Mysia L. Dye, Ph.D

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EDUCATION AND ACADEMIC POSITIONS

Lecturer in Biology, Whitman CollegeAugust 2024 – Present

Postdoctoral Research Associate, Texas A&M University

PI: Dr. Rachel Moran

June 2023 – August 2024

Ph.D., Biological Science, Florida State University

Adviser: Dr. Emily Moriarty Lemmon

Dissertation: Investigating Processes of Speciation at Multiple Scales in Chorus

Frogs (Pseudacris)

M.S., College STEM Teaching, Florida State University December 2021

B.S., Ecology and Evolutionary Biology, Tulane University

Summa cum laude, Departmental Honors

May 2016

May 2023

PUBLICATIONS *denotes undergraduate researcher

- **M. Dye**, A.R. Lemmon, and E.M. Lemmon. 2024. Female chorus frogs delay mate choice under sub-optimal conditions. Animal Behavior, 209, 215-226.
- C.B. Anderson, O. Ospina, P. Beerli, A.R. Lemmon, S.E. Banker, A.B. Hassinger, **M. Dye**, M.L. Kortyna and E.M. Lemmon. 2023. The population genetics of speciation by cascade reinforcement. Ecology and Evolution, 13(2), e9773.
- O.E. Ospina, A.R. Lemmon, **M. Dye**, C. Zdyrski*, S. Holland, D. Stribling, M.L. Kortyna, and E.M. Lemmon. 2021. Neurogenomic divergence during speciation by reinforcement of mating behaviors in chorus frogs (*Pseudacris*). BMC Genomics, 22(1), 1-23.
- S.E. Banker, E.M. Lemmon, A. Bigelow, **M. Dye**, S. Holland, M. Kortyna, and A.R. Lemmon. 2020. Hierarchical hybrid enrichment: multitiered genomic data collection across evolutionary scales, with application to chorus frogs (*Pseudacris*). Systematic Biology, 69(4), 756-773.
- A.M. Makowicz, M.J. Daniel, B.C. Jones, P.R. Rivers, **M. Dye**, M.R. Kuzel, A.G. Guerrera, S. Kettelkamp, C. Whitcher, and E.H. DuVal. 2020. Foundations and Frontiers in Mate Choice Review of: Rosenthal, G. 2017. Mate Choice: The Evolution of Sexual Decision Making from Microbes to Humans. Evolution, 74(7), 1575-1583.
- **M. Dye**, A.R. Lemmon, and E.M. Lemmon. *In Prep* (<u>full manuscript available upon request</u>). Reinforcement drives the evolution of increased variation in temperature-driven acoustic plasticity.

- **M. Dye**, M.L. Kortyna, A.R. Lemmon, and E.M. Lemmon. *In Prep* (*full manuscript available upon request*). Reinforcing selection and cline evolution over half a century in the Upland chorus frog (*Pseudacris feriarum*).
- **M. Dye**, K.R. Hillman*, A. Wang*, O.E. Ospina, A.R. Lemmon, and E.M. Lemmon. *In Prep (full manuscript available upon request)*. Multiple axes of divergence maintain species boundaries in a four species contact zone of chorus frogs (*Pseudacris*).

PRESENTATIONS *denotes undergraduate researcher

- **M. Dye**, and R. L. Moran. 2024. Uncovering incompatibilities in sex determining regions in darters. 3rd Joint Congress on Evolutionary Biology, Montreal, QC, Canada (Talk).
- I. Mendoza*, **M. Dye**, and R. L. Moran. 2024. Characterizing genetic variation in hormonal pathways associated with the evolution of parental care in darters. 3rd Joint Congress on Evolutionary Biology, Montreal, QC, Canada (Poster).
- N. Povelikin*, **M. Dye**, L. Barrow, C. McDaniels, A.R. Lemmon, and E.M. Lemmon. 2024. Abiotic drivers of genetic structure in the Pseudacris regilla complex. 3rd Joint Congress on Evolutionary Biology, Montreal, QC, Canada (Poster).
- B. Johnson, T. Black, **M. Dye**, C. Kopack, K. Bryan, R. L. Moran. The effect of mate choice, competition, and physiology on hybrid swarm dynamics in darters. 2024. 3rd Joint Congress on Evolutionary Biology, Montreal, QC, Canada (Poster).
- **M. Dye**, and E.M. Lemmon. 2023. Reinforcing selection and cline evolution over half a century in the upland chorus frog. Society for the Study of Evolution, Albuquerque, NM (Talk).
- **M. Dye**, and E.M. Lemmon. 2021. Uncovering the effects of environment on mating behaviors. Society for the Study of Evolution, Virtual (Faux-Live Talk).
- K.R. Hillman*, **M. Dye**, and E.M. Lemmon. 2021. Investigating factors promoting speciation through comparing frog hybrid zone. Society for the Study of Evolution, Virtual (On-Demand Talk).
- **M. Dye**, and E.M. Lemmon. 2019. Using phylogenomic data to identify species boundaries in a contact zone. Society for the Study of Evolution, Providence, RI (Talk).
- M. Dye, and E.M. Lemmon. 2018. Detecting changes in male advertisement calls across a hybrid zone over fifty generations. International Society for Behavioral Ecology, Minneapolis, MN (Poster Presentation).
- **M. Dye**, and E.M. Lemmon. 2017. Foundations for defining species boundaries in a four species contact zone (Hylidae: *Pseudacris*). Society for the Study of Evolution, Portland, OR (Poster Presentation).
- M. Dye, and C.L. Richards-Zawacki. 2015. Timing and development of coloration in Strawberry Poison Frogs (*Oophaga pumilio*). Center for Engaged Learning and Teaching Poster Session, Tulane University, New Orleans, LA (Poster Presentation)

