

PRIYA SHUKLA

Berkeley, CA 94706

pshukla @ucdavis.edu • priyology.github.io • blogs.forbes.com/priyashukla • @priyology

EDUCATION

- 2018-Present** **Ph.D. Ecology**, University of California, Davis (UCD) || GPA: 4.00
Dissertation Topic: Oyster aquaculture in an era of marine heatwaves
Adviser: Dr. Edwin (Ted) Grosholz
- 2016** **M.S. Ecology**, San Diego State University (SDSU) || GPA: 3.95
Thesis: *Environmental Variability Influences Kelp Physiology: Implications of Anthropogenic Climate Change*
Adviser: Dr. Matthew Edwards
- 2011** **B.S. Environmental Science and Management**, University of California, Davis (UCD) || GPA: 3.38
Emphasis in Ecology, Biodiversity and Conservation, Minor in Oceanography

PROFESSIONAL EXPERIENCE

- 2020-2021** **Lead Mentor**, Coastal and Marine Sciences Institute (CMSI), UCD
- 2019** **Policy Engagement Fellow**, COMPASS (Communication Partnership for Science and the Sea)
- 2019** **Communications Coordinator**, CMSI, UCD
- 2016-2018** **Lab Manager**, Bodega Ocean Acidification Research Group, UCD Bodega Marine Lab
- 2016** **Policy Research Intern**, San Francisco Baykeeper
- 2015-2016** **Public Educator**, Marine Science Institute
- 2012-2015** **Graduate Student Researcher**, Department of Biology, SDSU
- 2014-2015** **Research Diving Technician**, Point Loma Kelp Forest Abalone Outplanting Survey, SDSU
- 2012** **Environmental Consulting Intern**, San Francisco-Oakland Bay Bridge Seismic Safety Project, Caltrans
- 2011** **Lab Technician**, Biogeochemistry Laboratory, Bodega Marine Laboratory, UCD
- 2009-2011** **Lead Lab Technician**, Fish Conservation Biology Laboratory, UCD
- 2008-2009** **Lab Technician**, Agricultural Entomology Laboratory, UCD
- 2008** **Lab Technician**, Air Quality Research Center, UCD
- 2005-2007** **Lab Technician**, Environmental Toxicology Laboratory, Stanford University

PEER-REVIEWED PUBLICATIONS

- In Review** Ricart, A., Ward, M., Hill, T., Sanford, E., Kroeker, K. Takeshita, Y., Merolla, S., **Shukla, P.**, Ninokawa, A., Elsmore, K., Gaylord, B., Coast-wide evidence of low pH amelioration by seagrass ecosystems. *Global Change Biology*.
- In Review** Ricart, A., Gaylord, B., Hill, T., Sigwart, Julia., **Shukla, P.**, Ward, M., Ninokawa, A., and Sanford, E. Seagrass driven changes in carbonate chemistry enhance oyster growth. *Ecology*.
- In Review** Ward, M.A., Hill, T.M, Ricart, A.M., Gaylord, B., O'Donnell, B., Capece, L. **Shukla, P.**, Kroeker, K., Sanford E, and Oechel, W. Assessing multiple carbon fluxes in a temperature, Pacific seagrass meadow. *Journal of Geophysical Research - Oceans*.
- 2019** Barclay, K.M., Gaylord, B., Jellison, B.M., **Shukla, P.**, Sanford, E., and Leighton, L.R. Variation in the effects of ocean acidification on shell growth and strength in two intertidal gastropods. *Marine Ecology Progress Series*. 626:109-121.
- 2018** Cavalcanti, G.S., **Shukla, P.**, Morris, M., Ribeiro, B., Foley, M., Doane, M., Leomil, L., Thompson, C., Edwards, M.S., Dinsdale, E. A., and Thompson, F.L. Rhodoliths holobionts in a changing ocean: Host-microbes interactions mediating coralline algae resilience under ocean acidification? *BMC Genomics*. 19:701.

- 2017 **Shukla, P.** and Edwards, M.S. Elevated $p\text{CO}_2$ is less detrimental than increased temperature to early development of the giant kelp, *Macrocystis pyrifera* (Phaeophyceae, Laminariales). *Phycologia*. 56(6):638-648.

