CURRICULUM VITAE

Professor Margaret Anne McManus Chairwoman of the Department of Oceanography University of Hawaii at Manoa Honolulu, Hawaii 96822 (808) 348-9395, mamc@hawaii.edu http://margaretmcmanus.com/Home.html

Education

1996	Ph.D. Physical Oceanography
	Center for Coastal Physical Oceanography, Old Dominion University
1991	M.S. Biological Oceanography
	Department of Oceanography, Old Dominion University
1989	B.A. Environmental Sciences
	Department of Environmental Sciences, University of Virginia

Professional History

2020 - present	<i>Chairwoman</i> Department of Oceanography, University of Hawaii at Manoa
2012 - present	Professor of Oceanography Department of Oceanography, University of Hawaii at Manoa
2007-2012	Associate Professor of Oceanography Department of Oceanography, University of Hawaii at Manoa
2003-2007	Assistant Professor of Oceanography Department of Oceanography, University of Hawaii at Manoa
2000- 2003	Assistant Professor of Ocean Sciences Ocean Sciences Department, University of California Santa Cruz
1998-2000	Assistant Marine Research Scientist Graduate School of Oceanography, University of Rhode Island
1996-1998	<i>Post-doctoral Researcher</i> Graduate School of Oceanography, University of Rhode Island

Additional Roles, University of Hawaii at Manoa

2013 - present	Faculty Member, Marine Biology Graduate Program
2004 - present	Affiliate Faculty, Hawaii Institute of Marine Biology (HIMB)
2003 - present	Faculty, Global Environmental Science (GES) Undergraduate Program

RESEARCH & SCHOLARLY ACTIVITIES

Publications

*Please note: students, postdoctoral researchers and McManus lab members are underlined.

I. Refereed publications in scholarly journals <u>Submitted</u>

Dierssen HM, S Ackleson, K Joyce, E Hestir, A Castagna, S Lavender, MA **McManus. Submitted.** Living up to the Hype of Hyperspectral Aquatic Remote Sensing: Science, Resources and Outlook. Frontiers.

Hixon M, B Bowen, R <u>Coleman</u>, C <u>Counsell</u>, M Donahue, E Franklin, J Kittinger, MA **McManus**, R Toonen. **Submitted**. Fish Flow: Following Fisheries from Spawning to Supper. Frontiers in Ecology and the Environment.

McManus MA, AT Greer, AVH <u>Timmerman</u>, JC <u>Sevadjian</u>, CB <u>Woodson</u>, T Cowen, DA Fong, S Monismith, OM <u>Cheriton</u>. **Submitted**. Biological, physical and chemical attributes of a toxic thin layer in a temperate marine system: Mechanisms for formation and persistence. Marine Ecology Progress Series.

<u>Smith</u> KA, JL <u>Whitney</u>, MA **McManus**, J Lecky, A Copeland, DR Kobayahi, JM <u>Gove</u>. **Submitted**. Physical mechanisms driving biological accumulation in surface lines on coastal Hawaiian waters. Continental Shelf Research.

Published

Penninck, SB, RM Lopes, JF Lima, MA **McManus**. **2021**. Thin layers in the coastal zone of Ubatuba, Brazil: Mechanisms of formation and dissipation. Limnology and Oceanography. 66: 558-574, doi: 10.1002/lno.11623

<u>Whitney</u> J, JM <u>Gove</u>, MA **McManus**, KA <u>Smith</u>, J Lecky, P Neubauer, JE Phipps, EA Contrearas, DR Kobayashi, GP Asner. **2021**. Surface slicks are pelagic nurseries for diverse ocean species. Scientific Reports. (2021) 11:3197. https://doi.org/10.1038/s41598-021-81407-0

<u>Vollbrecht C</u>, <u>P Moehlenkamp</u>, <u>J Gove</u>, AB Neuheimer, MA **McManus**. **2020.** Long term presence of the island mass effect at Tiputa Channel, Rangiroa Atoll. Frontiers. Special Issue. In press.

