

Amelia (Emmy) James

(803) 412-6099 aames56@vols.utk.edu emmyliajames.com

EDUCATION

- 2028 Ph.D Ecology and Evolutionary Biology (anticipated)
University of Tennessee, Knoxville, TN
- Advisor: Dr. Elizabeth Derryberry
Committee: Drs. Claire Hemingway, Elisabeth Schussler, Kimberly Sheldon
- Relevant Coursework:* Biometry, Core Ecology and Evolution, Special Topics in Animal Behavior, Animal Communication, Topics in Education Theory and Practice, Scientific Writing
- 2023 B.S. Ecology and Evolutionary Biology, *cum laude*, with Distinction in the Major
Yale University, New Haven, CT
- Senior Thesis:* "Salamander Fight Club: Heat-Induced Behavioral Plasticity in *Plethodon* Hybrids"
Advisor: Dr. Martha Muñoz
- Relevant Coursework:* Evolutionary Biology, Wetlands Ecology, Bird Behavior, General Ecology, Invertebrates, Herpetology, Global Climate Change, Ichthyology, Observing and Measuring Behavior, Evolutionary Architects, Evolutionary Genetics, Phylogenetic Biology, Animal Physiology, Structural Geology, Earth Surface Processes

PUBLICATIONS

James E & Muñoz MM. "Thermal sensitivity changes competitive ability across a woodland salamander hybrid system." (submitted)

HONORS AND AWARDS

*Denotes monetary award

- 2024 *Elizabeth Adkins-Regan Award Finalist*, SICB Division of Animal Behavior
**Graduate Student Senate Travel Award*, UTK
**Charlotte Mangum Award*, SICB
**Outstanding Graduate Teaching Award*, UTK EEB Department
GIAR Finalist, Sigma Xi
- 2023 cum laude, Yale University
Distinction in the Major, Yale University EEB Department
**J. Wallace and Katie Dean Graduate Fellowship*, UTK
Karel Liem Award Finalist, SICB Division of Vertebrate Morphology
**Charlotte Mangum Award*, SICB
- 2022 **Peabody Internship Recipient*, Yale University
- 2019 **Yale Scholarship*, Yale University
International Baccalaureate Diploma, Rock Hill, SC
National Merit Finalist, National Merit Scholarship Corporation
Seal of Biliteracy, English and French, SC Department of Education
Palmetto Fellow, SC Department of Education
Semifinalist, Coca-Cola Scholars Foundation
Valedictorian, Rock Hill High School
All-Star Scholarship Finalist, Charlotte Observer
US Senate Youth Scholarship Semifinalist, SC Department of Education

PRESENTATIONS

¹Talk; ²Poster

- 2024 ²James E, Muñoz MM. "Salamander Fight Club: Behavioral Plasticity in *Plethodon* Hybrids." The Society for Integrative and Comparative Biology 2024; Seattle, WA. Abstract No: 398.
- 2023 ¹James E, Muñoz MM. "Salamander Fight Club: Behavioral Plasticity in *Plethodon* Hybrids." Ecology and Evolutionary Biology Undergraduate Research Symposium. Yale University, New Haven, CT.
- ¹James E, Muñoz MM. "Salamander Fight Club: Behavioral Plasticity in *Plethodon* Hybrids." Timothy Dwight Mellon Forum, Yale University, New Haven, CT.
- ²James E, Bhullar BA, Muñoz MM, Camarillo H. "Lunging as a Possible Compensatory Mechanism for Muscle-Powered Feeders within *Plethodontidae*." The Society for Integrative and Comparative Biology 2023; Austin, TX. Abstract No: 1803.
- 2022 ¹James E, Bhullar BA, Muñoz MM, Camarillo H. "Salamander Skeletal Structure." Peabody Museum Internship Symposium. Yale University, New Haven, CT.

TEACHING, MENTORING, AND OUTREACH

TEACHING

General Biology (BIOL 101/102), University of Tennessee Knoxville
Graduate Teaching Assistant, August 2023–Present

- Developed and piloted 5 unique lesson plans focusing on topics such as scientific literacy, experimental design, and citizen science
- Created and delivered weekly lectures to ~70 students
- Provided hands-on and individualized instruction to all students, serving as the primary facilitator and point of contact for students in the lab
- Graded student assessments and provided feedback promptly

Bearden Middle School Science Olympiad, Knoxville, TN
Ecology Coach, October 2023–Present

- Provided weekly instruction to students on core concepts in Ecology, Evolution, and Environmental Science
- Developed activities and assessments to prepare students for Olympiad meets
- Acted as the primary instructor for all students competing in Ecology events

Yale Education Tutoring Initiative, Yale University
Tutor, August 2021–May 2023

- Worked one-on-one with high school students weekly to practice writing and math skills, prepare for tests, and develop study habits
- Created lesson plans for tutoring sessions by outlining key concepts and developing practice problems for students

MENTORSHIP

2024–present: Mary-Scarlett Sharp
2024–present: Madison Padmore
2024–present: Marisol Park

2024-present: Omayah El-Salim
2024-present: Ellis Kelsey
2024-present: Evelyn (Rees) Many
2023-present: Lillian Para

OUTREACH

2024 Darwin Day, UTK and the McClung Museum
Bearden Middle School Science Olympiad
EEB Mentorship Program
2023 Girl Scouts Math in Nature, UTK
Rocky Top BioBlitz, UTK and Discover Life in America
Bearden Middle School Science Olympiad
EEB Mentorship Program

EXPERIENCE

RESEARCH

Derryberry Lab, University of Tennessee Knoxville
Graduate Teaching Assistant, August 2023-Present