CHAPTERS & REPORTS

- 2020 Science in Action: Exploring the Future of U.S. Aquaculture, *A COMPASS Roundtable on Ocean Aquaculture*
+ Associated Blog Post: "**Science in Action: Exploring the Future of U.S. Aquaculture**"
- 2020 Oldach, E.J. & **Shukla, P.** Using Vulnerability Assessments to Evaluate the Sensitivity of Infrastructure to Environmental Change. Chapter in United Nations Sustainable Development Goals, Goal Nine Compendium.
- 2018 Gaylord, B., Rivest, E., Hill, T., Sanford, E., **Shukla, P.**, Ninokawa, A., Ng, G. California mussels as bio-indicators of ocean acidification. A Report for California's Fourth Climate Change Assessment.

RESEARCH POSTERS † & ORAL PRESENTATIONS

- Shukla, P.**, Burge, C. M., Grosholz, E.D. 2020. Effect of Temperature on the Mortality, Growth & Immune Response of the Pacific Oyster, *Crassostrea gigas*, in a California Estuary 101st Western Society of Naturalists Conference. Virtual.
- Ricart, A.M., Ward, M.A., Kroeker, K., Sanford, E., Gaylord, B., Merolla, S., **Shukla, P.**, Takeshita, Y., Hill, T.M. 2019. Seagrass ecosystems buffer low pH in coastal areas. Ocean Sciences Meeting, San Diego, CA.
- Ward, M.A., Hill, T.M., Ricart, A.M., Gaylord, B., O'Donnell, B., Capece, L. **Shukla, P.**, Kroeker, K., Sanford E, and Oechel, W. 2019. Assessing multiple carbon fluxes in a temperature, Pacific seagrass meadow. Ocean Sciences Meeting, San Diego, CA.
- Capece, L.R., Hill, T.M., Ricart, A.M., Ward, M., **Shukla, P.** 2018. Insights from stable isotopes and C/N ratios: Assessing the spatial and temporal variation of sedimentary organic matter stored in seagrass meadows. American Geophysical Union, Washington, D.C.
- Ricart, A.M., Sanford, E., Gaylord, B., **Shukla, P.**, Ward, M., Hill, T.M. 2018. Natural pH variability driven by seagrass affects oyster growth: insights into potential mitigation of ocean acidification. 99th Western Society of Naturalists Conference, Tacoma, WA.
- Shukla, P.** 2018. Climate Justice through Ocean Science. Imagining America, Chicago, IL.
- Barclay, K.M., Gaylord, B., Jellison, B.M., **Shukla, P.**, Sanford, E., and Leighton, L.R. 2017. Impact of ocean acidification on shell growth and strength of two intertidal gastropods exposed to the scent of predation. 98th Western Society of Naturalists Conference, Pasadena, CA.
- Ward, M.A., Hill, T.M., Gaylord, B., Sanford, E.D., Kroeker, K.J., O'Donnell, B.C., **Shukla, P.**, and Oechel, W.C. 2017. A synthesis of carbon services in California seagrass beds. 98th Western Society of Naturalists Conference, Pasadena, CA.
- Shukla, P.**, Brown, M.B., and Edwards, M.S. 2015. Impacts of elevated $p\text{CO}_2$ and temperature on multiple life stages of the giant kelp. 96th Western Society of Naturalists Conference, Sacramento, CA.
- Shukla, P.** 2015. Photosynthesis is a Choice: Environmental Variability Influences Carbon Uptake in Kelps at Different Life Stages. SDSU Marine Ecology and Biology Student Association Seminar Series, San Diego, CA.
- Shukla, P.** and Edwards, M.S. 2015. Elevated CO_2 concentrations facilitate development in microscopic life stages of *Macrocystis pyrifera*. 44th Annual Benthic Ecology Meeting, Québec City, Canada.
- Shukla, P.** and Edwards, M.S. 2014. Elevated CO_2 concentrations facilitate development in microscopic life stages of *Macrocystis pyrifera*. 95th Western Society of Naturalists Conference, Tacoma, WA.
- †**Shukla, P.** and Edwards, M.S. 2013. Characterizing the effects of climate change on photosynthesis for embryonic and juvenile sporophytes of *Pterygophora californica* and *Laminaria farlowii*. 94th Western Society of Naturalists Conference, Oxnard, CA.

