

John J. Stachowicz

Contact Information

Department of Evolution and Ecology (and Center for Population Biology)
University of California; Davis, CA 95616
Phone: (530) 752-1113; FAX (530) 752-1449; email: jjstachowicz@ucdavis.edu

Education

Ph.D. University of North Carolina, Marine Sciences (Marine Ecology), 1998
A.B. Dartmouth College, Environmental and Evolutionary Biology, 1993

Major research interests

Population and community ecology of marine plants and invertebrates. Community ecology of mutualism and facilitation; Relationship between biodiversity and ecosystem functioning; Biological Invasions.

Positions Held

2016-present, Chair, Department of Evolution and Ecology
2014-2017, Secretariat, Western Society of Naturalists
2008- present Professor, Department of Evolution and Ecology, UC Davis
2009-2014 Director, Center for Population Biology, University of California, Davis
2005-2008 Associate Professor, Section of Evolution and Ecology, UC Davis
2000-2005 Assistant Professor, Section of Evolution and Ecology, UC Davis
1998-2000 Postdoctoral Fellow, University of Connecticut, Dept. of Marine Sciences
1997 Instructor in Biological Oceanography, Curriculum in Marine Sciences, UNC-CH
1994-7 National Science Foundation Graduate Fellow
1993-4, 7-8 University of North Carolina Graduate School Fellow
1992 Research Assistant, LTER program, Harvard Forest
1991-2 Presidential Scholar Research Assistant, Dartmouth College Geography Department
1991 Research Assistant, Connecticut Department of Fisheries

Awards and Honors

2015-2016 President, Western Society of Naturalists
2012 Academic Senate Distinguished Teaching Award, UC Davis
2011 College of Biological Sciences Teaching Award, UC Davis
2008 Aldo Leopold Leadership Fellow
2007-2011 Chancellor's Fellow, UC Davis
2004 Mercer Award, outstanding ecology paper, Ecological Society of America
1997-1998 UNC-CH Graduate School Dissertation Fellowship
1994-1997 National Science Foundation Graduate Fellowship
1993-1994 Walter S. Barr Fellowship
1993 Elected to Sigma Xi, The Scientific Research Society
1993 Elected to Phi Beta Kappa
1993 Eggleston Memorial Botany Award
1992-3 Presidential Scholar Research Grant
1989-1993 Elks Student Leadership Scholarship

Publications

Books

Bertness, M.D., J.F. Bruno, B.R. Silliman, and **J.J. Stachowicz** (editors). 2013. *Marine Community Ecology and Conservation*.

Sax, D.F., **J.J. Stachowicz**, and S.D. Gaines (editors). 2005. *Species invasions: insights into ecology, evolution and biogeography*. Sinauer Press, Sunderland MA. 495pp.

Refereed papers

Rhoades, OK, RJ Best, and **JJ Stachowicz**. 2018. Assessing feeding preference of a consumer guild: partitioning variation among versus within species. *American Naturalist* (in press)

Rhoades OK, S Lonhart, and **JJ Stachowicz**. 2018. Fished species assemblages exhibit uniform behavioral responses to protection. **Biological Conservation** (in press)

Abbott, JM, K Dubois, RK Grosberg, SL Williams and **JJ Stachowicz**. 2018. Genetic distance predicts trait differentiation at the subpopulation but not the individual level in eelgrass, *Zostera marina*. **Ecology and Evolution** (in press)

Koweek DA, RC Zimmerman², KM Hewett, B Gaylord, SN Giddings, KJ Nickols, JL Ruesink, **JJ Stachowicz**, Y Takeshita, and K Caldeira. 2018. Expected limits on the ocean acidification buffering potential of a temperate seagrass meadow. **Ecological Applications** (in press)

Reynolds PL, **JJ Stachowicz**, Kevin Hovel, C. Boström, K. Boyer, M. Cusson, J.S. Eklöf, F.G. Engel, A.H. Engelen, B.K. Eriksson, F.J. Fodrie, J.N. Griffin, C. Hereu, M. Hori, T.Hanley, M.Ivanov, P.Jorgensen, C.Kruschel, Kun-Seop Lee, K. McGlathery, P-O. Moksnes, M. Nakaoka, M. I. O'Connor, N. O'Connor, R.J. Orth, F. Rossi, J. Ruesink, E. Sotka, F. Tomas, R.K.F. Unsworth, M.A. Whalen, and J.E. Duffy. 2018. Latitude, temperature and habitat complexity predict predation pressure in eelgrass beds across the northern hemisphere. **Ecology**. 99:29-35

