

HEILI E. LOWMAN

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EDUCATION:

- 2020 **Ph.D.** Ecology, Evolution, and Marine Biology. University of California Santa Barbara.
- 2012 **B.A.** Chemistry; French and Francophone Studies. Vassar College.

PROFESSIONAL EXPERIENCE:

- 2022-*present* Visiting Scholar. Bernhardt Laboratory, Department of Biology. Duke University.
- 2021-*present* Postdoctoral Scholar. Blaszczyk Laboratory, Department of Natural Resources and Environmental Science. University of Nevada, Reno (UNR).
- 2020-2021 Scientist. Department of Biology. Southern California Coastal Water Research Project (SCCWRP).
- 2015-2020 Graduate Researcher. Santa Barbara Coastal Long Term Ecological Research (SBC LTER) Project. University of California Santa Barbara (UCSB).
- 2016-2019 Teaching Assistant. Department of Ecology, Evolution, and Marine Biology (EEMB); Bren School of Environmental Science and Management. UCSB.
- 2013-2015 Research Assistant. Departments of Biology and Engineering. University of Iowa.
- 2012-2014 Senior Associate. Healthcare Performance Improvement Practice. Berkeley Research Group.
- 2012 Communications Coordinator. National Marine Sanctuary Foundation.
- 2009-2012 Research Assistant. Department of Chemistry. Vassar College.
- 2011 Research Intern. Biogeochemistry Group. Stroud Water Research Center.
- 2010 Research Intern. Department of Marine Science. Texas A&M University Galveston (TAMUG).

PUBLICATIONS: (*denotes undergraduate mentee co-author)

Peer-reviewed manuscripts

In Press or Published

- 2023 **Lowman, H.E.**, M.E. Hirsch, M.A. Brzezinski, and J.M. Melack. 2023. Sandy Marine Sediments Surrounding Giant Kelp Forests Provide Recycled Nutrients. *Journal of Coastal Research*. <https://doi.org/10.2112/JCOASTRES-D-22-00035.1>.

- Halpern, B., C. Boettiger, M.C. Dietze, [and 113 others, including **H.E. Lowman**]. 2023. Priorities for Synthesis in Ecology and Environmental Science. *Ecosphere*. <https://doi.org/10.1002/ecs2.4342>.
- Gushulak, C., P. Bodmer, C. Rosa de Carvalho, R. Gladstone-Gallagher, Y.P. Lee, **H. Lowman**, N. Oguguah, K. Meinikmann, Y. Rii, B. Rodríguez-Cardona, and M. Bizic. 2023. The Silent Mental Health and Well-Being Crisis of Early Career Researchers in Aquatic Sciences. *Limnology and Oceanography Bulletin*. <https://doi.org/10.1002/lob.10539>.
- 2022 **Lowman, H.E.**, M. Moingt, A.R. Zimmerman, J. Dugan, and J.M. Melack. 2022. Distribution of Terrestrial Organic Material in Intertidal and Nearshore Marine Sediment due to Debris Flow Emergency Response. *Science of the Total Environment*. 843:1568886. <https://doi.org/10.1016/j.scitotenv.2022.156886>.
- Thornton Hampton, L., **H. E. Lowman**, S. Coffin, [and 18 others]. 2022. A Living Tool for the Continued Exploration of Microplastic Toxicity. *Microplastics and Nanoplastics*. 2:13. <https://doi.org/10.1186/s43591-022-00032-4>.
- Stein, E.D., J.S. Brown, A. Canney, M Mirkhanian, **H. Lowman**, K. O'Connor, and R. Clark. 2022. Prioritizing Stream Protection, Restoration and Management Actions Using Landscape Modeling and Spatial Analysis. *Water*. 14: 1375. <https://doi.org/10.3390/w14091375>
- 2021 **Lowman, H.E.**, K.A. Emery, J.E. Dugan, and R.J. Miller. 2021. Nutritional Quality of Giant Kelp Declines Due to Warming Ocean Temperatures. *Oikos*. 2022(7): e08619. <https://doi.org/10.1111/oik.08619>
- Lowman, H.E.**, M. Moingt, M. Lucotte, J.M. Melack, and H.M. Page. 2021. Terrestrial Organic Matter Inputs to Nearshore Marine Sediment Under Prolonged Drought Followed by Significant Rainfall as Indicated by Lignin. *Estuaries and Coasts*. 44: 2159-2172. <https://doi.org/10.1007/s12237-021-00931-4>
- 2019 **Lowman, H.E.**, K.A. Emery, L. Kubler-Dudgeon⁺, J.E. Dugan, and J.M. Melack. 2019. Contribution of Macroalgal Wrack Consumers to Dissolved Inorganic Nitrogen Concentrations in Intertidal Pore Waters of Sandy Beaches. *Estuarine, Coastal and Shelf Science*. 219: 363-371. <https://doi.org/10.1016/j.ecss.2019.02.004>
- 2015 Schroer, A.L., **H.E. Lowman**, and C.L. Just. 2015. Educating the Aware, Informed, and Action-oriented Sustainable Citizen. *Sustainability*. 7(2): 1985-1999. <https://doi.org/10.3390/su7021985>
- 2014 Aldeborgh, H., K. George, M. Howe, **H. Lowman**, H. Moustakas, N. Strunsky, and J.M. Tanski. 2014. Analysis of Small Molecule X-Ray Crystal Structures: Chemical Crystallography with Undergraduate Students in a Teaching Laboratory. *Journal of Chemical Crystallography*. 44(2): 70-81. <https://doi.org/10.1007/s10870-013-0485-z>

