



# Robert J. Dellinger

UCLA, Department of Atmospheric and Oceanic Sciences, Los Angeles, CA 90095

he/him, they/them | +1 (310) 880-9842 | 0009-0009-3524-4041 | rob-dellinger | robertjdellinger

Ph.D. student in Atmospheric and Oceanic Sciences at UCLA, researching the impacts of climate change on marine ecosystems, with a focus on biogeochemistry. Learn more at [robdellinger.com](http://robdellinger.com).

## Educational Experience

### PH.D. STUDENT, ATMOSPHERIC AND OCEANIC SCIENCES

University of California, Los Angeles (UCLA) | 2024 – Present

Advisors: Dr. Aradhna Tripathi & Dr. Robert Eagle

*Research focus:* Coral biomineralization and symbiont community dynamics under climate variability and coastal land-use change, integrating multi-proxy geochemistry with ancient coral DNA (coraDNA).

*Graduate Certificate (In Progress):* Leaders in Sustainability, UCLA Institute of the Environment & Sustainability

### M.S., BIOLOGICAL SCIENCES

California State University, Northridge (CSUN) | 2021 – 2024

Advisor: Dr. Nyssa Silbiger

*Research focus:* Quantitative marine ecology and biogeochemistry, examining the physiological and energetic responses of marine invertebrates to the combined impacts of ocean acidification and warming.

### B.S., MARINE & COASTAL SCIENCE, AND B.A., INTERNATIONAL RELATIONS

University of California, Davis | 2017 – 2021

*Departmental Citation for Outstanding Achievement and Contributions*

Study Abroad Program: “Ecological and Social Issues in Lake Atitlán, Guatemala”

## Research & Professional Experience

### GRADUATE RESEARCH ASSISTANT

Critical Ecology Lab & Hubbard Brook Experimental Forest (HBEF) NSF Long Term Ecological Research (LTER) Program (May 2024 – January 2025)

Supervisors: Dr. Suzanne Pierre

- Conducted interdisciplinary research at the Hubbard Brook Experimental Forest (HBEF), examining links between industrial economic activity and ecological disturbances, particularly acid rain-induced changes in Northern Hardwood Forests.
- Applied a critical ecology framework to examine how structural racism and classism (resource allocation, residential segregation, and wage differentials) drive air pollution disparities and impact biogeochemical cycles.
- Synthesized and managed large-scale ecological and social datasets in R, integrating atmospheric chemistry, economics, and historical policy impacts into a broader Long-Term Ecological Research (LTER) framework..

### GRADUATE STUDENT RESEARCHER

California State University, Northridge (September 2021 - September 2024)

- Designed and executed controlled mesocosm experiments to investigate the interactive effects of ocean acidification and warming on the physiological energetics of the intertidal gastropod *Tegula funebris*, utilizing thermal performance curves to assess energetic expenditure under future climate scenarios.
- Maintained high-precision seawater conditions across 16 experimental tanks by regulating carbonate chemistry (pH, total alkalinity, pCO<sub>2</sub>) and temperature, while simulating natural intertidal dynamics using solenoid valve-driven tidal fluctuations.

- Conducted routine water chemistry monitoring, including total alkalinity, pH, and carbonate system calculations, using potentiometric pH measurements and titrations (Dickson protocols) with certified reference materials.
- Applied advanced statistical modeling in R, employing nonlinear regression, two-way ANOVAs, and thermal performance curve analysis to quantify temperature-dependent metabolic responses.

### **NSF RESEARCH TRAINEESHIP (SUSTAINABLE OCEANS)**

National Science Foundation (NSF) (June 2022 – June 2023)

- NSF Sustainable Oceans Research Trainee, emphasizing the integration of policy into scientific research to bridge the gap between marine science and decision-making for ecosystem-based management.
- Participated in experiential learning through field trips, internships, policy workshops, and basecamp sessions with decision-makers and stakeholders, enhancing skills in science communication and stakeholder engagement.
- Presented research at the Sustainable Oceans Symposium, collaborating with scientists, policymakers, and resource managers to align scientific inquiry with policy needs.

