

Michelle J. Jungbluth, Ph.D.

Natural Resources Specialist, Research Scientist,
Lecturer, Contractor

(808) 482-1112

Petaluma, CA 94954

michelle.jungbluth@noaa.gov

EXPERIENCE

Natural Resources Specialist/Fish Biologist, National Ocean and Atmospheric Administration, National Marine Fisheries Service, California Coastal Office, North Coast Branch	2024-Present
Lecturer, University of California Berkeley	2022-Present
Research Contractor, Jlab	2022-Present
Lab Manager, GTAC Gene Lab, San Francisco State University, Estuary & Ocean Science Center	2021-2024
Principal Investigator, Research Scientist & Adjunct Assistant Professor, San Francisco State University, Estuary & Ocean Science Center	2018-Present
Postdoctoral Research Fellow, San Francisco State University, Estuary & Ocean Science Center	2017-2019
Postdoctoral Researcher, Hawaii Pacific University	2016

EDUCATION

Ph.D. Oceanography	University of Hawai‘i at Mānoa	2016
M.S. Oceanography	University of Hawai‘i at Mānoa	2012
B.S. Biology	University of Wisconsin Madison	2007

PUBLISHED MANUSCRIPTS:

Indicates mentored student

- 12 **Jungbluth, M.J.***, Hanson, K.M.* , Lenz, P.H., Robinson, E., and Goetze, E. (2022). A qPCR-based approach for estimating species-specific biomass of metazoan plankton. *Limnology and Oceanography: Methods*. 20(6), 305-319. *co-first author
- 11 **Jungbluth, M.J.**, Lee, C.# , Patel, C.# , Ignoffo, T., and Kimmerer, W. (2022). Production of the copepod *Pseudodiaptomus forbesi* is not enhanced by ingestion of the diatom *Aulacoseira granulata* during a bloom. *Estuaries and Coasts*. 44(4), 1083-1099. doi: 10.1007/s12237-020-00843-9. Online Access: <https://rdcu.be/b8IUk>
- 10 **Jungbluth, M.J.**, Burns, J.# , Grimaldo, L., Katla, A.# , and Kimmerer, W. (2021) Feeding habits and novel prey of larval fishes in the northern San Francisco Estuary. *Environmental DNA*. 3(6), 1059-1080. doi: [10.1002/edn3.226](https://doi.org/10.1002/edn3.226)
- 9 Kersten, O., Vetter, E.W., **Jungbluth, M.J.**, Smith, C. R., & Goetze, E. (2019). Larval assemblages over the abyssal plain in the Pacific are highly diverse and spatially patchy. *PeerJ*, 36. doi: 10.7717/peerj.7691