In Revision, In Review, Submitted and In Prep (pdfs available upon request)

- 2022 **Lowman, H.E.**, R. Shriver, R. Hall, J. Harvey, P. Savoy, C. Yakulic, and J. Blaszczak. Macroscale controls on disturbance thresholds and the recovery of river ecosystem productivity following flood disturbances. *Submitted*.
- Marzolf, N.S., M.J. Vlah, **H.E. Lowman**, W.M. Slaughter, E.S. Bernhardt. Are annual river productivity regimes changing through time?. *In Prep*.
- Harms, T., **H.E. Lowman**, J. Blaszczak, X. Dong, S. Earl, L. Gaines-Sewell, E. Hanan, M. Lauck, J. Melack, A.M. Reinhold, A. Webster, and N.B. Grimm. Interacting Fire and Precipitation Regimes Influence Catchment Biogeochemistry of Aridlands. *In Prep*.
- Emery, K.A., A. Miller-ter Kuile, **H.E. Lowman**, M. Gans, J.R. Madden, J.C. Ohlman, J.E. Dugan, and R.J. Miller. Individual and Environmental Drivers of Persistence and Loss of Giant Kelp from Nearshore Rocky Reefs. *In Prep*.

Reports and theses

- 2022 Stein, E.D., J.S. Brown, A. Canney, M. Mirkhanian, **H. Lowman**, K. O'Connor, R. Clark. 2022. Prioritizing Stream Protection, Restoration and Management Actions Using Landscape Modeling and Spatial Analysis. Southern California Coastal Water Research Project Technical Report 1246.
- 2021 Mazor, R.D., B. Topping, T.-L. Nadeau, K.M. Fritz, J. Kelso, R. Harrington, W. Beck, K. McCune, **H. Lowman**, A. Allen, R. Leidy, J.T. Robb, and G.C.L. David. 2021. User Manual for a Beta Streamflow Duration Assessment Method for the Arid West of the United States. V 1.0. Document No. EPA-800-5-21001
- 2020 **Lowman, H.** Nutrient and Organic Matter Cycling in the Nearshore Ocean and Marine Sediment of the Santa Barbara Channel. Ph.D. Dissertation. University of California Santa Barbara. <https://escholarship.org/uc/item/7nj792b9>

