Analisa A. Milkey

analisa.milkey@gmail.com (650) 575-5579

Education

PhD student, Ecology & Evolutionary Biology University of Connecticut GPA 4.0

Advisor: Dr. Paul Lewis

Bachelor of Science, Biological Sciences University of California, Davis University Honors Program GPA 3.88

Honors thesis advisor: Dr. Peter Wainwright

June 2020

expected graduation 2026 / 2027

Publications

Wang, Y. B., **Milkey, A.**, Li, A., Chen, M. H., Kuo, L., & Lewis, P. O. (2023). LoRaD: Marginal likelihood estimation with haste (but no waste). *Systematic Biology*, *72*(3), 639-648.

Hodge, J. R., Song, Y., Wightman, M. A., **Milkey, A.**, Tran, B., Stajner, A., Roberts, A. S., Hemingson, C. R., Wainwright, P. C., & Price, S. A. (2021). Constraints on the ecomorphological convergence of zooplanktivorous butterflyfishes. *Integrative Organismal Biology, 3*(1), obab014.

Software

Milkey A, Korte E, Lewis PO (2023). *lorad: Lowest Radial Distance Method of Marginal Likelihood Estimation*. R package version 0.0.1.0, https://CRAN.R-project.org/package=lorad.

Conference Presentations *denotes equal contribution

Milkey, A., Lewis, P. Testing the sequential multispecies coalescent. Oral speed talk at UConn Ecology and Evolutionary Biology Graduate Student Symposium, Storrs, CT. February 2024.

Milkey, A., Lewis, P. The sequential multispecies coalescent. Oral presentation at Evolution 2023 meeting (Annual joint meeting of the American Society of Naturalists, the Society for the Study of Evolution, and the Society of Systematic Biologists.) Albuquerque, NM. June 2023.

Milkey, A., Lewis, P. The sequential multispecies coalescent. Oral presentation at UConn Ecology and Evolutionary Biology Graduate Student Symposium, Storrs, CT. February 2023.

Wang, Y. B., **Milkey, A.,** Li, A., Chen, M., Kuo, L., Lewis, P. LoRaD: marginal likelihood from a single posterior sample. Poster presentation at Evolution 2022 meeting (Annual joint meeting of the American Society of Naturalists, the Society for the Study of Evolution, and the Society of Systematic Biologists.) Cleveland, OH. June 2022.

Wang, Y. B., **Milkey, A.,** Li, A., Chen, M., Kuo, L., Lewis, P. LoRaD method for marginal likelihood estimation. Oral presentation delivered on zoom at UConn Ecology and Evolutionary Biology Graduate Student Symposium, Storrs, CT. February 2022.

Milkey, A., Hodge, J., Wainwright, P.C. Coral feeding shapes behavior in butterflyfishes (Chaetodontidae). Oral presentation delivered through video at UC Davis Undergraduate Research Conference, Davis, CA. April 2020.

Deshmukh*, R., **Milkey*, A.** The effects of early home environment on young Mexican American mothers' ethnic identity. Oral presentation delivered through video at Western Regional Psychology Association Conference, San Francisco, CA. October 2020.

Leung*, T., **Milkey***, **A.**, Rusit*, X. Elongation in Eupercaria. Oral presentation delivered at UC Davis Undergraduate Research Conference, Davis, CA. April 2018.

Awards

Schaefer Fund and the CBC Endowment to the Department of Ecology	and April 2024
Evolutionary Biology and Connecticut State Museum of Natural	
History (\$1215)	
EEB Headship Award (\$500)	May 2023
The Bamford Fund to the Department of Ecology and Evolutionary Biol	ogy May 2023
and Connecticut State Museum of Natural History (\$520)	
NSF Graduate Research Fellowship (\$147,000)	2023 - present
The Ecology and Evolutionary Biology Graduate Student Research	April 2022
Endowment Fund for Research to the Department of Ecology	
and Evolutionary Biology (\$1245)	
Department Citation, UC Davis College of Biological Sciences	June 2020
Law Family Award, UC Davis Herbarium (\$250)	April 2020
Goldwater Scholarship (\$7500)	April 2019
UC Davis Regents' Scholarship (\$30,000)	Sept. 2016 - June 2020
Teaching Experience	
Teaching Assistant; Workshop on Molecular Evolution	May 2023
Graduate Teaching Assistant; University of Connecticut	
Lab Instructor, EEB5249, Phylogenetics	Jan 2024 - May 2024
Teaching Assistant, EEB2245, Evolutionary Biology	Jan 2023 - May 2023
Lab Instructor, BIOL1108, Principles of Biology II	Aug 2021 - Dec 2022

Undergraduate Research Experience

College Essay Writing Tutor; The Princeton Review

Teaching Assistant; Greentech Education and Employment

Undergraduate Researcher; Department of Evolution & Ecology, UC Davis
Wainwright Lab March 2017 - June 2020

June 2020 - July 2021

March 2018 - Feb 2019

- Collected and analyzed behavioral data in R programming language to assess influence of coral feeding on butterflyfish behavior. Completed honors thesis.
- Filmed cichlids eating for project on jaw protrusion.
- Pinned out and measured butterflyfish specimens for project on butterflyfish morphology.
- Analyzed teleost morphological data in R to assess body shapes across habitats.

Schoener Lab July 2019 - Feb. 2020

• Analyzed genetics of *Daphnia pulicaria* populations using molecular techniques (DNA extraction, PCR, gel electrophoresis).

Research Assistant; Department of Human Ecology, UC Davis Hibel Lab

Aug. 2018 - June 2020

- Coded actigraph data, transcribed interviews for project on self-regulation in chronically stressed Mexican American children.
- Analyzed survey data in R for independent project on effects of early home environment on ethnic identity.

Field Assistant; Institute of Science and Technology, Austria
Barton Lab

Summer 2019

• Used Trimble GPS to tag, sample, and measure morphological traits in *Antirrhinum* hybrid zone in Planoles, Spain.

Other Experience

Curatorial Assistant; UC Davis Herbarium April 2018 - June 2021

Driver; Yolo Food Bank March 2020 - June 2020

Academic Organizations

Phi Beta Kappa Honor Society

April 2019 - present
UC Davis Regents' Scholars Society

Sept. 2016 - June 2020

Skills

Basic knowledge of R, Python, and C++ programming languages. Basic experience with RevBayes software.

Experience with Access and Symbiota databases.

Last updated 4/25/2024.