### **TEACHING ASSOCIATE & GRADUATE ASSISTANT**

California State University, Northridge, Department of Biology (August 2021 - June 2022)

- Instructed introductory biology courses and labs, which included curriculum development, leading discussions, and evaluating student assignments to enhance comprehension of fundamental biology and ecology concepts.
- Provided support as a graduate assistant for ecology courses, assisting with grading, course materials preparation, and student support.
- Tutored undergraduates in ecology, marine biology, and general biology.

### **NATIONAL OCEANOGRAPHIC & ATMOSPHERIC ASSOCIATION INTERNSHIP**

NOAA Fisheries, U.S. Department of Commerce (June 2021 - August 2021)

- Conducted histopathological analysis to assess the impact of contaminants on *Morone americana* (white perch) in an urbanized estuarine system, comparing tissue samples from disturbed vs. undisturbed sites.
- Analyzed gill, liver, spleen, and gonad tissue for histological markers of environmental stress, disease, and injury to quantify pollutant-induced physiological changes.
- Contributed to a Natural Resource Damage Assessment (NRDA) by analyzing fish tissue pathology and pollutant impacts, supporting NOAA's efforts to quantify ecosystem injury and inform restoration strategies.
- Presented research findings at NOAA's Student Symposium, communicating research outcomes to scientists and policymakers.

### **SENIOR ENVIRONMENTAL TECHNICIAN**

Eco-Alpha Environmental & Engineering Services (June 2020 - August 2021)

- Managed procedural development, equipment procurement, and technician training for federal and state water quality compliance monitoring programs (CA State Water Board).
- Compiled technical reports and ensured adherence to pertinent environmental regulations for client activities. Additionally, handled document formatting and drafted responses for statewide bid and contract requests.

### **UNDERGRADUATE RESEARCHER, BAY LAB**

UC Davis Department of Evolution and Ecology (September 2019 - August 2021)

- Conducted a collaborative meta-analysis to assess the evolutionary, ecological, and anthropogenic drivers of the genetic diversity of reef-building corals globally.
- Attended weekly lab meetings to discuss research on genomics, physiology, and ecology in response to climate change. Engaged in discussions on genomic sequencing, evolutionary theory, and predictive modeling of climate change impacts on populations of marine species.

### **INDEPENDENT UNDERGRADUATE RESEARCHER, BODEGA MARINE LAB**

Bodega Marine Laboratory (June 2019 - July 2019)

- Designed and executed an experiment to assess the impact of microplastics on feeding behavior in *Lytechinus pictus* (white sea urchin) larvae, comparing algae and microplastic (<5mm) consumption.
- Presented research findings to the scientific community at the Bodega Marine Lab Symposium.

### **UNDERGRADUATE RESEARCHER, GOLD LAB**

Gold Lab, Bodega Marine Laboratory (July 2019 - September 2019)

- Studied the early evolution of animal life, particularly genes related to biomineralization and geochemical biomarkers in Cnidaria (corals, jellyfish, and anemones) using molecular paleontology techniques.
- Investigated moon jellyfish (*Aurelia aurita*) as a model organism to understand cell type evolution, tissue regeneration mechanisms, and developmental biology.
- Investigated the physiological and genetic mechanisms of anoxia tolerance and regeneration, contributing to the understanding of evolutionary adaptations to hypoxic marine environments.

### **STUDY ABROAD RESEARCHER**

Amigos Del Lago NGO, Lake Atitlán, Guatemala (July 2017 - September 2017)

- Conducted aquatic sampling to assess pelagic processes, biogeochemical gradients, and species diversity at Lake Atitlán, focusing on the effectiveness of native plants in improving water quality and preventing eutrophication.
- Established communication (in English and Spanish) with local and governmental stakeholders to explore the connections between ecological and social issues at the lake, in collaboration with local NGOs and researchers.