Reynolds LK, E, Hunyh, K. Chan, S.L. Williams, and **J.J. Stachowicz**. 2018. Plant genotype identity and diversity interact with mesograzer species diversity to influence detrital consumption in eelgrass meadows. **Oikos**.
DOI: 10.1111/oik.04471

Williams SL, JM Abbott, LK Reynolds and **JJ Stachowicz**. 2018. Marine macrophyte detritus and degradation: the role of intraspecific genetic variation. **Estuaries and Coasts** 41:1223–1233

Ruesink, J., **J.J Stachowicz**, P.L. Reynolds, C. Bostrom, M. Cusson, J. Douglass, J. Eklof, A. Engelen, M. Hori, K. Hovel, K. Iken, P. Moksnes, M. Nakaoka, M.

- O'Connor, J. Olsen, E. Sotka, M. Whalen, J.E. Duffy. 2018. Form-function relationships in a marine foundation species depend on scale: a shoot to global perspective from a distributed ecological experiment. **Oikos** 127:364-374 doi: 10.1111/oik.04270
- Abbott, J.M., S.L. Williams, R.K. Grosberg, and **J.J. Stachowicz**. 2017. Multiple dimensions of intraspecific diversity affect biomass of eelgrass and its associated community. **Ecology** **98**: 3152–3164
- Ettinger C., S.L. Williams, J.M. Abbott, J.J. Stachowicz and J.A. Eisen 2017. Microbiome succession during ammonification in eelgrass bed sediments. **PeerJ** 5:e3674
- Fahimipour A., Kardish M., Lang J, Green J., Eisen J, and **Stachowicz, J.J.** 2017. Global-scale structure of the eelgrass microbiome" **Applied and Environmental Microbiology** 83 (12) e03391-16
- Whalen, M.A. and **J.J. Stachowicz**. 2017. Suspension feeder diversity enhances community filtration rates in different flow environments. **Marine Ecology Progress Series**. 570: 1–13.
- Ettinger C., S. Voerman, J. Lang, **J. Stachowicz**, and J. Eisen. 2017. Microbial communities in sediment from *Zostera marina* patches, but not the *Z. marina* leaf or root microbiomes, vary in relation to distance from patch edge. **Peer J**. 5:e3246; DOI 10.7717/peerj.3246
- Reynolds, L.K. J.J. Stachowicz, A.R. Hughes, S.J. Kamel, B. Ort, and R.H. Grosberg. 2016. Temporal stability in patterns of genetic diversity and structure of a marine foundation species (*Zostera marina*). **Heredity** **118:404-412**.
- Reynolds, L.K., K. DuBois, J.M. Abbott, S.L. Williams, and **J.J. Stachowicz**. 2016. Response of a Habitat-Forming Marine Plant to a Simulated Warming Event is Delayed, Genotype Specific, and Varies with Phenology. **PLoS ONE** 11 (6), e0154532.
- Whalen, M.A., K.M. Aquilino, and **J.J. Stachowicz**. 2016. Grazer diversity interacts with biogenic habitat heterogeneity to accelerate intertidal algal succession. **Ecology** 97: 2136-2146.
- Rogers T.L., J.E. Byrnes, and **J.J. Stachowicz**. 2016. Native predators limit invasion of benthic invertebrate communities in Bodega Harbor, California, USA. **Marine Ecology Progress Series** 545:161-173.
- Lurig, M., R.J. Best, and **J.J. Stachowicz**. 2016. Microhabitat partitioning in seagrass mesograzers is driven by consistent species choices across multiple predator and competitor contexts. **Oikos**, in press. doi: 10.1111/oik.02932
- Abbott, J.M. and **J.J. Stachowicz**. 2016. The relative importance of trait vs. genetic differentiation for the outcome of interactions among plant genotypes. **Ecology** 97: 84-94.