TEACHING EXPERIENCE

Instructor of Record—Eco, Evo, & Diversity Lab (BIOL101L) Department of Biology, Whitman College	Fa24
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Instructor of Record—Experimental Biology (BSC3402L) Department of Biological Sciences, Florida State University	Sp23
Instructor of Record—Evolution (PCB4674) Department of Biological Sciences, Florida State University	Su21
Guest Lecturer—Bioinformatics (BIOL451) Using BLAST for Evolutionary Biology Department of Biology, Texas A&M University	Fa23
Guest Lecturer—Biogeography (BSC4821C) Human Biogeography Department of Biological Sciences, Florida State University	Fa22
Guest Lecturer—Evolution (PCB4674) Speciation Department of Biological Sciences, Florida State University	Su17, Su20
Guest Lecturer —Introductory Biology for Non-Majors (BSC1005) Evolution and Biodiversity Science and Mathematics, Tallahassee Community College	Fa20
Graduate Teaching Assistant Biogeography (BSC4821C) Department of Biological Sciences, Florida State University	Sp18, Sp22, Fa22
Graduate Teaching Assistant —Introductory Biology Lab II (BSC2011L Department of Biological Sciences, Florida State University) Su22
Graduate Teaching Assistant —Animal Behavior (Z004513) Department of Biological Sciences, Florida State University	Fa21
Graduate Teaching Assistant Evolution (PCB2674) Department of Biological Sciences, Florida State University	Su15 Fa17
Graduate Teaching Assistant Introductory Biology Lab I (BSC2010L) Department of Biological Sciences, Florida State University	Sp17
Graduate Teaching Assistant Experimental Biology (BSC3402L) Department of Biological Sciences, Florida State University	Fa16
Undergraduate Teaching Fellow —Diversity of Life Lab (EBIO1015) <i>Ecology and Evolutionary Biology Department, Tulane University</i>	Fa14-Sp16

UNDERGRADUATES MENTORED *denotes honors thesis student

- Isabelle Mendoza*, Texas A&M University (Moran Lab), 2023-Present
- Halle Hagdorn, Texas A&M University (Moran Lab), 2023-2024
- Abby Saegert, Texas A&M University (Moran Lab), 2023-2024
- Nicole Povelikin*, Florida State University (Lemmon Lab), 2021-Present
- Maia Erbes, Florida State University (Lemmon Lab), 2023
- Kylee Hillman*, Florida State University (Lemmon Lab), 2019-2022
- Sydney Jansen, Florida State University (Lemmon Lab), 2021
- Rachel Baugh, Florida State University (Lemmon Lab), 2017
- Kristen Solt, Florida State University (Lemmon Lab), 2017
- Anni Wang*, Florida State University (Lemmon Lab), 2016-2017

HONORS AND AWARDS

National Science Foundation Graduate Research Fellowship, 2018

Tulane 34 Award, Tulane University, 2016

Fred. R. Cagle Memorial Prize, Tulane University, 2016

Senior Honors Scholar in Ecology and Evolutionary Biology, Tulane University, 2016

RESEARCH FUNDING

American Philosophical Society Lewis and Clark Field Research Grant (\$1200), 2020 Animal Behavior Society Student Research Grant (\$1500), 2019 Louisiana Supervised Undergraduate Research Experience (\$4,000), 2015 CELT Undergraduate Research Grant (\$2,000), 2014

OUTREACH

"Reading Scientific Papers": Workshop for Students, Florida State University, 2020-2022

Panelist: GRFP Workshop, Florida State University, 2018-2022

Welcome Committee Member: Biological Sciences, Florida State University, 2022

Skype a Scientist: Online School Visits (8 Classrooms), 2018-2020

Science Fair Judge: Trinity Catholic School, 2019

"Foraging Ecology": Leon County Virtual School Lesson for Middle School, 2018

Volunteer: Tallahassee Science Festival, 2017-2019

Executive Board Member: Tulane Women in Science, 2013-2016 **Program Developer and Volunteer:** GiST in Schools, 2015-2016

Volunteer: Girls in STEM at Tulane (GiST), Tulane University, 2013-2016

Education Intern: Seacoast Science Center, Rye, NH, 2014 **Public Service Intern:** Girls in STEM at Tulane (GiST), 2014

PROFESSIONAL SERVICE

Reviewer: Herpetological Conservation and Biology Journal, Ethology Journal & Behavioral Ecology Journal

Treasurer: Ecology and Evolution Research Discussion Group, Florida State University, 2019-2020

PROFESSIONAL DEVELOPMENT

Society for the Study of Amphibians and Reptiles Workshop: The fieldwork that we envision: A future of equitable field biology and reciprocity with the local communities (April 2023)

PIE Biannual Teaching Conference (December 2022)

Mentoring Up Workshop, Florida State University (April 2021)

Inclusive Teaching Practices Workshop, Florida State University (February 2021)

Summer Institute on Education, Equity, and Justice, American University School of Education (June 2020)

PROFESSIONAL AFFILIATIONS

Society for the Study of Evolution

Society for the Study of Animal Behavior

International Society for Behavioral Ecology