Datasets

- 2022 Santa Barbara Coastal LTER, **H. Lowman**, M. Hirsch, M. Brzezinski, J. Melack. 2022. SBC LTER: Reef: Dissolved nitrogen fluxes from kelp forest sediment. *Environmental Data Initiative*. <https://doi.org/10.6073/pasta/99e17a0aa3a12b0c75000d394e6d79b1>
- Santa Barbara Coastal LTER, **H. Lowman**, M Moingt, A. Zimmerman, J. Dugan, J. Melack. 2022. SBC LTER: Beach: Distribution of terrestrial organic material in intertidal and nearshore marine sediment due to debris flow response efforts. *Environmental Data Initiative*. <https://doi.org/10.6073/pasta/beb2eac54c6f02e1ff6206b3ec21e0d3>
- 2021 Santa Barbara Coastal LTER, **H. Lowman**, J. Melack, M. Brzezinski. 2021. SBC LTER: Ocean: Diel nearshore water profiles (CTD and chemistry) during stratified conditions. *Environmental Data Initiative*. <https://doi.org/10.6073/pasta/7a41a41c52b425c564de7aa079839049>
- 2020 **Lowman, H.**, K. Emery, L. Kubler-Dudgeon⁺, J. Dugan, J. Melack. 2020. SBC LTER: Beach: Data to support “Contribution of macroalgal wrack consumers to

dissolved inorganic nitrogen concentrations in intertidal pore waters of sandy beaches.” *Environmental Data Initiative*.

<https://doi.org/10.6073/pasta/ab62a56a85ce73f2cb93269d5482e79e>

- 2018 Santa Barbara Coastal LTER, Page, H., **H. Lowman**, J. Melack, J. Smith, D. Reed. 2018. SBC LTER: OCEAN: Particulate Organic Matter Content and Composition of Stream, Estuarine, and Marine Sediments. *Environmental Data Initiative*. <https://doi.org/10.6073/pasta/c9c8f3cd147aca98ef5226ec7eeb57bd>

R Shiny Applications (if required, access credentials available upon request)

- 2022 Masroor, R.⁺, **H. Lowman**, J. Blaszcak, J. Hosen. 2022. DOM Explorer: A Tool for Visualizing Dissolved Organic Matter in Streams across North America. https://hlowman.shinyapps.io/neon_dom/
- Thornton Hampton, L., **H. Lowman**, S. Coffin, [and 16 others]. 2022. Toxicity of Microplastics Explorer. https://sccwrp.shinyapps.io/aq_mp_tox_shiny/
- 2021 Wong, C., S. Kotar, A. Zuelow, **H. Lowman**, A. Wong, E. Miller, D. Lin, R. Sutton, S. Weisberg. 2021. Contaminants of Emerging Concern Data Tool. https://sccwrp.shinyapps.io/cec_data_tool/
- 2020 Mazor, R., **H. Lowman**, A. Holt., 2020. Beta Streamflow Duration Assessment Method for the Arid West: Online Report Generating Tool Version 1.0. https://sccwrp.shinyapps.io/beta_awsdam_report/

Software Packages

- 2019 Bui, A., **H. Lowman**, A. Guerra. 2019. *calecopal*: a California-inspired package of color palettes. <https://github.com/an-bui/calecopal/>

FELLOWSHIPS, SCHOLARSHIPS, AND AWARDS:

2022-2023	PME New Researcher Award	\$1,000
2022	Postdoctoral Award for Professional Development. UNR.	\$500
2021	Coastal and Estuarine Research Federation (CERF) Participation Grant.	\$300
2019-2020	President’s Dissertation Year Fellowship. UCSB.	\$76,600
2020	Ocean Sciences Meeting Travel Grant.	\$380
2019	Doctoral Student Travel Grant. UCSB.	\$400
2019	Graduate Division Travel Grant. UCSB.	\$1,000
2019	Coastal and Estuarine Research Federation Travel Grant.	\$300
2016-2019	Santa Barbara Coastal LTER Graduate Fellowship. UCSB.	\$76,000
2015	EEMB Departmental Fellowship. UCSB.	\$45,000
2012	Environmental Research Institute Scholarship. Vassar College.	\$5,000
2010	National Science Foundation Research Experiences for Undergraduates (REU) Award. TAMUG.	\$5,000

RESEARCH GRANTS:

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- 2023 Scientific Peers Advancing Research Collaborations (SPARC) Award. National Center for Ecological Analysis and Synthesis (NCEAS). “Quantifying interactive

	effects of fire and precipitation regimes on catchment biogeochemistry of aridlands.” Role: Co-Lead PI	\$19,720
2022	Lake Tahoe License Plate Program. Nevada Department of State Lands. “Making the smart watershed-to-lake connection: using high-frequency sensors and process-based aquatic ecosystem models to predict nearshore greening in Lake Tahoe.” Role: Senior Personnel	\$81,287
2018	Worster Award. EEMB, UCSB. “Investigating Zooplankton as a Source of Nitrogen for Kelp Forests During Low Nutrient Periods.” Role: Lead PI.	\$5,400
2018	Emergency Grant. Associated Students Coastal Fund, UCSB. “Composition of Debris Deposited on Goleta Beach and Persistence in Marine Ecosystems.” Role: Lead PI.	\$8,840
2018	Departmental Block Grant. EEMB, UCSB. “Lignin Phenols as Biomarkers of Terrestrial Organic Matter in the Santa Barbara Channel.” Role: Graduate Researcher.	\$1,000

INVITED SEMINARS:

2023	National Center for Ecological Analysis and Synthesis. Santa Barbara, CA.
2023	Department of Ecology, Evolution, and Conservation Biology. UNR. Reno, NV.
2022	Department of Natural Resources and Environmental Science. UNR. Reno, NV.
2020	Southern California Coastal Water Research Project. Costa Mesa, CA.
2017	Biogeosciences Seminar Series. UCSB. Santa Barbara, CA.

CONFERENCE ACTIVITIES: (+ undergraduate mentee, ** invited presentation)

Organizing Committees

2023-present Ocean Sciences Meeting 2024 Program Committee Early Career Representative

Chaired Sessions

2022	A. Carter, H. Lowman , L. Koenig, B. Oleksy, M. Trentman, J. Blaszcak. “Ecological Models as Tools for Integrating Aquatic Sciences.” Joint Aquatic Sciences Meeting (JASM). Grand Rapids, MI.
2020	H. Lowman , T. Treude. “Marine Sediments: Fluxes, Fauna, and Forecasting.” Ocean Sciences Meeting. San Diego, CA.

Presentations

2023	H. Lowman , K. Loria, L. Katona, J. Krause, R. Miller, S. Chandra, S. Macintyre, J. Melack, J. Blaszcak. “Littorally turning green: Quantifying variability in nearshore benthic metabolism in an oligotrophic mountain lake.” Aquatic Sciences Meeting. Palma de Mallorca, Spain.
2022**	H. Lowman , R.O. Hall, A. Carter, S. Collins, J. Harvey, P. Savoy, C. Yackulic, J. Blaszcak. “Predicting river resilience to disturbance in streams and rivers across the U.S.” Data Science and Open Science for Aquatic Research. <i>Virtual summit</i> .