- Best, R.J., M.N. Stone, and **J.J. Stachowicz**. 2015. Predicting consequences of climate change for ecosystem functioning: variation across trophic levels, species, and individuals. **Diversity and Distributions** 21:1364-1374.
- Bulleri, F, J.F. Bruno, B. Silliman, and **J.J. Stachowicz**. 2015. Facilitation and the niche: implications for coexistence, range shifts and ecosystem functioning. **Functional Ecology** 30:70-78.
- Byers, J.E., R.S. Smith, J.M. Pringle, G.F. Clark, P.E. Gribben, C.L. Hewitt, G.J. Inglis, E.L. Johnston, G.M. Ruiz, **J.J. Stachowicz**, M.J. Bishop. 2015. Invasion Expansion: Time since introduction best predicts global ranges of marine invaders. **Scientific Reports** 5:12436
- Duffy J.E., Reynolds P.L., Boström C., Coyer J.A, Cusson M., Donadi S., Douglass J.G., Eklof, J., Engelen A., Eriksson B.K., Fredriksen S., Gamfeldt L., Gustafsson C., Hoarau G, Hori M., Hovel K., Iken K., Lefcheck J.S., Moksnes P-O, Nakaoka M., O'Connor M.I., Olsen J.L., Richardson J.P., Ruesink J.L., Sotka E.E., Thormar J., Whalen M.A., and **Stachowicz J.J.** 2015. Biodiversity and top-down control in eelgrass ecosystems: A global comparative experiment. **Ecology Letters** 18:696-705
- Rius, M., E.E. Potter, J.D. Aguirre, and **J.J. Stachowicz**. 2014. Mechanisms of biotic resistance across complex life cycles. **Journal of Animal Ecology** 83, 296–305.
- Best, R.J., A. Chaudoin, M.E. Bracken, M.H. Graham and **J.J. Stachowicz**. 2014. Plant-animal diversity relationships in a rocky intertidal system depend on invertebrate body size and algal cover. **Ecology** 95:1308-1322
- Best, R.J. and **J.J. Stachowicz**. 2014. Phenotypic and phylogenetic evidence for the importance of food and habitat in the assembly of communities of herbivorous marine amphipods. **Ecology** 95:775–786
- Afkhami, M.E., J. Rudgers, and **J.J. Stachowicz**. 2014. Multiple Mutualist Effects: Conflict and synergy in multispecies mutualisms. **Ecology** 95(4): 833-844
- Duffy, J.E., L.A. Amaral-Zettler, D.G. Fautin, G. Paulay, T.A. Ryneerson, H. Sosik, and **J.J. Stachowicz**. 2013. Envisioning a Marine Biodiversity Network. **BioScience** 63:350-361
- Stachowicz, J.J.**, S.J. Kamel, A.R. Hughes, and R.K. Grosberg. 2013. Genetic relatedness influences plant biomass accumulation in eelgrass (*Zostera marina*). **American Naturalist**. 181:715-724.
- Wicksten, M. and **J.J. Stachowicz**. 2013. *Mimulus* Stimpson, 1860, a junior synonym of *Pugettia* Dana, 1851 (Decapoda: Brachyura: Majoidea: Epialtidae). **Zootaxa** 3693:358-364