- 8 Millette, N.C., Grosse, J., Johnson, W.M., **Jungbluth, M.J.**, and Suter, E. (2018). Hidden in plain sight: The importance of cryptic interactions in marine plankton. *Limnology and Oceanography Letters*. 3, 341-356. doi: 10.1002/lol2.10084 (Open Access)
 - 7 Selph, K.E., Goetze, E., **Jungbluth, M.J.**, Lenz, P.H., and Kolker, G. (2018). Microbial food web connections and rates in a subtropical embayment. *Marine Ecology Progress Series*. 590, 19-34. doi: 10.3354/meps12432
 - 6 **Jungbluth, M.J.**, Selph, K.E., Lenz, P.H., & Goetze, E. (2017). Species-specific grazing and significant trophic impacts by two species of copepod nauplii, *Parvocalanus crassirostris* and *Bestiolina similis*. *Marine Ecology Progress Series*, 572, 57-76. doi:10.3354/meps12139
 - 5 **Jungbluth, M.J.**, Selph, K.E., Lenz, P.H., & Goetze, E. (2017). Incubation duration effects on copepod naupliar grazing estimates. *Journal of Experimental Marine Biology and Ecology*, 494, 54-62. doi: 10.1016/j.jembe.2017.05.005
- Jungbluth, M.J.** (2016). Copepod nauplii and their roles in marine planktonic environments. (PhD Dissertation), Oceanography, UH Mānoa, Honolulu, Hawaii.
- 4 Roncalli, V., **Jungbluth, M.J.**, Lenz, P.H., (2016). Glutathione S-Transferase regulation in *Calanus finmarchicus* feeding on the toxic dinoflagellate *Alexandrium fundyense*. *PLoS ONE* 11, e0159563.
 - 3 Goetze, E., & **Jungbluth, M.J.** (2013). Acetone preservation for zooplankton molecular studies. *Journal of Plankton Research*, 35(5), 972-981. doi: 10.1093/plankt/fbt035
 - 2 **Jungbluth, M.J.**, Goetze, E, & Lenz, P.H. (2013). Measuring copepod naupliar abundance in a subtropical bay using quantitative PCR. *Marine Biology*, 160, 3125-3141. doi: 10.1007/s00227-013-2300-y
 - 1 **Jungbluth, M.J.**, & Lenz, P.H. (2013). Copepod diversity in a subtropical bay based on a fragment of the mitochondrial COI gene. *Journal of Plankton Research*, 35(3), 630-643. doi: 10.1093/plankt/fbt015
- Jungbluth, M.J.** (2012). Development and demonstration of a quantitative PCR based method to enumerate copepod nauplii in field samples. (MS Thesis), Oceanography, UH Manoa, Honolulu, Hawaii.

MANUSCRIPTS in PREPARATION or IN REVIEW:

Klymus, K., Baker, J., Abbott, C., Brown, R., Craine, J., Gold, Z., Hunter, M., Johnson, M., Jones, D., **Jungbluth, M.**, Jungbluth, S., Lor, Y., Maloy, A., Merkes, C., Noble, R., Patin, N., Sepulveda, A., Spear, S., Steele, J., Takahashi, M., Watts, A., and Theroux, S. *The MIEM Guidelines: Minimum Information for publication of Environmental Metabarcoding data*. Metabarcoding and Metagenomics. *In Review*.

Tuthill Christensen, G.A., **Jungbluth, M.J.**, and Crow, K.D. *Elusive and Vulnerable: Evaluating Spatial and Temporal Variation in the Distribution*

of the Reef Manta (Mobula alfredi) around Oahu Using Environmental DNA. In Prep.

Hartman, R., Burdi, C., Lee-Akiyama, C., Rasmussen, N., and **Jungbluth, M.**
Bottom-up predictors of zooplankton in the upper San Francisco Estuary. In Prep.

Jungbluth, M.J., Ignoffo, T., Slaughter, A., and Kimmerer, W. *What really defines food for a non-native estuarine copepod? In Prep.*

Jungbluth, M.J., Feyrer, F., Grimaldo, L., Slaughter, A., and Kimmerer, W.
Molecular insights into prey important to the diets of native fishes of the San Francisco Estuary. In Prep.

Jungbluth, M.J., Selph, K., Lenz, P.H., Goetze, E. *Storm impacts on copepod populations over ontogeny in a subtropical coastal ecosystem. In Prep.*

AWARDS

Proposals Awarded

As PI:

From Microbes to Zooplankton What Defines a Beneficial Wetland? (Delta Science Program, **2021**). Amount Awarded: \$706,463.

As Co-PI:

Collaborative Research: Zooplankton restarts in a high-latitude marine ecosystem: species-specific recruitment and development in early spring. (National Science Foundation, **2022**). PI: Dr. Petra Lenz. Amount Awarded: \$350,839.

Seasonal transitions in the food webs supporting delta and longfin smelt. (State Water Contractors, **2021**). PI: Dr. Wim Kimmerer. Amount Awarded: \$426,221.

Filling gaps in knowledge of zooplankton prey of listed smelt species. (California Department of Fish and Wildlife, Proposition 1, **2021**). PI: Dr. Wim Kimmerer. Amount Awarded: \$288,682.

As Co-I:

Testing and quantifying a conceptual model for the response of longfin smelt to outflow. (California State Water Contractors, **2023**). PI: Dr. Jason Hassrick, Dr. Wim Kimmerer. Amount Awarded: \$2,268,406.