†Shukla, P. and Edwards, M.S. 2013. Characterizing the effects of climate change on photosynthesis for embryonic and juvenile sporophytes of *Pterygophora californica* and *Laminaria farlowii*. 22nd Biennial Conference of the Coastal and Estuarine Research Federation, San Diego, CA.

†Shukla, P., Hill, T.M., Gaylord, B., Hosfelt, J., and Nickols, K.J. 2011. Understanding impacts of ocean acidification on seagrass and salt marsh ecosystems based on studies in Bodega Harbor, California. 92th Western Society of Naturalists Conference, Vancouver, WA.

†Shukla, P. Hobbs, J., Kurth, R., Kindopp, J., and Cavallo, B. 2010. Determining run-type using otolith ⁸⁷Sr/⁸⁶Sr ratios among Feather River Chinook salmon spawners, 2002-2008. 6th Biennial Bay-Delta Science Conference, Sacramento, CA.

GRANTS IN SUPPORT OF RESEARCH & TRAVEL

2018	Western Society of Naturalists Student Travel Award (\$45)
2012-2015	San Diego State University Grant (\$9,765)
2014-2015	Council on Oceanic Affairs, Science and Technology Graduate Student Research Award (\$3,000)
2013-2014	Harold and June Grant Memorial Scholarship (\$2,195)
2014	San Diego State University Farris/EPEF Travel Award (\$1000)
2014	Western Society of Naturalists Student Travel Award (\$300)
2013	Council on Oceanic Affairs, Science and Technology (COAST) Travel Award (\$500)
2013	San Diego State University Research Foundation Award (\$495)

AWARDS & DISTINCTIONS

2022	Graduate Group in Ecology Fellowship, UC Davis (\$23,928)
2020	Scientist Sentinels: Civic Engagement & Leadership Program, COMPASS
2020	Graduate Research Fellowship, California Sea Grant (\$40,000)
2019	Dennis and Patricia Salisbury Graduate Student Award, UC Davis (\$3,993)
2019	Sustainable Oceans National Science Foundation Research Traineeship, UC Davis (\$51,892)
2019	Russell J. and Dorothy S. Bilinski Bodega Marine Lab Fellowship, UC Davis (\$20,000)
2018	Scholars Strategy Network Graduate Fellowship, Sacramento-Davis Chapter (\$2,000)
2018	Publicly Active Graduate Education (PAGE) Fellowship, Imagining America (\$500)
2018	Graduate Group in Ecology Fellowship, UC Davis (\$23,928)
2017	Climate Engagement Fellowship, UC Santa Cruz
2016	Monetary Award from Kung Guerra Foundation, Awarded to the Marine Science Institute (\$10,000)
2015	Most Valuable Member Award, SDSU MEBSA
2013	Maritime Alliance Environmental Leadership Award, co-recipient with MEBSA
2013	San Diego Ocean's Foundation Ocean Leadership Award, co-recipient with MEBSA
2010	Dean's List, Biological Sciences, UC Davis (Spring Quarter)

TEACHING & UNDERGRADUATE MENTORSHIP EXPERIENCE

Instructor

2020 Professional Development in Marine Science (ANS 198), UCD

Guest Lectures

2020	Career Discovery, University of California, Irvine, Virtual
2020	Marine Conservation Ecology, California State University, Northridge, Virtual
2020	Climate Change Biology, Doane University, Virtual
2020	Coastal Oceanography, UCD, Virtual
2020	Marine Invertebrate Ecology, Texas A&M University at Galveston, Virtual

Teaching Assistant

2015	Marine Ecology (BIOL 517), SDSU
2014	Ecology and the Environment (BIOL 354), SDSU

2012-2013 General Biology Laboratory (BIOL 100L), SDSU
2011-2012 AP Environmental Science, American High School, Fremont, CA

Mentor to Undergraduate Laboratory Assistants

Olivia Zanzonico. 2018. Techniques for measuring and analyzing seawater carbonate chemistry data.
Amanda Nordstrom. 2017. Techniques for measuring and analyzing seawater carbonate chemistry data.
David Gamez-Alvarez. 2015. Analysis of ¹³C/¹²C and ¹⁵N/¹⁴N in giant kelp blades from Southern California.
Marina Gandara. 2015. Analysis of ¹³C/¹²C and ¹⁵N/¹⁴N in giant kelp blades from Southern California.
David Logue. 2014. Measuring and analyzing microscopic kelp densities.
Wesley Leonard. 2013. Building a system for manipulating seawater carbonate chemistry.