- Best, R.J. and **J.J. Stachowicz**. 2013. Phylogeny as a proxy for ecology in seagrass amphipods: which traits are most conserved? **PLoS ONE** 8(3): e57550
- Best R.J., N.C. Caulk, and **J.J. Stachowicz**. 2013. Trait versus phylogenetic diversity as predictors of competition and community composition in herbivorous marine amphipods. **Ecology Letters** 16:72-80.
- Olyarnik, S.V. and **J.J. Stachowicz**. 2012. Multi-year study of the effects of green macroalgal (*Ulva* sp.) blooms on eelgrass (*Zostera marina*). **Marine Ecology Progress Series** 486:107-117.
- Aquilino, K.M., M. Coulbourne, and **J. J. Stachowicz**. 2012. Mixed species diets enhance the growth of two rocky intertidal herbivores. **Marine Ecology Progress Series** 468:179-189.
- Edwards, K.F. and **J.J. Stachowicz**. 2012. Temporally varying larval settlement, competition, and coexistence in a sessile invertebrate community. **Marine Ecology Progress Series** 462: 93–102.
- Poore, A., A. Campbell, R. Coleman, G. Edgar, V. Jormalainen, P. Reynolds, E. Sotka, **J. Stachowicz**, R. Taylor, M. Vanderklift, J.E. Duffy. 2012. Global patterns in the impact of marine herbivores on benthic primary producers. **Ecology Letters** 15:912-922
- Stachowicz, J.J.** 2012. Niche expansion by positive interactions: realizing the fundamentals: a comment on Rodriguez-Cabal et al. **Ideas in Ecology and Evolution** 5:42-43
- Aquilino, K.M. and **J.J. Stachowicz**. 2012. Seaweed richness and herbivory increase rate of community recovery from disturbance. **Ecology** 93:879-890.
- Best, R.J. and **J.J. Stachowicz**. 2012. Trophic cascades in seagrass meadows depend on mesograzers variation in feeding rates, predation susceptibility, and abundance. **Marine Ecology Progress Series** 456:29-42.
- Kamel, S.J., A.R. Hughes, R.K. Grosberg, and **J.J. Stachowicz**. 2012. Fine-scale genetic structure and relatedness in the eelgrass *Zostera marina*. **Marine Ecology Progress Series** 447:127-137
- Pruitt, J.N., **J.J. Stachowicz**, and A. Sih. 2012. Behavioral types of predator and prey jointly determine prey survival: potential implications for the maintenance of within species behavioral variation. **American Naturalist** 179:217-227
- Tomas F., J.M. Abbott, M. Balk, C. Steinberg, S.L. Williams, and **J.J. Stachowicz**. 2011. Plant genotype and nitrogen loading influence seagrass productivity, biochemistry, and plant-herbivore interactions. **Ecology** 92:1807-1817
- Sorte, C.J.B and **J.J. Stachowicz** 2011. Patterns and processes of compositional change in a California epibenthic community. **Marine Ecology Progress Series**. 435:63-74
- Hultgren, K. and **J.J. Stachowicz**. 2011. Camouflage in decorator crabs: Integrating ecological, behavioural and evolutionary approaches. Pages 214-229 in M. Stevens

and S. Merlaita (eds). *Animal Camouflage*. Cambridge University Press.

- Edwards, K.F. and **J.J. Stachowicz**. 2011. Spatially stochastic settlement and the coexistence of benthic marine animals. **Ecology** 92:1094-1103.
- Claar, D.C., K.F. Edwards, and **J.J. Stachowicz**. 2011. Positive and negative effects of a dominant competitor on the settlement, growth, and survival of competing species in an epibenthic community. *J. Exp. Marine Biology and Ecology* 399:130-134.
- Hughes, A.R. and **J.J. Stachowicz**. 2011. Seagrass genotypic diversity increases disturbance response via complementarity and dominance. **Journal of Ecology** 99:445-453.
- Hughes, A.R., R.J. Best, and **J.J. Stachowicz**. 2010. Genotypic diversity and grazer identity interactively influence seagrass and grazer biomass. *Marine Ecology Progress Series* 403: 43-51.
- Edwards, K.F. and **J.J. Stachowicz**. 2010. Multivariate tradeoffs, succession, and phenological differentiation in a guild of colonial invertebrates. **Ecology** 91: 3146–3152.
- Edwards, K.F., K.M. Aquilino, R.J. Best, K.L. Sellheim, and **J.J. Stachowicz**. 2010. Prey diversity is associated with weaker consumer effects in a meta-analysis of benthic marine experiments. **Ecology Letters** 13:194-201
- Hultgren, K.M. and **J.J. Stachowicz**. 2010. Size related habitat shifts facilitated by positive preference induction in a marine kelp crab. **Behavioral Ecology** 21: 329-336.
- Sellheim, K.L., **J.J. Stachowicz** and R.C. Coates. 2010. Effects of a non-native habitat-forming species on mobile and sessile epifaunal communities. **Marine Ecology Progress Series** 398:69-80.
- Larson, A.A., **J.J. Stachowicz** and B.T. Hentschel. 2009. The effect of a tube-building phoronid on associated infaunal species diversity, composition and community structure. **Journal of Experimental Marine Biology and Ecology** 381:126-135
- Byrnes, J.E. and **J.J. Stachowicz**. 2009. The Consequences of Consumer Diversity Loss: Different Answers From Different Experimental Designs. **Ecology** 90:2879-2888.
- Byrnes, J.E. and **J.J. Stachowicz**. 2009. Short and Long Term Consequences of Increases in Exotic Species Richness on Water Filtration by Marine Invertebrates. **Ecology Letters** 12:830-841.
- Palumbi, S.R., P.A. Sandifer, J.D. Allan, M.W. Beck, D.G. Fautin, M.J. Fogarty, B.S. Halpern, L.S. Incze, Jo-Ann Leong, E. Norse, **J.J. Stachowicz**, and D.H. Wall. 2009. Managing for ocean biodiversity to sustain marine ecosystem services. *Frontiers in Ecology and the Environment* 4: 204-211.
- Hughes, A.R., **J.J. Stachowicz**, and S.L. Williams. 2009. Morphological and physiological variation among seagrass (*Zostera marina*) genotypes. *Oecologia* 159:725–733.