As Research Associate/Research Fellow:

High-resolution characterization of lower food web resources connected to important nursery habitats in restored wetlands. (Delta Science Program, **2018**). PI: Dr. Wim Kimmerer. Amount awarded: \$715,000.

Revealing the invisible contributors to the diets of larval longfin smelt and striped bass in the San Francisco Estuary. (California Sea Grant, Delta Science Postdoctoral Research Fellowship, **2017**). PI: Dr. Wim Kimmerer. Award amount: \$219,272.

Other Proposals Applied for as PI

Alternative tools for the assessment of vulnerable fish populations. (California Department of Fish and Wildlife, Watershed Grants Program **2023**). \$883,000. In review.

Elusive and endangered: using eDNA to detect manta rays off Oahu, Hawaii. (SFSU Dr. Kenneth S. Fong Translational Research Award 2022, **2023**). \$20,000. Not awarded.

Problematic parasites and carnivorous copepod impacts on native estuarine fishes.
(California Department of Fish and Wildlife, Proposition 1 RFP **2021**). \$860,000.
Not awarded.

Enhanced zooplankton monitoring along coastal north-central California. (Sea Grant
New Faculty Grant Program, **2020**). \$104,000. Not awarded.

*High-resolution characterization of lower food web resources connected to important
nursery habitats in restored wetlands* (Delta Science Proposal Solicitation, **2018**).
\$995,000. Not awarded.

Other Awards

To Self (Selected)

Equitable Collaboration in STEM Award, to support and enhance collaboration across
female researchers at SF State, NSF-based, \$1,000.

To Mentored Students

ARCS 2024 Scholarship. ARCS Foundation, \$12,000 to Graduate Student Anthony
Donahue

Dr. Kenneth Coale 2024 Research Award, CSU COAST, \$4,000 to Graduate Student
Anthony Donahue

SFSU Graduate School Distinguished Achievement Award, Amy Wong

SFSU EOS Center Paul F. Romberg Award for Service, Cheryl Patel

SFSU COSE 2024 Student Project Showcase, Best Poster Award, \$500 to Jennifer Staat

ARCS 2023 Scholarship. ARCS Foundation, \$11,600 to Graduate Student Anthony
Donahue

Dr. Kenneth Coale 2023 Research Award, CSU COAST, \$4,000 to Graduate Student
Anthony Donahue

Scientific Illustration Grant, Maxwell/Hanrahan Foundation \$3,333 to Graduate Student
Anthony Donahue

COAST 2022 Research Award, CSU COAST, \$3,000 to Graduate Student Erick Ortiz

ARCS 2021 Scholarship. ARCS Foundation, \$10,000 to Graduate Student Amy Wong

COAST 2021 Research Award, CSU COAST, \$3,000 to Graduate Student Amy Wong

COAST 2021 Research Award, CSU COAST, \$3,000 to Mentee Graduate Student
Lindsey Metz

Sea Grant 2020 State Fellowship, CA Sea Grant, to Mentee Graduate Student Cheryl
Patel

PROFESSIONAL SERVICE

TEACHING

Lecturer, *EPS N82 Introduction to Oceanography* Summer 2022 - Present
University of California Berkeley

Guest Lecturer, *MSCI 709 Foundations in Global Change in* 2019 - Present
Urbanized Coasts and Estuaries
San Francisco State University

Chief Scientist, REU Teaching Research Cruise, R/V 2019, 2022, 2023
Questuary
San Francisco State University

Lead Teaching Assistant, <i>Oceanography 201 -Science of the Sea, Lecture and Lab Course</i> University of Hawai‘i at Mānoa	Fall semester, 2015
Teaching Assistant, <i>Oceanography 201 -Science of the Sea, Lecture and Lab Course</i> University of Hawai‘i at Mānoa	Spring semester, 2015

ADVISING and MENTORING:

Graduate Research Mentorship, Primary Advisor

Student: Anthony Donahue <i>IMES program SFSU</i> – studying food web benefits provided by restoring wetlands to native larval fishes.	2022-present
Student: Jennifer Staat <i>IMES program SFSU</i> – zooplankton dietary DNA and response to spring bloom in Gulf of Alaska.	2022-present
Student: Erick Ortiz <i>IMES program SFSU</i> –diversity and distribution of the microbes to zooplankton in restoring wetlands of San Francisco Estuary.	2021-present
Student: Cheryl Patel <i>IMES program SFSU</i> – Investigating feeding by the copepod <i>Pseudodiaptomus forbesi</i> on cyanobacteria.	2018-2024

Graduate Research Mentorship, Committee Member

Student: Grace Tuthill <i>Biology Dept, SFSU</i> – studying reef manta ray environmental DNA.	2022-2024
Student: Amy Wong <i>IMES program SFSU</i> – comparing feeding by two dominant copepods during transition periods in abundance.	2020-present
Student: Maria Salgado <i>IMES program, SFSU</i> – studying relationship between California sea lion’s diet and ocean conditions on the Farallon Islands.	2021-present
Student: Lindsey Metz <i>IMES program, SFSU</i> – measuring microbial assemblages associated with toxic algae.	2019-present

Undergraduate Research Mentorship

REU Scholar: Danh Nguyen NSF Research Experiences for Undergraduates (REU) at <i>SFSU</i> ; and PINC Summer Coding Program	Summer 2024
Research Intern: Eliana Prosnitz Pomona College Summer Internship Award	Summer 2024

REU Scholar: Adrianna Albert NSF Research Experiences for Undergraduates at <i>SFSU</i> : Biological Research in Ecological and Evolutionary Developmental Biology Program (BREED Program)	Summer 2023
REU Scholar: Paris Kellogg NSF Research Experiences for Undergraduates at <i>SFSU</i> : BREED Program	Summer 2022
REU Scholar: Aspen Katla NSF Research Experiences for Undergraduates at <i>SFSU</i> : BREED Program	Summer 2019
Research Fellow: De'asha Moore Stem Teacher and Researcher (STAR) program, <i>SFSU</i>	Summer 2019

Other Research Mentorship

Student: Calvin Lee Research assistant measuring grazing rates by <i>Pseudodiatomus forbesi</i> on the diatom, <i>Aulacoseira</i> sp.	2017-2018
Intern: Chandler Gorman; Summer research project for high school student.	2017
Student: Michelle Uchida; Undergraduate student lab assistant.	2015, 2016
Student: John Lee; Undergraduate student through a senior thesis project (C-MORE Scholar).	2012
UH Manoa undergraduate volunteers in the field (numerous mentees)	2011-2015

OTHER SERVICE

Ocean Census Science Network Member: International organization aimed at the broad goal of discovering and protecting ocean life to sustain and benefit all life on Earth.

Anti-racism Committee Member: SFSU College of Science and Engineering effort to develop and implement strategies to become an anti-racist community. (2023-2024)

Scientific Journal Reviewer: Environmental DNA, Frontiers in Marine Science, Nature Scientific Reports, Marine Biology, Marine Ecology Progress Series, Journal of Plankton Research, PeerJ, Bioinvasions Records, Crustaceana, San Francisco Estuary and Watershed Science

Contributing Member: Interagency Ecological Program: Zooplankton Project Work Team, San Francisco Bay-Delta region

Contributing Member: Interagency Ecological Program: Genetics Project Work Team, San Francisco Bay-Delta region

Contributing Member: Interagency Ecological Program: Estuarine Ecology Team, San Francisco Bay-Delta region

Contributing Member: California Molecular Methods Work Group

Faculty Committees at SFSU: Anti Racism Committee (2023-2024), Organizer for EOS Center Science Networking Event (2020), Student Scholarship Committee (2019, 2020)

PROFESSIONAL DEVELOPMENT

DEIJ Leadership Opportunities

Anti-racism Committee Member: SFSU College of Science and Engineering effort to develop and implement strategies to become an anti-racist community. 2023-Present