SHORT COURSE EXPERIENCE

2019 Expert Witness Training Academy, National Science Foundation, Mitchell Hamline School of Law
2019 Communications Training for Storytelling and Messaging, UCD
2019 Story Circles Narrative Training, Randy Olson
2018 Improv for Academics, UCD
2016 Science Communication Short Course, Bodega Marine Laboratory, UCD
2013 SciFund Introduction to Outreach, #SciFund University
2013 Design and Analysis of Ecological Experiments, SDSU

PROFESSIONAL SERVICE

2019 Reviewer, UCD Graduate Group in Ecology Awards Committee
2019 Panelist, Northern California Forum for Diversity in Graduate Education: "What to do in a Gap Year", UC Davis
2019 Referee, *Marine Ecology*
2019 Panelist, Scholars Strategy Network National Convening: "Partnering with the Media", Washington, D.C.
2018-Present Founding Board Member, Rowan Institute
2018-2020 Co-Chair, Graduate Student Affairs Committee, Coastal and Marine Sciences Institute, UC Davis
2017-2019 Pod Coordinator, 500 Women Scientists, San Francisco Bay Area Pod
2016-2018 Science Adviser, Time to Lead on Climate, Marin County, CA
2017-2018 Bodega Marine Lab Diversity Committee Co-Founder
2017-2018 Staff Diversity Administrative Advisory Committee to UCD's Provost and Chancellor
2016-2018 Bodega Marine Lab Sponsorship Program Co-Founder
2018 [DECLINED] Student Ambassador, Planetary Health Center of Expertise, University of California
2017 Referee, *Phycologia*
2017 Referee, Society for Advancement of Chicanos and Native Americans in Science (SACNAS)
2017 Twitter Conversation Panelist, Union of Concerned Scientists Science Network
2016 Contributor, Seagrass-Ocean Acidification Working Group
2015 Invited Expert, SDSU Climate Action Planning Retreat
2012-2015 Seminar Series Coordinator, SDSU Marine Ecology and Biology Student Association (MEBSA)
2014 Student Grant Writing Group Leader and Editor, SDSU
2014 External Reviewer, High Tech High School Fire Ecology Journal Articles
2012-2013 Member-at-Large, SDSU Marine Ecology and Biology Student Association (MEBSA)
2008-2009 Member & Chair, UCD Environmental Policy and Planning Commission

PUBLIC ENGAGEMENT & ACTIVISM

Writing

2018-Present Ocean and Climate Science Contributor, *Forbes* (> 100 articles)
2020 What Civically Engaged Science Can Look Like: Our Work Doesn't End With Elections, *COMPASS Blog*
2020 Desis Should Celebrate Kamala Harris, But Also Hold Her Accountable, *Medium*
2020 Graduate School in a Post-COVID World Requires Reckoning with More than a Virus, *COMPASS Blog*
2019 How To: Write A Blog Post About Your Research with Priya Shukla, *COMPASS Blog*