### **CAMPUS AMBASSADOR**

UC Davis Undergraduate Admissions (December 2017 - June 2021)

- Represented UC Davis to prospective students, providing insights into campus life, academic programs, and student opportunities through tours and outreach events.

## **Community Service**

---

### **RADICAL IMAGINATION COALITION, PRESIDENT**

- UCLA Climate Justice Collective (Sep 2024 - Present)

### **CLIMATE STORYTELLING PROJECT, CO-FOUNDER**

- UCLA Center for Diverse Leadership in Science (Sep 2023 - Present)

### **QUEER SOL COLLECTIVE, BOARD OF DIRECTORS**

- Kumeyaay Territory, San Diego, California (Jun 2023 - Present)

### **MARINE BIOLOGY GRADUATE STUDENT ASSOCIATION, PRESIDENT**

- California State University, Northridge (Sep 2022 - June 2023)

### **ANTI-RACISM COMMITTEE, MEMBER**

- UC Davis Department of Earth and Planetary Sciences (Jun 2020 - Jun 2021)

### **GENDER AND SEXUALITY COMMISSION, COMMISSIONER**

- Associated Students of the University of California, Davis (Sep 2019 - Jun 2021)

### **ETHNIC AND CULTURAL AFFAIRS COMMISSION, COMMISSIONER**

- Associated Students of the University of California, Davis (Sep 2017 - Jun 2019)

### **NO NAME BOOK CLUB, VOLUNTEER**

- Radical Hood Library (Jun 2021 - Present)

## **Fellowships, Awards & Distinctions**

---

### **Sigma Xi Nomination, 2025**

(Sigma Xi, Scientific Research Honor Society)

**Center for Diverse Leadership in Science Fellowship, 2024**

(University of California, Los Angeles, \$4,000)

**UCLA Eugene V. Cota Robles Fellowship, 2024**

(Full tuition & \$32,000/year stipend for 4 years)

**Center for Diverse Leadership in Science Fellowship, 2023**

(University of California, Los Angeles, \$4,000)

**National Science Foundation Graduate Research Fellowship, 2023**

(Full tuition & \$32,000/year stipend for 3 years)

**Sustainable Oceans Scholar, 2022**

(National Science Foundation National Research Traineeship, \$1,000)

**Center for Diverse Leadership in Science Fellowship, 2022**

(University of California, Los Angeles, \$1,000)

**Department Citation, 2021**

(University of California, Davis, Department of Earth and Planetary Sciences)

**Honorable Mention, 2021**

(National Science Foundation)

**Geology and Marine and Coastal Science Scholarship, 2020**

(University of California, Davis, Department of Earth and Planetary Sciences, \$8,000)

**BML Ambassador Award, 2019**

(University of California, Davis, Bodega Marine Laboratory, \$3,000)

**Ann E. Pitzer Award, 2018**

(University of California, Davis, Study Abroad, \$750)

## Publications

---

**Dellinger, R.J.**, et al. (2025). Ecology and evolutionary biology urgently needs a paradigm shift to alleviate harm and advance LGBTQ+ belonging. *Ecology and Evolution*. (In submission)

**Dellinger, R.J.**, Fields, J.B., & Silbiger, N.J. (2024). Ocean acidification alters thermal performance metrics & increases energetic demand in the intertidal gastropod, *Tegula funebris*. *Journal of Experimental Biology*. (In preparation).

## Academic Conferences & Colloquia

---

**Dellinger, R.J.**, Pierre, S., & Hawkins, P-S. (2025). Measuring Social Drivers & Biogeochemical Changes: The Social Origins of Emissions and Transboundary Impacts on Forest Ecosystem Function [Presentation]. *NSF Long-term Ecological Research (LTER) Project Review, Hubbard Brook Project Meeting*, Vassar College, NY.

**Dellinger, R.J.**, Hawkins, P-S., & Pierre, S. (2024). Ecology Through The Lens of Critical Theory [Presentation]. *UCLA Center for Diverse Leadership in Science Research and Outreach Symposium*, University of California, Los Angeles, CA.