Fellow, Equitable Collaboration in STEM HUB, SFSU 2021-2022

Other Leadership Opportunities

Exhibit Leader, California Academy of Science; Women in Science Nightlife Event 2019

Visiting Scientist, on NOAA Pacific Island Fisheries Science Center LOPEC Research Cruise; Joint Institute for Marine and Atmospheric Research, Honolulu, Hawaii 2017

Exhibit Leader, SOEST Open House outreach event- *Zooplankton: Microscopic Ocean Drifters* 2013, 2015, 2017

Officer, Professional Development and Training Program 2015-2016

Chair, Science Communicators ‘Ohana, an organization I co-founded that aimed to promote effective methods of science communication to increase science literacy in society 2014-2015

President, Na Kama Kai Oceanography graduate student organization 2014-2015

Member, Mentoring Network. Mentors and mentees of all levels who talk about how to be better mentors. 2014-2015

Organizer, student committee member representative of The Oceanography Society, for the 2014 Ocean Sciences Meeting in Honolulu, HI 2013-2014

Vice President, Na Kama Kai Oceanography graduate student organization 2013- 2014

Founder and contributor, Real Science at SOEST Blog: the first blog for graduate students in the School of Ocean Earth Science and Technology (UH Manoa) to share research and science experiences with the public 2013-2016

SHIP TIME: 88 days at sea, >90 on small vessels coastally

Chief Scientist, R/V Questuary – Led field work for a study on longfin smelt population distribution in the northern San Francisco Estuary (biweekly Mar-June) 2024

Chief Scientist, R/V Athena – Lead Scientist, field work for my Microbes to Zooplankton project in wetlands of the San Francisco Estuary (6+ days) 2022

R/V Questuary – Lead Scientist, teaching cruises for Summer REU students around the Central San Francisco Bay. (1 day ea) 2019-present

<i>R/V Questuary and R/V Turning Tide</i> – San Francisco Estuary field sampling investigating fine-scale spatial distribution of longfin smelt juveniles and potential prey assemblage; use of echosounder, trawls, zooplankton tows. (8 days)	2018
<i>Chief Scientist, R/V Questuary</i> – San Francisco Estuary field sampling investigating depth distribution of longfin smelt juveniles and potential prey community, coordinated between a team of three research vessels; use of echosounder, trawls, zooplankton tows. (2 days)	2017
<i>NOAA Oscar Elton Sette</i> – Cruise SE17-03, Leeward Oahu Pelagic Ecosystem Characterization (LOPEC) cruise participant. Use of MOCNESS trawls, plankton tows – D. Kobayashi (NOAA) chief scientist. (10 days)	2017
<i>R/V Questuary</i> – San Francisco Estuary field sampling targeting longfin smelt larvae and potential prey community. (2 days)	2017
<i>RRS James Clark Ross</i> – Atlantic Meridional Transect cruise 24, Basin-Scale Genetics of Marine Zooplankton, cruise participant, NSF RAPID funded – T. Smyth (PML) chief scientist. (46 days)	2014
<i>R/V Falkor</i> – Student cruise 3 participant, Station ALOHA and Molokai Channel, MOCNESS zooplankton tows, microzooplankton grazing experiments, and seafloor mapping. E. Goetze (UH) chief scientist. (6 days)	2014
<i>R/V Kilo Moana</i> – cruise participant, Station ALOHA, NSF-funded Mesopelagic Micronekton study; 1m MOCNESS and zooplankton tows, B. Popp & J. Drazen chief scientists. (6 days)	2011
<i>R/V Kilo Moana</i> – cruise participant, West Coast of Oahu, Hawaii, University of Hawaii School of Ocean and Earth Science and Technology funded student cruise, J. Drazen (UH) chief scientist. (2 days)	2011
<i>R/V Atlantis</i> – <i>ROV JASON-II</i> cruise participant, Juan de Fuca Ridge, NSF-Microbial Observatory, J. Cowen (UH) & A. Fisher (UCSC) chief scientists. (18 days)	2010
<i>Field sampling time series</i> , Kaneohe Bay, HI – M.S. and Ph.D. Monthly plankton and environmental samples, four sets of 2-week daily sampling, other events. (>75 days)	2010-2016