- Hughes, A.R. and **J.J. Stachowicz**. 2009. Ecological impacts of genotypic diversity in the clonal seagrass, *Zostera marina*. *Ecology* 90: 1412-1419.
- Hultgren, K. and **J.J. Stachowicz**. 2009. Evolution of decoration in majoid crabs: a comparative phylogenetic analysis of the role of body size and alternative defensive strategies. *American Naturalist* 173:566-578.
- Larson, A.A and **J.J. Stachowicz**. 2009. Chemical defense of a soft-sediment dwelling phoronid against local epibenthic predators. *Marine Ecology Progress Series* 374: 101-111.
- Aquilino, K.M., M.E.S. Bracken, M. Faubel, and **J.J. Stachowicz**. 2009. Local-scale autochthonous nutrient inputs in an upwelling ecosystem facilitate seaweed growth on wave-exposed rocky shores. *Limnology and Oceanography* 59:304-317
- Stachowicz, J.J.**, R.J. Best, M.E.S. Bracken, and M. H. Graham. 2008. Complementarity in marine biodiversity manipulations: reconciling divergent evidence from field and mesocosm experiments. *Proceedings of the National Academy of Sciences USA* 105:18842-18847.
- Olyarnik SV, Bracken MES, Byrnes JE, Hughes AR, Hultgren KM, **Stachowicz JJ** (2008) Ecological factors affecting community invasibility. Pages 215-238 in: Rilov G, Crooks JA (eds) *Biological invasions of marine ecosystems: ecological, management, and geographic perspectives*. Springer, Heidelberg, Germany
- Stachowicz, J.J.**, M. Graham, M.E.S. Bracken, A.I. Szoboszlai. 2008. Diversity enhances cover and stability of seaweed assemblages: the importance of environmental heterogeneity and experimental duration. *Ecology* 89:3008-3019.
- Hultgren, K. and **J.J. Stachowicz**. 2008. Molecular phylogeny of the brachyuran crab superfamily Majoidea indicates close congruence with larval morphology-based trees. *Molecular Phylogenetics and Evolution*. 48:986-996.
- Thornber C.S., E. Jones, and **J.J. Stachowicz**. 2008. Differences in herbivore feeding preferences across a vertical rocky intertidal gradient. *Marine Ecology Progress Series*. 363:51-62.
- Hultgren, K. and **J.J. Stachowicz**. 2008. Alternative camouflage strategies mediate predation risk among closely related co-occurring kelp crabs. *Oecologia*. 155:519-528.
- Sax D.F., **J.J. Stachowicz**, J.H. Brown, J.F. Bruno, M.N. Dawson, S.D. Gaines, R.K. Grosberg, A.Hastings, R.D. Holt, M.M. Mayfield, M.I. O'Connor, and W. R. Rice. 2007. Ecological and evolutionary insights from species invasions. *Trends in Ecology and Evolution* 22:465-471
- Stachowicz, J.J.**, J.F. Bruno, and J.E. Duffy. 2007. Consequences of biodiversity for marine communities and ecosystems. **Annual Review of Ecology, Evolution and Systematic** 38: 739-766.