- 2022 J. Blaszcak, R.O. Hall, C. Yackulic, L. Genzoli, **H. Lowman**. “Predicting River Ecosystem Dynamics Using Population Models to Inform Freshwater Management.” JASM. Grand Rapids, MI.
- 2022 L. Thornton Hampton, **H. E. Lowman**, S. Coffin, [and 15 others]. “ToMEx: Toxicity of Microplastics Explorer.” Society of Environmental Toxicology and Chemistry Southern California Chapter Annual Meeting. Ventura, CA.
- 2021 A. Webster, **H. Lowman**, B. Summers, T. Harms, S. Earl, X. Dong, A.M. Reinhold, J. Blaszcak, M. Lauck, L. Gaines-Sewell, N.B. Grimm. “Wildfire impacts to aridland stream chemistry across a hydroclimatic gradient.” American Geophysical Union Fall Meeting. New Orleans, LA.
- 2021 **H. Lowman**, M. Hirsch, M. Brzezinski, J. Melack. “Marine Sediments Surrounding Giant Kelp Forests Supply Recycled Nutrients to the Overlying Water Column.” CERF Conference (*Virtual summit*).
- 2019 **H. Lowman**, M. Moingt, A. Zimmerman, J. Melack. “Distribution of Terrestrial Organic Material in Nearshore Marine Ecosystems due to Debris Flow Emergency Response.” CERF Conference. Mobile, AL.
- 2019 K. Le⁺, **H. Lowman**. “Investigating Pelagic Zooplankton as a Source of Nitrogen for Giant Kelp Forests during Low Nutrient Periods.” Worster Award Symposium. UCSB. Santa Barbara, CA.
- 2018 E. Staguhn⁺, **H. Lowman**, J. Melack. “The Impact of Thomas Fire Debris on Nitrogen Cycling in Nearshore Marine Sediments in the Santa Barbara Channel”. Ocean Global Change Biology REU Symposium. UCSB. Santa Barbara, CA.
- 2018 **H. Lowman**, M. Moingt, J. Melack, M. Page, M. Lucotte. “Lignin Phenols as Biomarkers of Terrestrial Organic Matter in the Santa Barbara Channel.” Association for the Sciences of Limnology and Oceanography (ASLO) Summer Meeting. Victoria, British Columbia.
- 2018 **H. Lowman**. “Data Science in the Classroom: Lessons Learned from Using R, JMP, MATLAB, and Excel.” Graduate Student Teaching Symposium. UCSB. Santa Barbara, CA.
- 2018 **H. Lowman**, J. Melack. “Investigating Benthic Marine Sediments as a Nutrient Source to the Overlying Water Column.” EEMB Graduate Symposium. UCSB. Santa Barbara, CA.
- 2014 C. Just, **H. Lowman**. “Sustainability Education and Community Conversation Training.” Just Sustainability Conference. Seattle University. Seattle, WA.
- 2012 **H. Lowman**, A. Spodek Keimowitz. “The Effect of Organic Matter on Metal Cycling in Wetland Soils.” Department of Chemistry Thesis Symposium. Vassar College. Poughkeepsie, NY.
- 2010 **H. Lowman**, S. Moller, D. Aguirre, P. Louchouart. “Tracing Black Carbon in Local Aqueous Environments Using Levoglucosan and Free Lignin Phenols.” National Science Foundation REU Symposium. TAMUG. Galveston, TX.

Posters

- 2023 A. Webster, **H. Lowman**, T. Harms, J. Blaszcak, S. Earl, X. Dong, L. Gaines-Sewell, E. Hanan, M. Lauck, J. Melack, A.M. Reinhold, N.B. Grimm. “Precipitation constrains biogeochemical responses of arid land catchments to fire.” Aquatic Sciences Meeting. Palma de Mallorca, Spain.

- 2022 R. Masroor⁺, **H. Lowman**, T. Hou, J. Hosen, J. Blaszcak. “DOM Explorer: A tool for visualizing dissolved organic matter in streams across North America.” Wolfpack Discoveries Summer Research Symposium. UNR.
- 2022 **H. Lowman**, R.O. Hall, A. Carter, S. Collins, J. Harvey, P. Savoy, C. Yackulic, J. Blaszcak. “Modeling Primary Productivity and Responses to Disturbance in Streams Using a Bayesian Population Model.” JASM. Grand Rapids, MI.
- 2020 **H. Lowman**. “Investigating Benthic Marine Sediments near Giant Kelp Forests as a Nutrient Source to the Overlying Water Column.” Ocean Sciences Meeting. San Diego, CA.
- 2018 **H. Lowman**, J. Melack. “Investigating Benthic Marine Sediments as a Nutrient Source to the Overlying Water Column.” LTER All Scientists’ Meeting. Asilomar, CA.
- 2018 C. Smith⁺, **H. Lowman**, J. Melack. “Effects of Low pH on Microbially Mediated Nitrogen Transformations in Marine Sediments.” Ocean Sciences Meeting. Portland, OR.
- 2016 **H. Lowman**, J. Melack. “Monitoring Fluctuations in Dissolved Inorganic Nitrogen in Local Kelp Forest Environments.” Santa Barbara Coastal LTER Annual Meeting. UCSB. Santa Barbara, CA.
- 2012 **H. Lowman**, A. Spodek Keimowitz, K. Wovlkovich. “What might the *Deepwater Horizon* oil spill have done to Gulf Coast marshes? A Study of the Effects of Organic Matter on Metal Cycling in Wetland Soils.” Hudson River Symposium. Vassar College. Poughkeepsie, NY.
- 2009 **H. Lowman**, E. Eberhardt. “Impact of Hydroxylation on Poly (*L*-Proline) Type II Helix Formation and Protease Resistance.” Mid-Hudson American Chemical Society Research Symposium. Mount Saint Mary College. Newburgh, NY.