Abbott, M.H., Huson, V., Dhayalan, T., Fajardo, C., **Dellinger, R.J.**, Reed, K., & Silbiger, N.J. (2023). Intertidal foundation species alter seawater biogeochemistry at high tide [Poster]. *Western Society of Naturalists 104th Annual Meeting*.

**Dellinger, R.J.**, Fields, J.B., & Silbiger, N.J. (2023). Facing physiological constraints: The response of an intertidal gastropod to the interactive effects of ocean acidification and warming [Presentation]. *CSUNposium*. California State University, Northridge.

**Dellinger, R.J.**, Fields, J.B., & Silbiger, N.J. (2023). Facing physiological constraints: The response of an intertidal gastropod to the interactive effects of ocean acidification and warming [Presentation]. *NSF Sustainable Oceans Conference*, University of California, Davis.

**Dellinger, R.J.**, Fields, J.B., & Silbiger, N.J. (2022). Facing physiological constraints: The response of an intertidal gastropod to the interactive effects of ocean acidification and warming [Poster]. *Western Society of Naturalists 103rd Annual Conference*.

Wallingford, P.D., Pandori, L.M., Elsberry, L.A., Barnas, D.M., Chiachi, A.E., **Dellinger, R.J.**, Kerlin, J., Singh, R., Zeff, M., & Silbiger, N.J. (2022). Dueling unicorns: Physiological and distributional comparisons of native and range-shifting whelks [Poster]. *Western Society of Naturalists 103rd Annual Meeting*.

**Dellinger, R.J.** (2021). Does industrial contamination in urban coastal rivers cause injury to wild fish? Quantifying injury from contamination to a key member of the estuarine ecosystem, the white perch [Presentation]. *National Oceanographic and Atmospheric Administration Annual Internship Conference*.

Bay, R.A., **Dellinger, R.J.**, Flores, J.A., & Rumberger, C.A. (2021). Assessing the drivers of genetic diversity on coral reefs [Presentation]. *UC Davis Undergraduate Research Conference*.

**Dellinger, R.J.**, (2021). Patterns & Consequences of Microplastic Ingestion by Larval Stages of The White Urchin (*Lytechinus pictus*) [Presentation]. Bodega Marine Laboratory Symposium, Bodega Bay, CA.

Vriesman, V.P., Sumner, D.Y., Rudolph, M., Rousseau, M., Oskin, M.E., Micheletti, A., Livsey, C.M., Hwang, L., **Dellinger, R.J.**, Chidester, B., (2020). Curtailing Institutional Racism in an Earth and Planetary Sciences Department [Poster]. *Geological Society of America* 52 (6).

**Dellinger, R.J.**, & Warneke, A. (2020). Designing an effective science website workshop. *101st Western Society of Naturalists Conference*.

Bay, R.A., **Dellinger, R.J.**, & Rumberger, C.A. (2020). Assessing the drivers of genetic diversity on coral reefs [Presentation]. *101st Western Society of Naturalists Conference*.

## Public Engagement

---

Dellinger, R.J. (2025). The Role of Artivism in Climate Advocacy. Conversation hosted for the Climate Storytelling Project featuring Dr. Kumi Naidoo. *Climate Storytelling Project*.

Dellinger, R.J. (2025). Indigenous and Black Climate Futures through Art. Conversation hosted for the Climate Storytelling Project featuring Dr. Stacey A. Robinson and Taty Trinidad Hernandez. *Climate Storytelling Project*.

Dellinger, R.J. (2025). The Role of Art in Imagining Climate Futures. Conversation hosted for the Climate Storytelling Project featuring Rob Reynolds, Mrinalini Aggarwal, and Joshua Dawson. *Climate Storytelling Project*.

Dellinger, R.J. (2025). The State of the Planet: An Earth-systems View Approach to Climate Change and the Importance of Imagined Optimistic Climate Futures. Lecture by Robert J. Dellinger. *Climate Storytelling Project*.