- Fridley, J. D., **J. J. Stachowicz**, S. Naeem, D. F. Sax, E. W. Seabloom, M. D. Smith, T. J. Stohlgren, D. Tilman, and B. V. Holle. 2007. The invasion paradox: Reconciling Pattern and Process in Species Invasions. *Ecology* 88:3-17.
- Hughes, A.E., J.E. Byrnes, D. L. Kimbro, and **J.J. Stachowicz**. 2007. Reciprocal relationships and potential feedbacks between biodiversity and disturbance. *Ecology Letters* 10:849-864.
- Byrnes, J.E., Reynolds, P.L. and **Stachowicz, J.J.** 2007. Invasions and extinctions reshape coastal food webs. *PloS One* 2(3):e295
- Bracken, M.E.S., C.A. Gonzalez-Dorantes, and **J.J. Stachowicz**. 2007. Whole community mutualism: Associated invertebrates facilitate a dominant habitat-forming seaweed. **Ecology** 88:2211-2219.
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- Worm, B. E.B. Barbier, N. Beaumont, J.E. Duffy, C. Folke, B.S. Halpern, J.B.C. Jackson, H.K. Lotze, F. Micheli, S.R. Palumbi, E. Sala, K.A. Selkoe, **J.J. Stachowicz**, and R. Watson. 2006. Impacts of biodiversity loss on ocean ecosystem services. **Science** 314:787-791.
- Bracken, M.E.S. and **J.J. Stachowicz**. 2006. Seaweed diversity enhances nitrogen uptake via complementary use of nitrate and ammonium. **Ecology** 87:2397-2403
- Thornber, C.S., **J.J. Stachowicz**, and S.D. Gaines. 2006. Grazing on different phases of an isomorphic alga: interactive effects of life history phase and reproductive status on susceptibility to herbivory. **Ecology** 87:2255-2263
- Stachowicz, J.J.** and J.E. Byrnes. 2006. Species diversity, invasion success and ecosystem functioning: disentangling the influence of resource competition, facilitation and extrinsic factors. **Marine Ecology Progress Series** 311: 251-262
- Duffy, J.E. and **J.J. Stachowicz**. 2006. Why biodiversity is important to oceanography: potential roles of genetic, species, and trophic diversity in pelagic ecosystem processes. **Marine Ecology Progress Series** 311: 179-189

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Hay, M.E., **J.J. Stachowicz**, E. Cruz-Rivera, S. Bullard, M. Deal, and N. Lindquist. 1998. Bioassays with marine and freshwater macro-organisms. Pages 39-141, in: J.G. Millar and K.F. Haynes (eds) *Methods in Chemical Ecology*. Chapman and Hall, New York.

Stachowicz, J.J. and N. Lindquist. 1997. Chemical defense among hydroids on pelagic Sargassum: predator deterrence and absorption of solar UV radiation by secondary metabolites. *Marine Ecology Progress Series* 155:115-126.

Stachowicz, J.J. and M.E. Hay. 1996. Facultative mutualism between an herbivorous crab and a coralline alga: advantages of eating noxious seaweeds. *Oecologia* 105:377-387.

Stachowicz, J.J. and T.D. Allison 1995. Vegetation, browsing, and site factors as determinants of Canada yew (*Taxus canadensis*) distribution in central New Hampshire. *Rhodora* 97:357-374.

Non Peer Reviewed Technical Reports

Duncan, B.E., K.D. Higgason, T.H. Suchanek, J. Largier, J. Stachowicz, S. Allen, S. Bograd, R. Breen, H. Gellerman, T. Hill, J. Jahncke, R. Johnson, S. Lonhart, S. Morgan, J. Roletto, F. Wilkerson. 2014. Ocean Climate Indicators: A Monitoring Inventory and Plan for Tracking Climate Change in the North-central California Coast and Ocean Region. Report of a Working Group of the Gulf of the Farallones National Marine Sanctuary Advisory Council. Marine Sanctuaries Conservation Series ONMS-14-09. U.S. Department of Commerce, National Oceanic and Atmospheric Administration, Office of National Marine Sanctuaries, Silver Spring, MD. 81pp.

Grants awarded

Gordon and Betty Moore Foundation (December 2013 to December 2016). Evolution, functioning and community assembly of seagrass-associated microbes. co-PI (\$771,855).

NSF (Biological Oceanography) (1 September 2013 – 31 August 2017). Collaborative Research: Global biodiversity and functioning of seagrass ecosystems, co PI, UCD portion (\$274,491).