WORKSHOPS LED:

- 2023 Co-Organizer. Quantifying Interactive Effects of Fire and Precipitation Regimes on Catchment Biogeochemistry of Aridlands. NCEAS. Santa Barbara, CA.
- 2022 Co-Organizer. Temporal Trends in Nutritional Content of Primary Production. LTER All Scientists’ Meeting. Asilomar, CA.
- 2022 Instructor. Building Your Own RShiny Application. Modelscape Consortium. Flathead Lake Biological Station, University of Montana.
- 2022 Instructor. Introduction to RShiny Workshop. University of Wyoming, Confronting Models with Data Working Group (*Virtual*).
- 2021 Co-Organizer/ Co-Instructor. Introduction to R for Ecologists. UCSB (*Virtual*). https://hlowman.github.io/ucsb_r_workshop/
- 2020-2021 Organizer/Lead Instructor. *Tidy Tuesday* R Workshop Series. SCCWRP (*Virtual*). <https://github.com/hlowman/TidyTuesday>
- 2020 Co-Organizer/Co-Instructor. Visualizing and Mapping Bioassessment Data in R. California Aquatic Bioassessment Workgroup/CA Chapter of the Society for Freshwater Science (*Virtual*). https://ucd-cws.github.io/CABW2020_R_training/
- 2017 Co-Organizer and Co-Instructor. Introduction to R Workshop. SBC LTER.

WORKSHOPS ATTENDED:

2023	Salt Water Intrusion and Sea-Level Rise All-Hands Meeting, Duke University.
2022	Decolonizing Ecology, Department of Biology, Duke University.
2021	Mentoring Mentors, Office of Postdoctoral Affairs, UNR.
2021	Culturally Relevant Education in Environmental Data Science, Environmental Data Science Inclusion Network, <i>Virtual</i> .
2021	The Future of Synthesis in Ecology Workshop, National Center for Ecological Analysis and Synthesis, <i>Virtual</i> .
2020	The Carpentries Instructor Training, <i>Online</i> .
2020	California Water Data Science Symposium, California Water Boards.
2020	Ocean Sciences Data Labs Workshop, Ocean Observatories Initiative.
2019	University of California (UC) Office of the President Fall Meeting, UC Berkeley.
2019	Scientific Communication Workshop, Schmidt Ocean Institute.
2017	Coastal Resiliency Workshop, UC Irvine (UCI).
2017	Software Carpentry Workshop, EcoDataScience, UCSB.

TEACHING EXPERIENCE:

Academic Teaching Experience

Department of Natural Resources and Environmental Science, UNR (Graduate-level)

Guest Lecturer. NRES 701c: Science Writing.

Spring 2023, 12 students

Department of Biology, UNR (Undergraduate-level)

Guest Lecturer. BIOL 314: Ecology and Population Biology.

Spring 2022, 30 students

Bren School of Environmental Science and Management, UCSB (Graduate-level)

Teaching Assistant. ESM 202: Environmental Biogeochemistry.

Winter 2017, 88 students; Winter 2018, 83 students; Winter 2019, 74 students

Department of Ecology, Evolution, and Marine Biology, UCSB (Undergraduate-level)

Teaching Assistant. EEMB 148: Stream Ecology.

Spring 2017, 141 students; Spring 2018, 125 students

Teaching Assistant. EEMB 142B: Environmental Processes in Oceans/Lakes.

Winter 2016, 86 students

Collegebound Santa Barbara (Undergraduate and high school-level)

Tutor. SAT Prep, Algebra, English Composition.

Summer 2019, 6 students

Bilingual Teaching Experience

The Experiment in International Living, World Learning (Primary Spoken Language: French)

Group Leader. France: French Language and Culture.

Summer 2012, 10 students

Seedrioru Estonian Summer Camp (Primary Spoken Language: Estonian)

Counselor. Suured Tüdrukud.