- Leading projects to investigate the behaviors used by wild birds to buffer themselves from heat
- Developing protocols for novel field and scoring methods, including the proper use of iButtons, Akaso V50 Pro cameras, UniHeat heat packs, FLIR thermal imaging cameras, and JWatcher and ImageJ scoring software
- Capturing, banding, and bleeding adult and nestling Tree Swallows (*Tachycineta bicolor*) and Eastern Bluebirds (*Sialia sialis*)
- Assembling, training, and managing a team of research assistants
- Assisting with Zebra Finch (*Taeniopygia guttata*) captive care
- In collaboration with Elizabeth Derryberry, Atalanta Ritter, and Kimberly Rosvall

Title IX Department, University of Tennessee Knoxville
Graduate Researcher, September 2023-Present

- Creating novel bystander intervention workshops for labs and teaching teams that focus on giving Mandatory Reporters the tools of support and intervention and generating a community value of misconduct prevention
- Incorporating topics of prejudice and bias into current Title IX trainings to encourage meaningful and intentional reflection
- Blending bystander intervention strategies with teaching techniques to understand how the skills of noticing and acting can be implemented in the classroom
- Advocating for a shift away from Mandated Reporting policies and towards Mandated Supporting policies
- Piloted workshops to Special Topics in Animal Behavior seminar in May 2024, applying for funding in Fall 2024
- In collaboration with Laura Bryant, Kayley McMahan, Merrill Roseberry, and Elisabeth Schussler

Muñoz Lab, Yale University
Senior Thesis Researcher, September 2022-May 2023

- Developed and implemented an original experiment focusing on the effects of heat on animal behavior and physiology
- Wrote and submitted an IACUC protocol
- Recorded, reviewed, and coded over 14 hours of video footage
- In collaboration with Eduardo Fernandez-Duque, Meaghan Gade, and Martha Muñoz

Undergraduate Research Assistant, August 2021–August 2022

- Provided research assistance to physiology projects in the lab (including water loss rate and metabolic rate experiments) by preparing salamanders for trials and monitoring the respirometer during runs
- Assumed husbandry responsibilities of terrestrial salamanders
- Attended weekly lab meetings and provided general feedback for upcoming presentations, interviews, and publications

Peabody Museum, Yale University

Peabody Intern, May 2022–July 2022

- Designed and executed an original research project jointly between the Peabody Collections, the Bhullar Lab of Vertebrate Paleontology, and the Muñoz Lab
- Used CT scans to segment pectoral girdles of lungless salamanders
- Developed proficiency in geometric morphometrics and phylogenetic analysis in R
- In collaboration with Bhart-Anjan Bhullar, Henry Camarillo, and Martha Muñoz

PHOTOGRAPHY

*Denotes long-term project or position

- 2024 **Collective on Animal Behavior (CoLAB)*, UTK
Graduate Researchers in Ecology and Evolutionary Biology (GREBE), UTK
Tanner Lab, UTK
Derryberry Lab, UTK
Annual Meeting, The Society for Integrative and Comparative Biology (SICB)
Promotional Photography, Jaelon Brice
- 2023 **Ecology and Evolutionary Biology Department*, Yale University
- 2021 **Yale Precision Marching Band*, Yale University

PROFESSIONAL

Graduate Researchers in Ecology, Behavior, and Evolution (GREBE), UTK

President, May 2024–Present

- Developing activities and programs to foster connection and a sense of belonging throughout the department
- Advocating for the professional development of graduate students in faculty meetings and other UTK communities, liaising between students and faculty
- Organizing executive board meetings and delegating responsibilities
- Attending to the members of the executive board, ensuring that all officers feel supported and are given the tools to succeed

Office of Gender and Campus Culture (OGCC), Yale University

Project Coordinator, August 2022–May 2023

- Led project teams of 10–20 undergraduates to design, plan, and implement campus-wide interventions
- Guided training sessions for undergraduates within the OGCC
- Served as liaison between the Title IX office and undergraduates, meeting with office staff weekly throughout the year to implement new program initiatives and manage the day-to-day operations of the OGCC

Communication and Consent Educator, January 2020–May 2023

- Served on a team of undergraduates to foster a more positive sexual and social campus climate, receiving approximately 70 hours of harm reduction training annually
- Shared concrete skills for preventing and reducing sexual misconduct
- Facilitated Title IX training for Yale undergraduates in the form of interactive workshops on sexual consent and bystander intervention
- Designed and initiated interventions to analyze and improve the social climate of Yale's campus, namely within campus religious spaces, performance groups, residential colleges, and among off-campus students during the COVID-19 pandemic

Campus Scenes, Rock Hill, SC

Technical Advisor, June 2023–August 2023

- Communicated with thousands of customers daily at art festivals, presenting products to buyers, and managing transactions
- Maintained the digital presence of the company through the monitoring of social media and digital marketplace accounts (Etsy, Amazon Marketplace)

WORKSHOPS AND TRAINING

- 2024 *Introduction to Bird Banding*, Clare Dattilo, Seven Islands State Birding Park
warbleR Tutorial, Amy Luo, UTK
Neurodivergent Student Inclusion, David Bowers, UTK Teaching & Learning Innovation
Giving Feedback Well - Creating Safe Dialogue, Ombuds, UTK
FLIR Thermal Imaging Workshop, Juan Zuluaga, UNCW
Brevity in Writing, Stephen Heard, UTK Darwin Day
- 2023 *Teaching and Advising with Heart*, Roel Snieder, Colorado School of Mines
Evidence-Based Teaching Strategies, GTA Training, UTK
Infographic Design: Combine Art and Data, Thales Molina, Domestika