

Tori Spencer

CURRICULUM VITAE

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RESEARCH INTERESTS

- Fish ecology, food webs, functional traits, biogeography, phylogeny and conservation

EDUCATION

Texas A&M University – College Station, TX: Aug 2020 – Present (in progress)

- PhD in Ecology and Evolutionary Biology, Winemiller Aquatic Biology Lab
- Specialized in multivariate analysis and Bayesian mixing models in R
- Academy of Future Faculty certification

Lincoln University – Jefferson City, MO: 2017 – 2020

- B.S. Biology, Chemistry minor, *summa cum laude*
- Research and Presentation Emphasis
- *STEM Alliance* Student Organization President (Spring 2019)

St. Louis Community College – Forest Park, MO: 2008 – 2012

- A.A. Communication Arts and Multimedia, *cum laude*

AWARDS/SCHOLARSHIPS

- NSF GRFP (2021)
- The Chris Cattaneo Memorial Scholarship (2020)
- GEM Associate Fellow (2020)
- NSF GRFP Honorable Mention (2020)
- Texas A&M *Graduate Diversity Excellence Fellowship* (2020)
- The UCLA *Diversity Project / Pathways to PhDs in Marine Science* 2020 [Covid Cancelled]
- TAMU EEB Travel Grant (2020)
- selected for the Lincoln University *Spring Break Study Abroad* program (2020)
- *First Place Oral Presenter*, Show Your Stripes Research and Creative Showcase (2019)
- *Outstanding Achievement in Animal Health & Production & Animal Products for Undergraduate Student Competitive Poster Presentations [Second Place]*, Association of Research Directors (2019)
- *Third Place Poster Presenter*, Louis Stokes Alliance for Minority Participation Annual Meeting (2018)
- *Outstanding Academic Achievement in Biology Award*, Lincoln University (2018)

PROFESSIONAL EXPERIENCE

Edox of America LLC – St. Louis, MO: Jan 2021 – Present

Collaborator/Content Writer/Editor

Edits and creates content for a workflow developer and women's advocate who provides resources to the local community and technical support to small businesses.

Texas A&M University – College Station, TX: August 2020 – May 2021

TA

Created lecture slides, graded assignments and taught sections of the 2-part introduction to biology laboratory courses.

Mote Marine Laboratory – Sarasota, FL: June-August 2020

Shark and Ray Conversation Research Program: Intern

Daily animal husbandry and systems maintenance for a marine research facility. Included 2 offshore field surveys to collect data from local shark species aboard research vessels using longline and drumline equipment, megafauna beach fishing, and other tag and release methods.

Accelerated Nanotechnology Training – Norfolk, VA: July 2020

Primary Cohort Student

A three week intensive that introduced cleanroom etiquette, the basics of lithography, etching, layering and mask production.

Monsanto/Belcan – Creve Coeur, MO: April-May 2020

Extractions Team: Laboratory Technician

Crop science laboratory operations, sample and reagent preparation. Fast-paced, larger scale data generation using laboratory automation technology, LIMS and Kraken software to manage workflow.

The Watering Bowl – St. Louis, MO: January-April 2020

Day Care Attendant

Attendant for a free range kennel service provider. Animal handling and care experience including bathing, nails, safe animal holds and behavioral redirection.

Anthropology Research Course – Lincoln University, MO: Fall 2019

Research Assistant

Analyzed an archaeological collection previously excavated from the Don Carlos Homestead site (Moniteau County, MO) for implications of socioeconomic status found among the glass artifacts. The finding of this research will be presented at a professional conference and have been accepted to a research journal for publication.

Great Lakes Internship – Lincoln University, MO: 2018 - 2019

Cooperative Research: Aquaculture and Aquaponics Intern

Managed an aquaculture facility, aquaponics system, research wet lab and dry lab. Animal handling, husbandry and training for aquatic species. Performed experiments (fish feed studies and antagonist behavior studies, aquaponics investigations, invasive insect trap-building) and sampled water quality. Represented Lincoln University at an interactive animal display for The St. Louis Science Center's annual SciFest event (in both 2018 and 2019).

Missouri State Parks – Department of Natural Resources, MO: 2018 – 2019

Assistant Natural Research Steward

Contracted to use taxonomic information and data entry to catalog Missouri native pollinators. Organized a collection of bee specimens from a 3-year project for submission to a natural history museum.

Great Lakes Internship – Lincoln University, MO: 2018

Cooperative Research: Laboratory Intern

Co-designed a market survey, wrote scientific literature and began triplicate experimentation on an ICP-MS and mercury analyzers to assess nutritional content and trace element levels in fish available in central Missouri. Used DOLT-4 and DOLT-5 standards. Assisted with water quality sampling for a longitudinal analysis.

Academic Support Center – Lincoln University, MO: 2018

Canvas Mentor

Oversaw the webpages for student tutors through the semester. Worked closely with management to facilitate improved relations between students and faculty. Used excel spreadsheets to perform data entry.

Academic Support Center – Lincoln University, MO: 2017 – 2018

SI Leader

Facilitate supplemental tutoring 3x a week for psychology and biology courses. Maintained a university resource webpage. Wrote lesson plans and attended lectures with students. Work closely with professors to coordinate resources. Provide mentoring by promoting successful college habits.