Summer 2008, 10 campers

MENTORING:

Undergraduate Independent Research Projects Advised and Student Awards

- 2022 Rija Masroor, College of William and Mary. “DOM Explorer: A Tool for Visualizing Dissolved Organic Matter in Streams across North America.” National Science Foundation REU (2022).
- 2017-2019 Katherine Le, UCSB. “Investigating Pelagic Zooplankton as a Source of Nutrients for Giant Kelp Forests.” Worster Award (2018).
- 2018 Elena Staguhn, University of Maryland. “The Impact of Thomas Fire Debris on Nutrient Cycling in Nearshore Marine Sediments.” National Science Foundation REU (2018).
- 2017-2018 Lila Kubler-Dudgeon, UCSB. “Contribution of Talitrid Amphipods and their Kelp Wrack Consumption to Sandy Beach Nitrogen Cycling.” Co-author on *Estuarine, Coastal and Shelf Science* publication (2019).
- 2017 Chloe Smith, Oregon Institute of Technology. “Effects of Low pH on Microbially Mediated Nitrogen Transformations in Marine Sediments.” National Science Foundation REU (2017), ASLO Multicultural Program Award (ASLOMP, 2018).

Undergraduate, Graduate, & Professional Mentees and Affiliations

- 2021-2022 Annie Holt, Department of Biology, SCCWRP.
- 2021 Angelina Zuelow, Department of Biological Science, California State University (CSU) Fullerton.
- 2020-2021 Jhenevieve Cabasal, Department of Biological Sciences, CSU Long Beach.
- 2020 Megan Mirkhanian, Department of Civil and Environmental Engineering, UCI.
- 2019-2020 Tyler Daniel, Santa Barbara Coastal LTER, UCSB.
- 2017-2019 Angela Delossantos, Department of Environmental Science, UCSB.
- 2017-2018 Kristine Robinson, Women in Science and Engineering, UCSB.

Undergraduate Teaching Assistants (UCSB)

- 2018 Belle Jiyarom, Sophie O’Hare
- 2017 Timothy Ngo, Paige Rasmussen

OUTREACH, EDUCATION, AND DIVERSITY RELATED ACTIVITIES:

- 2023 ASLOMP Mentor, ASLO Aquatic Sciences Meeting
- 2023 Facilitator, Amplifying Voices Seminar Series, ASLO
- 2022 Mentor, Joint Aquatic Sciences Meeting
- 2021 Student Presentation Judge and Mentor, CERF Conference
- 2021 Facilitator, Data Therapy Monthly Meeting Series, Global Water Center (UNR)
- 2020 Facilitator, Cover Letter and CV Workshop for Undergraduates, SCCWRP
- 2020 Panelist, EEMB 120 Career Panel for Ecology Undergraduates, UCSB

2019 Volunteer, CERF Conference
2019 Co-facilitator, Ocean Change Biology REU Research Skills Workshop, UCSB
2019 Panelist, Graduate Students for Diversity in Science Panel, UCSB
2019 Judge, Santa Barbara County Science Fair
2018, 2019 Facilitator, Ocean Change Biology REU Career Panel, UCSB
2018 Mentor, LTER All Scientists' Meeting
2017, 2018 Mentor, NSF REU Program
2017-2018 Mentor, Women in Science and Engineering, UCSB
2017-2018 Panelist, EEMB 142 Career Panel for Aquatic Biology Undergraduates, UCSB
2017 Volunteer, Santa Barbara World Oceans Day
2017 Presenter, EEMB 142 Graduate School Workshop, UCSB
2016-2017 Editor/Contributor, "Roots to STEM" blog
2016 Facilitator, EEMB 142 Career Panel for Aquatic Biology Undergraduates, UCSB
2010 Volunteer, Texas Marine Mammal Stranding Network
2009 Volunteer, Auburn Heights Preserve

PROFESSIONAL SERVICE:

Association for the Sciences of Limnology and Oceanography

2022-present Member, Early Career Committee

Peer-review activities

Journal reviewer: *Biogeochemistry*, *Estuaries & Coasts*, *European Journal of Phycology*, *Hydrobiologia*, *Journal of Marine Science*, *Journal of Marine Systems*, *PLoS ONE*