INVITED PRESENTATIONS:

<i>Cyclopid diversity and distribution in the San Francisco Estuary from metabarcoding</i> . Zoopfest 2022: Interagency Ecological Program. Virtual. CA.	Aug 2022
<i>Revealing the hidden diversity, abundance and feeding interactions at the base of aquatic food webs</i> . Rosenberg Institute Seminar, Estuary and Ocean Science Center. San Francisco State University, San Francisco, CA	May 2022

- Revealing the hidden diversity, abundance and feeding interactions at the base of aquatic food webs.* Moss Landing Marine Labs, Symposium Series Apr 2022
- Feeding and Predation in the Zooplankton.* Zooplankton Ecology Symposium. Virtual. CA Oct 2020
- Larval longfin smelt diets assessed with morphological ID and DNA sequencing of guts.* Longfin Smelt Symposium. Sacramento, CA Nov 2019
- Molecular insights into aquatic foodweb ecology in the San Francisco Estuary and beyond.* Rosenberg Institute Seminar, Estuary and Ocean Science Center. San Francisco State University, San Francisco, CA Apr 2019
- Composition of larval fish diets: Comparing high-throughput DNA sequencing with morphological methods.* Interagency Ecological Program Workshop, Folsom, CA Mar 2019
- Studies of marine and estuarine zooplankton ecology using molecular methods.* Moss Landing Marine Labs, Moss Landing, CA Sept 2017
- Are plankton life history stages important to marine food webs?* Seminar, School of Freshwater Sciences, University of Wisconsin Milwaukee, WI. Sept 2015

SELECTED CONFERENCE and SYMPOSIUM PRESENTATIONS:

Talks

- Jungbluth, M.**, Slaughter, A., Ignoffo, T., and Kimmerer, W. *Insights into foodweb connections between anadromous forage fishes of the San Francisco Estuary through dietary DNA.* CERF Conference Virtual, CA Nov 2021
- Jungbluth, M.** and Kimmerer W. *Feeding habits and novel prey of larval fishes in the San Francisco Estuary, revealed by gut DNA metabarcoding.* Ocean Sciences Meeting San Diego, CA Feb 2020
- Jungbluth, M.** *Molecular insights into aquatic foodweb ecology in the San Francisco Estuary and beyond.* Rosenberg Institute Seminar, Estuary and Ocean Science Center. San Francisco, CA Apr 2019
- Jungbluth, M.** *Molecular insights into aquatic food web ecology in the San Francisco Estuary and beyond.* Colloquium in Ecology, Evolution and Conservation Biology. San Francisco, CA Feb 2019
- Jungbluth, M.**, Selph, K., Lenz, P.H., and Goetze, E. *Copepod nauplii in subtropical environments.* Stazione Zoological di Napoli. Naples, Italy May 2016

Jungbluth, M., Selph, K., Lenz, P.H., and Goetze, E. *Species-specific grazing impacts of copepod nauplii*. ICES/PICES 6th Zooplankton Production Symposium May 2016
Bergen, Norway

Student Presentations

*Indicates mentored student presentation

Ortiz, E.*, Slaughter, A., Kimmerer, W., and **Jungbluth, M.** Nov 2023
Microorganisms as indicators of habitat conditions in restoring wetlands.
Coastal and Estuarine Research Federation Conference, Portland, OR.
Poster

Ortiz, E.*, Slaughter, A., Kimmerer, W., and **Jungbluth, M.** Nov 2023
Microorganisms as indicators of habitat conditions in restoring wetlands.
Coastal and Estuarine Research Federation Conference, Portland, OR.
Poster

Staat, J.*, Block, L., Lenz, P.H., and **Jungbluth, M.** *Investigating feeding by high latitude naupliar copepods in Resurrection Bay, Gulf of Alaska.* Nov 2023
Coastal and Estuarine Research Federation Conference, Portland, OR.
Poster