STEM Alliance – Jefferson City, MO: 2017 – 2018

President/Speaker/Moderator

Moderated on-campus events, discussions and fishbowl discussions that aim to raise awareness and promote student involvement in college affairs.

Psychology Research Course – Lincoln University, MO: 2017- 2018

Research Assistant

Designed a survey and a corresponding intervention aimed at changing biased beliefs towards stigmatized groups. Analyzed data and wrote reports for presentation at professional conferences.

Stark Caverns - Eldon, MO: 2017

Tour Guide/Conservation Lead

Gave educational tours at a 200-year-old cave. Participated in exploration surveys inside the cave. Served as the lead coordinator for all conservation projects including the introduction of cover crops and cave flora, coordinating fish stock for recreational fishing ponds and the reintroduction of Missouri wildflowers to attract pollinators.

Humane Society of Missouri-Macklind – Forest Park, MO: 2008 – 2009

Red Star Volunteer

Specialized in socializing “red star” or unpredictable and powerful shelter dogs awaiting adoption. Fostered appropriate behavior to ensure successful and long-term placement.

PUBLICATIONS

Spencer, T., Boston, C. (2019, Sept. 2). **Archaeological Study of The Don Carlos Homestead Site: Implications of Socioeconomic Status from Excavated Glass Artifacts**, *Missouri Archaeological Society Quarterly*.

Spencer, T. (2019). **Consistency is Futile!: Selecting Phycoremediators for Consortia**. *Bio 410 Spring 2019 Research Papers*. Blue Commons - Lincoln University Repository, <https://bluetigercommons.lincolnu.edu/bio-410/5/>

ARTICLES

Spencer, T., Boston, C. (2019, Dec. 7). **Spotlight on Students: Understanding Paleoanthropological Studies (Part 1)**. *Humerus Revelations of the Naked Ape*. <https://humerusrevelations.blogspot.com/2019/12/spotlight-on-students-understanding.html>

Spencer, T., Boston, C. (2019, Nov. 9). **Spotlight on Students: Cultural Relativism & Ethnocentrism (Part 2). Humerus Revelations of the Naked Ape.**
https://humerusrevelations.blogspot.com/2019/11/spotlight-on-students-cultural_9.html.

PROFESSIONAL PRESENTATIONS

**awarded a full travel award to attend and present at these conferences*

Spencer, T., Boston, C. (2019). **Archaeological Study Of The Don Carlos Homestead Site: Implications Of Socioeconomic Status From Excavated Glass Artifacts.** *MAS Annual Meeting*, Northwest Missouri State University, Maryville, Missouri (April 13, 2020) [Covid Cancelled].

Spencer, T. & Wetzel, J. (2019). **The effect of simulated Martian conditions on De Grace Snow Pea (*Pisum sativum*) productivity.** *ERN Conference*, Washington Marriott Wardman Park Hotel, Washington, DC (February 6-8, 2020)*.

Spencer, T. (2019). **The Relationship Between Diet and Evolution In Primates.** *Show Your Stripes Research and Creative Showcase*. Lincoln University, Jefferson City, Missouri.

Spencer, T. (2019). **Selecting Phycoremediators for Consortia.** *Show Your Stripes Research and Creative Showcase*. Lincoln University (April 11, 2019), Jefferson City, Missouri.

Spencer, T., Dudenhoeffer, G., & Wetzel, J. (2018). **Optimum Feed Enhancement Methods for Non-Domesticated Largemouth Bass *Micropterus salmoides* Fingerlings Feed Trained at Two Initial Sizes.** Presented four times: *Louis Stokes Midwest Center of Excellence*. Eaton Technical Open House, Southfield, Michigan (November 2, 2018)*, *Association of Research Directors*. Hyatt Regency Riverfront, Jacksonville, Florida (March 30-April 3, 2019)*, *LSMRCE Conference*. Sheraton Hotel, Indianapolis, Indiana (October 25-27, 2019)*, and *ABRCMS Conference*, Anaheim Convention Center, Anaheim, CA (November 13-16, 2019).

Martin, J., Spencer, T., & Aruguete, M. (2018). **Attitudes Towards Transgender People.** *Missouri Academy of Science*. University of Missouri Science and Technology (S&T). Rolla, Missouri (May, 1 2018).

Allee, A., & Espinoza Patharkar, C, et. al. (2018). **Imaging Proteins Inside Cells with Fluorescent Tags.** *Student Research Expo*. Lincoln University, Jefferson City, Missouri (April 20, 2018).

Martin, J., Spencer, T., & Aruguete, M. (April 11, 2018). **Changing Minds Toward Transgender People: A Classroom Intervention.** *Student Research Expo*. Lincoln University, Jefferson City, Missouri.

Spencer, T., Martin, J., & Aruguete, M. (March 23-25, 2018). **Changing Attitudes Towards Transgender People: An Intervention Experiment.** *Louis Stokes Alliance for Minority Participation Annual Meeting*. Harris Stowe University. St. Louis, Missouri.