NSF (Biological Oceanography) (1 September 2012 – 31 August 2017). Connecting genetic diversity to ecosystem functioning: links between genetic diversity, relatedness and trait variation in a seagrass community (\$919,566). Lead PI

NSF (Biological Oceanography) (1 March 2009 – 28 Feb 2013). Long-term and interactive effects of seaweed diversity and herbivory on intertidal community structure and functioning (\$522,631) Sole PI

NSF (Biological Oceanography) (1 September 2006 – 31 Aug 2009) Patterns and mechanisms relating seagrass genotypic diversity and ecosystem response to biotic and abiotic stress (\$233,595) Sole PI

NSF (Biological Oceanography) (1 March 2004 – 29 Feb 2008) Biodiversity and ecosystem functioning of intertidal seaweed communities (\$266,489) Lead PI

NSF (Biological Oceanography) (1 Jan 2001 - 31 Dec. 2004) Anti-predator defenses of marine hydroids: alternative strategies, biogeographic patterns, and ecological implications (\$219,902). Lead PI

NSF (Long-Term Research in Environmental Biology) (1 Oct. 2000 - 30 Sept. 2005) Long-term studies on the recruitment dynamics of shallow water epifaunal communities (\$240,531) co-PI

National Center for Ecological Analysis and Synthesis (1 March 2004 – 28 Feb 2006) Insights from exotic species into ecology, evolution and biogeography (\$56,700 for 3 meetings) co-PI

National Sea Grant: (1 October 1999 - 30 September 2002) Species and community attributes affecting invasion success by exotic species (\$163,141) co-PI

California Sea Grant (1-July 2001 - 30-June 2002) Reproductive biology of *Undaria pinnatifida*, a seaweed recently introduced to southern California: assessing the potential for establishment and spread (\$9,916) co PI

Invited Presentations

2017: Ecological Society of America, Symposium: Hidden dimensions of biodiversity

2016: University of Texas, Austin
International Temperate Reef Symposium, Pisa Italy
Ecological Society of America, Symposium: Evolutionary approaches in Ecology
Florida State University

2014: Nara Women's University, Nara Japan
University of California San Diego

2013: University of Laval, Quebec
Northeastern University
Western Society of Naturalists, Presidential Symposium, Ventura CA

- 2012: Sydney Institute of Marine Sciences, Sydney, Australia
- 2011: Bodega Marine Lab
University of British Columbia
- 2010: Texas A&M University, Corpus Christi
Sonoma State University
Chico State University
Moss Landing Marine Laboratory
Brown University
United Nations International Conference on Biodiversity, Frankfurt Germany
University of Oldenburg, Germany
PICES Annual Meeting, Portland, OR
- 2009: University of North Carolina
University of New South Wales (Sydney, Australia)
- 2007: Rice University
University of California, Santa Barbara
- 2006: Ecological Society of America Annual Meeting Symposium on “When does genetic diversity matter for ecology?”
- 2005: Georgia Institute of Technology
Cornell University
University of California, Berkeley
Ecological Society of America Annual Meeting: Symposium on the “invasion paradox”
- 2004: American Society of Limnologists and Oceanography Annual Meeting
Symposium on Biodiversity and Ecosystem Functioning in the Sea
Ecological Society of America Annual Meeting: Symposium on Insights from Exotic Species
University of Washington, Friday Harbor Laboratories Centennial Celebration
- 2003: Scripps Institute of Oceanography
University of California, Santa Barbara, Dept. Ecology, Evolution & Marine Biol.
Humboldt State University, Department of Biology
Moss Landing Marine Laboratories
- 2002: University of California Los Angeles, Dept of Organismal, Biology, Ecology and Evolution
San Diego State University, Department of Biology
California State University, Northridge, Department of Biology
Center for Marine Biodiversity Conservation
- 2001: Phycological Society of America
International Society of Chemical Ecology
Western Society of Naturalists

- 2000: Society for Integrative and Comparative Biology meeting, Atlanta.
Center for Population Biology, UC-Davis
Bodega Marine Lab, Bodega Bay CA
- 1999: Stanford University, Hopkins Marine Station
Eastern Connecticut State University, Department of Biology
- 1998: University of Connecticut, Department of Marine Sciences
Brown University, Department of Ecology and Evolutionary Biology
University of California at Davis, Section of Evolution and Ecology

Professional Service

Boards and Advisory Groups

- California Ocean Protection Council, Science Advisory Team (OPC-SAT), 2008-present;
OPC SAT Executive Committee 2017-2019
Exxon-Valdez Oil Spill Trustee Council, Science Panel, 2012-present
Exploratorium Science Museum, Ad Hoc exhibit development consultant, 2010 – present
US Joint Subcommittee on Ocean Science and Technology - Ocean Partnerships,
Biodiversity Working Group, Biodiversity Observation Network Steering
Committee Member, 2010-2011.