- 2019 [Scientists, Meet Twitter](#), *The Xylom* (co-authored with Dr. Sabah Ul-Hasan & edited by 11 contributors)
- 2019 [Will Mussel Aquaculture Be Viable Along The California Coast?](#), Coastal and Marine Sciences Institute, UCD
- 2018 [Why California Needs to Strengthen Marine Aquaculture to Endure Climate Change](#), *Scholars Strategy Network*
- 2018 [Combating the Social Inequity That Climate Change Engenders](#), *Imagining America*
- 2018 [Calling for a Revisionist Natural History](#), *Bay Nature Magazine*
- 2018 [Stand Up for Science: More researchers now see engagement as a crucial part of their job](#), The Conversation (co-authored with Drs. Chelsea Rochman, Susan Williams, and Tessa Hill)
- 2017 [Make Public Engagement a Professional Priority](#), Union of Concerned Scientists Blog
- 2017 [I Will Be Marching Towards Pervasive Inclusion](#)
- 2017 [In 2017, I Resolve to Engage Publicly and Politically](#)
- 2017 [Diversi-tea & Cookies](#), Resources for Supporting Diversity in Science, Blog Series on [Toxic Musings](#)
- 2016 [The Prosaic Mosaic](#), an Effort to Normalize Diversity in Science, [Medium Publication](#) (>1000 reads)
- 2016 [Scientific service—for culture and community](#) (co-authored by Dr. Sarah E. Myhre)
- 2016 [Why Has Climate Change Been Omitted from Debates this Election Season?](#)
- 2015 [Forests of the Sea: the Role of Kelps in Oceanic Carbon Cycling](#), Friends of CMIL Newsletter, SDSU

Oral Presentations

- 2020 ["Fostering Diversity, Equity & Inclusion Through Mentoring"](#), California State University COAST
- 2020 ["Science Writing & Communication"](#), Invited Speaker, Reclaiming STEM, Virtual
- 2020 ["Science Communication"](#), Invited Speaker, UCD Graduate Group in Ecology Odd-yssey, Virtual
- 2020 ["Science Writing"](#), Invited Speaker, Santa Rosa Junior College, Virtual
- 2019 ["Science Communication: Best Practices"](#), Invited Speaker, Sonoma State University, Rohnert Park, CA
- 2019 ["Exploring the Aquaculture Landscape in California and Beyond"](#), Invited Speaker, Oceana, Washington, D.C.
- 2018 ["What 'commitment to diversity' really means"](#), Speed Talk, 99th Western Society of Naturalists Conference, Tacoma, WA.
- 2018 ["Communicating Science and Publicly Engaging"](#), Invited Speaker, Sonoma State University Geology Club, Rohnert Park, CA
- 2017 ["Seeking Solutions in a Sea of Change"](#), Invited Speaker, Science Uncorked, Bodega Bay, CA
- 2017 ["Seeking Solutions in a Sea of Change"](#), Invited Speaker, Taste of Science Festival, San Francisco, CA

Media

- 2020 ["Russia's unfrozen Laptev Sea is not the only warning sign of climate change"](#), *The California Aggie*
- 2020 [Oceans Under A Changing Climate](#), Unfold Podcast
- 2020 ["OK To Decay - Under the Bay"](#), Exploratorium, After Dark Online
- 2020 ["Warming oceans could mean bad news for oyster aquaculture"](#), CMSI, UCD
- 2020 [Profile: Priya Shukla, 46 Questions](#)
- 2019 [#83: Knock Knock. Who's There? Climate Change](#), Important, Not Important Podcast
- 2019 [SROCC Live Discussion!](#), Ocean Science Radio
- 2019 [The Psychological Toll of Working as a Climate Scientist](#), On The Media, WNYC
- 2019 ["It's the End of the World as They Know It: The distinct burden of being a climate scientist"](#), *Mother Jones*
- 2019 ["Biodiversity in and out of the field with Priya Shukla"](#), *Therese's Nature Journal*
- 2019 [All About Ocean Acidification & Dead Zones](#), Sustainable Design Master Class
- 2019 [Deep Water and Mussels](#), Green Boater TV
- 2019 [#STEMstories: Priya, PhD student, USA](#), Geeky Girl Reality
- 2018 [Science is a Public Good](#), 500 Women Scientists
- 2017 [Sharing the Stories of Marginalized Scientists](#), Ecological Society of America #MySciComm Series
- 2017 ["Meet Three Scientists Ready to March"](#), New York Times 360 Video, March for Science
- 2017 ["Here are the voices of women who couldn't strike"](#), *Splinter News*, Day Without a Woman (March 8)

2017 "Episode 2: How Dare a Woman", *Femmes of STEM* podcast episode about Rachel Carson's legacy

RELEVANT SKILLS

AAUS Scientific Diver (2013), SSI Open Water Scuba Diver (2010), California Boating and Waterways Safety Course (2012), Univariate and Multivariate Statistics R, (SYSTAT, SigmaPlot), Graphic Design, Website Design, Social Media