Professional memberships and associations

Association for the Sciences of Limnology and Oceanography (ASLO)
Coastal and Estuarine Research Federation (CERF)
Collaborative for Research in Aridland Stream Systems (CRASS)
Santa Barbara Coastal Long Term Ecological Research Project (SBC LTER)
Society for Open, Reliable, and Transparent Ecology and Evolutionary Biology (SORTEE)
University of Nevada Global Water Center (GWC)

DEPARTMENTAL AND INSTITUTIONAL SERVICE:

University of Nevada, Reno

2021-present Member, Global Water Center Strategic Planning Committee

Southern California Coastal Water Research Project

2020-2021 Member, Professional Development Training Team

University of California Santa Barbara

2019-2020 Graduate Representative, Freshwater Ecology Faculty Hiring Committee
2018-2020 Coordinator, Biogeosciences Seminar Series
2019 Judge, EEMB Graduate Student Symposium
2018 Organizer, Professional Development Seminar Series: Academic Positions
2017-2018 Organizer, Statistical Methods and Data Visualization in Ecology Group

2016 Organizer, Foundational Literature in Ecology Reading Group

Vassar College

2011-2012 Captain, Synchronized Ice Skating Team

2010-2012 Tour Guide, Office of Admissions

2009-2012 Captain/Treasurer, Ski Team

ADDITIONAL MEDIA:

- 2022 “Managing Mudslide Debris After Fires.” *Eos*: <https://eos.org/articles/managing-mudslide-debris-after-fires>
- 2022 “After the Debris Flow.” *The Current, UCSB*: <https://www.news.ucsb.edu/2022/020689/after-debris-flow>
- 2022 “Giant Kelp is Getting Less Nutritious.” *Hakai Magazine*: <https://hakaimagazine.com/news/giant-kelp-is-getting-less-nutritious/>
- 2021 “Giant Kelp Losing Nitrogen in Warming Waters.” *Santa Barbara Independent*: <https://www.independent.com/2021/12/19/giant-kelp-losing-nutrients-in-warming-waters/>
- 2021 “Climate Change Makes Kelp Less Nutritious.” *NSF LTER Network*: <https://lternet.edu/stories/climate-change-makes-kelp-less-nutritious/>
- 2021 “Kelp’s Nutrition Under Rising Temperatures and the Importance of Long-Term Data.” *The Bottom Line, UCSB*: <https://thebottomline.as.ucsb.edu/2021/11/kelps-nutrition-under-rising-temperatures-and-the-importance-of-long-term-data>
- 2021 Interviewed for *KCBX* story (90.1 FM): <https://www.kcbx.org/kcbx-top-regional-stories/2021-11-06/ucsb-researchers-find-long-term-rising-sea-temperature-decreases-the-nutritional-value-of-giant-kelp>
- 2021 “Warmer Water, Less Nutrition.” *The Current, UCSB*: <https://www.news.ucsb.edu/2021/020445/warmer-water-less-nutrition>
- 2021 Metadata Tutorial, SBC LTER: <https://www.youtube.com/watch?v=0n7TteZFbpc>
- 2020 “Tidy coding on Tidy Tuesday.” *SCCWRP Director’s Report*: <http://ftp.sccwrp.org/pub/download/DOCUMENTS/DirectorsReports/2011DirRep.pdf>
- 2019 Featured Scientist, *LTER Network*: <https://www.instagram.com/p/B0TcVZJhZBJ/>
- 2018 Interviewed for *KEYT-TV* story, “Clearing the Shoreline”: <https://app.criticalmention.com/app/#clip/view/34474083?token=c25563aa-f57e-4bbc-89b1-413293592708>

ADDITIONAL SKILLS AND EXPERTISE:

Software & Computing

R; STAN; Git/GitHub; Zotero; Slurm; High performance computing clusters (*proficient*)

Python, JMP, Mendeley (*working knowledge*)

MATLAB, SQL (*novice*)

Languages

English (*fluent*); Estonian, French (*conversational*);

Italian (*novice*)

Certifications

The Carpentries Certified Instructor