Ortiz, E.*, and **Jungbluth, M.** *Characterizing the diversity and foodweb support provided by microorganisms to native fishes in restored wetlands.* Feb 2022
Ocean Sciences Meeting, Virtual. Poster

Katla, A.* and **Jungbluth, M.** *DNA barcoding of San Francisco Estuary Zooplankton.* Feb 2020
Ocean Sciences Meeting, San Diego, CA. Poster

Patel, C.*, Lee, C., Ignoffo, T., **Jungbluth, M.** and Kimmerer, W. Feb 2019
Investigating copepod consumption of phytoplankton in San Francisco Estuary using qPCR. Ocean Sciences Meeting, Puerto Rico. Poster

SELECTED SCIENCE COMMUNICATION PRODUCTS

Jungbluth, M. *Using DNA to map out the food that keep fish alive.* Online
San Francisco Examiner. Nov 27, 2019. Newspaper
<https://www.sfexaminer.com/news-columnists/using-dna-to-map-out-the-food-that-keep-fish-alive/> Article

Jungbluth, M. *One scientist's path.* Presentation to Research Outreach Talk
Experiences for Undergraduates (REU) Students, Tiburon, CA. June 2017

Jungbluth, M. *Connections between plankton and people in Kane'ohe Bay, Hawai'i: Effects of coastal storm runoff on copepod populations.* Public
Sea Grant Graduate Presentations, Hanauma Bay, Presentation
Honolulu, HI. Dec 2013

Jungbluth, M. *Use of molecular techniques to study local zooplankton populations.* Article
Ka Pili Kai, Sea Grant Hawaii, Vol. 33(1) 6-7. May 2011

PROFESSIONAL MEMBERSHIPS:

International Ocean Census Science Network
Association for the Sciences of Limnology and Oceanography (ASLO)
Coastal and Estuarine Research Foundation (CERF)
The Oceanography Society (TOS)
World Association of Copepodologists (WAC)
American Microscopical Society (AMS)
The Crustacean Society (TCS)

Outreach and Other Experience

Etsy Business Owner, Entrepreneur. *Shelly's Schtuff; custom garden improvement supplies* (2020-Present)

Estuary & Ocean Science Center Open House, public science outreach event (2018, 2019, 2023: not held in 2020-2022)

Girl Scouts. *Women Oceanographers, Oceanography, and the Importance of Ocean Science to Our Planet!* Discussion with a Girl Scout Troop, to help them get their Oceanography Badge. Virtual Brooklyn, NY. April 2021.

Skype-a-Scientist. *Plankton Science!* Presentation to 1st grade class in Virtual Chester, PA. March 2021.

Skype-a-Scientist. *What's in your water? Studies of tiny aquatic animals.* Presentation to 5th grade class in Virtual Brooklyn, NY. April 2020.

California Academy of Sciences Night Life Women in Science event. Organized and led an exhibit on women in plankton ecology: past, present, and future. 2019.

School of Ocean Science Engineering and Technology Open House, Organized and led the Plankton and Food Webs exhibit

Interviewee on the *All Things Marine* radio show, via COSEE Island Earth on Hawaii's Tomorrow 760 AM radio, live from the R/V Falkor

CDEBI & CMORE visit to Kalama Middle School, discuss careers in Marine Science with 8th grade students, Makawao, Maui HI

Panelist, University of California, Berkeley, *Beyond Academia: Public Sector Fellowships* Workshop. 2018.

Zooplankton expert, Kapolei Middle School trips to Hawaii Institute of Marine Biology: plankton tows, talk to students about zooplankton and my research

Plankton expert, biannual UH Manoa Biology Plankton Party

Expanding Your Horizons event, to motivate young women in science, mathematics, and technology, Honolulu, Hawaii

Plankton expert, CDEBI & CMORE Marine Science Workshop for outer island teachers, Sacred Hearts Academy, Lahaina, Maui