## Analisa A. Milkey

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### **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**

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

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.

### **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

EEB Headship Award (\$500)	May 2023	
EEB Summer Fellowship (\$4200)	May 2023	
The Bamford Fund to the Department of Ecology and Evolutionary Biology and Connecticut		
State Museum of Natural History (\$520)	May 2023	
NSF Graduate Research Fellowship (\$147,000)	2023 - present	
EEB Summer Fellowship (\$3500)	May 2022	
The Ecology and Evolutionary Biology Graduate Student Research Endowment Fund		
for Research to the Department of Ecology and Evolutionary Biology (\$1245) April 2022		
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

Graduate Teaching Assistant; University of Connecticut	•
Teaching Assistant, EEB2245, Evolutionary Biology	Jan 2023 - May 2023
Lab Instructor, BIOL1108, Principles of Biology II	Aug 2021 - Dec 2022
College Essay Writing Tutor; The Princeton Review	June 2020 - July 2021
Teaching Assistant; Greentech Education and Employment	March 2018 - Feb. 2019

May 2023

### **Undergraduate Research Experience**

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

- 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.

Teaching Assistant; Workshop on Molecular Evolution

- 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 2/26/2024.