Fairlee, D. (2023). Sea Change: A Diverse group of CSUN Marine Scientists are Studying the Nearshore Effects of Warming and Acidifying Oceans. Interview with Dellinger, R.J. *CSUN Magazine*, Summer 2023.

Dellinger, R.J., et al., (2022). Roundtable Participant. Pathways to Advance Diversity, Equity, and Inclusion in California's Coastal and Ocean Sciences: Proceedings and Recommendations from a Series of Virtual Roundtable Discussions Convened by the California Ocean Science Trust. *California Ocean Science Trust*.

Dellinger, R.J., et al. (2022). Roundtable participant. Opportunities and actions in ocean science and technology. *White House Subcommittee on Ocean Science and Technology*.

Abraham, A. (2022). What Non-Monogamy Can Teach Us About Climate Advocacy. Interview with Dellinger, R.J. *CurrentlyHQ: Weekly Updates on the Climate Emergency*, from Eric Holthaus. [\[Link\]](#)

Dellinger, R.J. (2021). Celebrating National Hispanic Heritage Month as a NOAA Intern! *NOAA Northeast Fisheries Science Center*. [\[Link\]](#)

Dellinger, R.J. (2020). Kitchen Oceanography: Overturning Circulation (Guest post by Robert Dellinger). *Adventures in Oceanography and Teaching* [Link]

Dellinger, R.J. (2018). Our Crude Awakening. *Davis Political Review*. [Link]

Dellinger, R.J. (2018). Slavery in Thailand's Fishing Industry. *Davis Political Review*. [Link]

## Skills

---

### LANGUAGE SKILLS

Bilingual (English, Spanish)

### COMPUTER SKILLS

Programming (R, Python, LaTeX, CSS, HTML), Univariate and multivariate statistics (Excel, R, Python, JMP), Bioinformatics tools (BLAST), Image analysis (ImageJ), Photography (Adobe Photoshop), Design (Adobe Illustrator), Web design (Adobe Dreamweaver), Data visualization, Statistical analysis, Database management, Software development, Computational modeling

### RESEARCH SKILLS

Boating safety courses/license, Environmental compliance, Environmental data analysis, Protocol development, Environmental review, Environmental and aquatic sampling, Microscopy, Confocal microscopy, Micro-pipetting, Serial dilutions, Titrations, Animal husbandry, Experimental design, Scientific writing, Statistical data analysis, Interdisciplinary collaboration, Environmental policy, Scientific communications, Stakeholder engagement

### ADDITIONAL EXPERTISE

Critical theory, Biogeochemistry, Atmospheric chemistry, Demographic analysis, EPA methods, Geospatial modeling, Climate change science, Thermodynamics, Marine biology, Fisheries science, Ecotoxicology, Policy research, Traditional knowledge integration, LGBTQ+ advocacy, Gender equality, Student affairs, Legislative analysis, Racial justice

## Professional Memberships

---

- Society for Advancement of Chicanos/Hispanics & Native Americans in Science (SACNAS).
- Western Society of Naturalists (WSN).
- American Society of Limnology and Oceanography (ASLO).
- Ecological Society of America (ESA).
- Sigma Xi.

## References

---

### Dr. Aradhna Tripathi

UCLA, Department of Atmospheric and Oceanic Sciences

- Phone: 626-376-1308, Email: [atripati@ucla.edu](mailto:atripati@ucla.edu)

### Dr. Rachael Bay

UC Davis, Department of Evolution and Ecology

- Phone: 530-754-1439, Email: [rbay@ucdavis.edu](mailto:rbay@ucdavis.edu)

### Dr. Tessa Hill

UC Davis, Department of Earth and Planetary Science

- Phone: 707-875-1910, Email: [tmhill@ucdavis.edu](mailto:tmhill@ucdavis.edu)

---

Made with R Markdown using the [vitae package](#)