

## Tena S. Dhayalan

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### Education

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M.S. in Biology with Distinction, California State University, Northridge 2023–September 2025

Advisor: Dr. Nyssa Silbiger

GPA: 3.88

Thesis: Effects of ocean acidification and warming on predation of foundation species in the California rocky intertidal zone

B.S. Animal Biology *magna cum laude*, University of California, Davis 2021

GPA: 3.91

Undergraduate thesis: Determining the safety of alligator weed biocontrol agents for Delta Smelt *Hypomesus transpacificus* and Rainbow Trout *Oncorhynchus mykiss*

### Publications

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**Dhayalan, T.S.**, Tran, F.D., Hung, T.C., Lewis, L.S., Senegal, T.J., Mora, V., Teh, S.J., Hammock, B.G. 2023. Liver glycogen as a sensitive measure of food limitation in Delta Smelt. *Estuaries and Coasts*. <https://doi.org/10.1007/s12237-023-01282-y>.

### Research Experience

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Research Assistant | 20h/week | Dr. Nyssa Silbiger | CSU Northridge 2023–2025

- Conducted three month-long mesocosm experiments manipulating pH and temperature
- Determined photosynthetic and respiration rates of marine algae and invertebrates
- Deployed intertidal subsurface automated samplers for *in situ* seawater collection
- Titrations for total alkalinity following Dickson SOP 3b

Lab Assistant III | Full time | Dr. Bruce Hammock | UC Davis 2022–2023

- Developed and optimized a small-scale larval delta smelt culture to maximize survival
- Managed cultures of artemia, rotifers, and microalgae
- Genetic identification of wild-caught delta smelt and wakasagi
- Optimized an in-house method of determining glycogen levels in fish tissue

Undergraduate Research Assistant | 20 h/week | Dr. Swee Teh | UC Davis 2020–2021

- Culturing of Japanese medaka fish, algae, rotifers, and artemia

Undergraduate Research Student | Dr. Eric Sanford | UC Davis 2021

- Project: On the symbiotic relationship between the bat star *Patiria miniata* and its Hesnoid polychaete *Ophiodromis pugettensis*

Undergraduate Research Assistant | 12 h/week | Dr. Danika Bannasch | UC Davis 2018–2020

- Vertebrate blood DNA extractions, PCR, and gel electrophoresis

## Awards & Honors

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- Honorable Mention | NSF Graduate Research Fellowship Program 2024
- Graduate Fellowship for Outstanding Research Promise | CSU Northridge | \$5,000 2024
- Hugo and Irma Oppenheimer Student Award Endowment | CSU Northridge | \$200 2024
- Donald E. Bianchi Outstanding Graduate Teaching Award | CSU Northridge | \$400 2024
- Honorable Mention | UC Davis Research Rockstars | \$150 2022
- Bodega Marine Laboratory Ambassador Scholarship | UC Davis | \$3,200 2021
- James E. Casey Scholarship | UC Davis | \$7,500 2018–2021
- Second Lieutenant Warren R. Salz Memorial Scholarship | UC Davis | \$750 2018

## Research Support

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- Memorial Thesis Award | CSUN Association of Retired Faculty | \$2,500 2024
- Thesis Support | CSU Northridge | \$700 2023

## Teaching Experience

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11<sup>th</sup> Grade Marine Biology Teacher | PUC Community Charter Early High School 2024–2025

- Developed curriculum and lesson plans following Next Generation Science Standards and Ocean Literacy Principles.
- Created weekly laboratory experiences to supplement understanding of scientific principles.
- Environmental Club advisor coordinating recycling pickups, community gardening, and field trips for 25 students.

Graduate Assistant | California State University, Northridge Fall 2023

- Coordinated field trips for a class of 30 undergraduate biology students to go trawling, hook and line fishing, and to explore the Natural History Museum's ichthyology collection for the pelagic organisms class.
- Supervised weekly laboratory classes where students completed lab manual entries of pelagic organisms.

Teaching Assistant | California State University, Northridge Spring 2024

- Lectured and supervised laboratories for the introductory biological principles lab for undergraduate biology majors. Included spectroscopy, plant physiology, animal physiology, and genetics.

## Professional Service

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Climate Resilience Fellow | UCLA Center for Diverse Leadership in Science 2024

Early Career Fellow | UCLA Center for Diverse Leadership in Science 2024

Treasurer of the Marine Biology Graduate Student Association | CSU Northridge 2023–2024

**Presentations** (\* = denotes presenting author)

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**Dhayalan, T.S.\***, Silbiger, N.J. 2025. Mussel up for climate change! Effects of acidification and warming on the California mussel and a carnivorous whelk. CSUNposium, Northridge, California [talk].

**Dhayalan, T.S.\***, Abbott, M., Silbiger, N.J. 2024. Effects of acidification and warming on California rocky intertidal species. Ecological Society of America, Long Beach, California [poster].

**Dhayalan, T.S.\***, Abbott, M., Silbiger, N.J. 2024. HOT TO MOW! Differential effects of warming and acidification on an intertidal grazer and a macroalgae. Western Society of Naturalists, Portland, Oregon [talk].

**Dhayalan, T.S.\***, Abbott, M., Silbiger, N.J. 2024. Effects of acidification and warming on rockweeds and an herbivore. CSUNposium, Northridge, California [poster].

**Dhayalan, T.S.\***, Tran, F.D., Hung, T.C., Lewis, L.S., Senegal, T.J., Mora, V., Teh, S.J., Hammock, B.G. 2023. Liver glycogen as a sensitive measure of food limitation in Delta Smelt. Interagency Ecological Program, Sacramento, California [poster]; Western Society of Naturalists, Monterey, California [poster].

Abbott, M.\*, Huson, V., **Dhayalan, T.S.**, Fajardo, C., Dellinger, R., Reed, K., Silbiger, N.J. 2023. Intertidal foundation species alter seawater biogeochemistry at high tide. Western Society of Naturalists, Monterey, California [poster].

Huynh, K.\*, Hammock, B.G., **Dhayalan, T.S.**, Teh, S.J. 2023. Improving culture technique of a small sensitive endangered fish species. Western Society of Naturalists, Monterey, California [poster].

Huynh, K.\*, **Dhayalan, T.S.**, Ma Li, C., Stillway, M., Teh, S.J., Hung, T.C., Hammock, B.G. 2023. The effect of food limitation and salinity on the survival and growth of Delta Smelt larvae. Interagency Ecological Program, Sacramento, California [poster].