "Sips With Scientists" Incredible Coyotes! March 3, 2021

Curiosity Daily Podcast: <u>Lockdown Is Changing Our Perception of Time, a Devastating Meteor</u> that Never Landed, and Elephants Can Catch Yawns from Humans. June 22, 2020

Fellowships & Grants

National Science Foundation Graduate Research Fellowship	2019-2024
Grove Summer Research Scholarship (UNM)	2022
Joseph Gaudin Scholarship (UNM)	2020, 2021, 2022
American Society of Mammalogists Grants-in-Aid of Research	2020, 2021
GRAC Research Award (UNM)	2020, 2021
GRAC Travel Award (UNM)	2020
Provost's Undergraduate Fellowship (UC Davis)	2016
Honors & Awards	
Evolution & Ecology Departmental Citation (UC Davis)	2017
Chancellor's Award for Excellence in Undergraduate Research Honorable Me	ntion (UC Davis) 2017
Service	
UNM Biology Undergraduate Society (BUGS) Mentoring Coordinator	2022/2023
UNM Biology Graduate Research Allocation Committee (GRAC) Chair	2021/2022