Editorships: (subject editor or associate editor)

- American Naturalist (2011-present)
Ecology and Ecological Monographs (2005-2013)
Scientific Naturalist Section of Ecology (2017-present)
Biology Letters (2007-2011)

Manuscripts reviewed for

- | | |
|---|-------------------------------------|
| Science | Ecology / Ecological Monographs |
| Marine Ecology Progress Series | Chemoecology |
| Marine Biology | Oecologia |
| Journal of Exp. Marine Biology and Ecology | Molecular Ecology |
| Aquatic Microbial Ecology | Estuaries |
| Bulletin of Marine Sciences | PloS Biology |
| Proceedings of the National Academy of Sciences | American Naturalist |
| Estuarine, Coastal and Shelf Science | Ecology Letters |
| Ethology | Journal of Avian Biology |
| Aquatic Conservation | Marine and Freshwater Research |
| Pacific Science | Nature |
| Proceedings of the Royal Society | Integrative and Comparative Biology |
| PLoS ONE | Global Ecology and Biogeography |
| Helgolander Marine Research | Journal of Biogeography |
| BMC - Ecology | |

Proposals reviewed for:

- National Science Foundation: Biological Oceanography, Population Biology, Ecology,

International Programs, Antarctic Biology and Medicine, Antarctic Organisms and Ecosystems.

National Sea Grant College Program

NOAA – National Undersea Research Center

NOAA Coastal Oceans Program

National Environmental Research Council (UK)

Memberships in professional societies:

Ecological Society of America

Phi Beta Kappa

Western Society of Naturalists

American Society of Naturalists

Teaching Experience

University of California Davis

BIS 2B: Introductory Biology: Ecology and Evolution (currently taught)

EVE 101 Introduction to Ecology

EVE 115 Marine Ecology (currently taught)

EVE 112 Invertebrate Zoology

ECL 214 Marine Ecology (graduate)

PBG 200B Population Biology (graduate) (currently taught)

University of North Carolina at Chapel Hill

MASC 104 Biological Oceanography

Graduate Students Advised (all Ph.D, unless noted)

Graduates: Randall Hughes (2006, faculty at Northeastern University), Amy Larson (joint doctoral program with San Diego State, 2007, Lecturer at Portland State (OR)), Suzanne Olyarnik (2008, Director, Bodega Reserve), Kristin Hultgren (2007, faculty at Seattle University), Jarrett Byrnes (2008, faculty at University of Massachusetts, Boston), Kirsten Sellheim (M.A. 2010, Cramer Fish Sciences, Inc.), Kyle Edwards (2010, faculty at University of Hawaii), Kristin Aquilino (2011, postdoc at Cal. Dept of Fish and Game), Rebecca Best (postdoc at EAWAG, Switzerland), Jessica Abbott (currently postdoc with Institute for Wildlife Studies).

Current Students: Olivia Rhoades, Matt Whalen, Katie DuBois (co advised with S. Williams), Nicole Kollars, Melissa Kardish, Lauren Miller (co advised with P. Wainwright)

Postdoctorals supervised

Matt Bracken (currently faculty at Northeastern University)

Carol Thornber (currently faculty at University of Rhode Island)

Randall Hughes, (currently faculty at Northeastern University)

Fiona Tomas Nash (currently faculty at Institudos Estundacos Avancos, Barcelona, Spain)

Jonathan Pruitt (currently faculty at Princeton University)

Marc Rius (currently faculty at Southampton University, UK)

Laura Reynolds (current)

Major administrative experience

Director, Center for Population Biology
Executive Committee, College of Biological Sciences
Chair, committee on educational policy, UCD College of Letters and Sciences
Chair (and member), UC Davis Diving control board
Master Advisor, Biological Sciences major and marine biology area of emphasis
Member, Biological Sciences Curriculum Review Committee
Chair, Marine Ecology Area of Emphasis, Ecology Graduate Group
Member, Bodega Marine Lab Strategic Planning Committee
Chair, UC Davis Natural Reserves Visioning Committee
Chair, College of Biological Sciences Faculty Teaching Committee
Member, Biological Science Major redesign committee