Winter KB, YM Rii, F Reppun, K DeLaforgue Hintzen, RA Alegado, BW Bowen, LL Bremer, M Coffman, JL Deenik, MJ Donahue, KA Falinksi, KL Frank, EC Franklin, N Kurashima, NK Lincoln, E Madin, MA **McManus**, C Nelson, R Okano, A Olegario, K Oleson, P Pascua, MR Price, MAJ Rivera, K Rodgers, C Sabine, CM Smith, T Ticktin, A Hewitt, R Kaluhiwa, M Cypher, JA Leong, B Thomas, K Kekuewa, K Kukea-Shultz, H Kawelo, K Kotubetey, B Neilson, J Tonimoto, T Lee, RJ Toonen. **2020**. Collaborative research to inform adaptive co-management: A framework for the He'eia National Estuarine Research Reserve. *Ecology and Society*. In press. Winter KB, N Kekuewa Lincoln, F Berkes, RA Alegado, N Kurashima, KL Frank, P Pascua, YM Rii, F Reppun, ISS Knapp, WC McClatchey, T Ticktin, C Smith, EC Franklin, K Oleson, MR Price, **MA McManus**, MJ Donahue, KS Rodgers, BW Bowen, CE Nelson, B Thomas, J-A Leong, EMP Madin, MJ Rivera, KA Falinski, LL Bremer, JL Deenik, SM Gon III, B Neilson, R Okano, A Olegario, B Nyberg, A Kawelo, K Kotubetey, J Kukea-Shultz and RJ Toonen. **2020**. Ecomimicry in Indigenous resource management: optimizing ecosystem services to achieve resource abundance, with examples from Hawai'i. Ecology and Society 25 (2):26. [online] URL: https://www.ecologyandsociety.org/vol25/iss2/art26/

Bailey K, C Steinberg, C Davies, G Gailbert, M Hidas, MA **McManus**, T Murphy, J Newton, M Roughan, A Schaeffer. **2019.** Coastal Mooring Observing Networks and their Data Products: Recommendations for the Next Decade. Front. Mar. Sci., 05 April 2019 | https://doi.org/10.3389/fmars.2019.00180

<u>Comfort</u> C, G <u>Walker</u>, MA **McManus**, A Fujimura, CE <u>Ostrander</u> and T Donaldson. **2019**. Physical dynamics of the reef flat, channel, and fore reef areas of a fringing reef embayment: An oceanographic study of Pago Bay, Guam. Regional Studies in Marine Science. Vol 31. https://doi.org/10.1016/j.rsma.2019.100740

<u>Gove JM</u>, JL <u>Whitney</u>, MA **McManus**, J Lecky, F Carvalho, JM Lynch, J Li, P Neubauer, K <u>Smith</u>, JE Phipps, DR Kobayashi, KB Balagso, EA Contreras, ME Manuel, MA Merrifield, JJ Polovina, GP Asner, JA Maynard, GJ Williams. **2019.** Prey-sized plastics are invading larval fish nurseries. PNAS. https://doi.org/10.1073/pnas.1907496116¹

Menge BA, K Milligan, JE Caselle, JA Barth, CA Blanchette, MH Carr, F Chan, RK Cowen, M Denny, SD Gaines, GE Hofmann, KJ Kroeker, J Lubchenco, MA **McManus**, M Novak, SR Palumbi, PT Raimondi, GN Somero, RR Warner, L Washburn, and JW White. 2019. PISCO: Advances made through the formation of a large-scale, long-term consortium for integrated understanding of coastal ecosystem dynamics. *Oceanography* 32(3): 16–25, https://doi.org/10.5670/oceanog.2019.307.

Menge B, K Milligan, JE Casselle, JA Barth, F Chan, S Gravem, J Lubchenco, M Novak, JW White, CA Blanchette, L Washburn, M Carr, P Raimondi, MA **McManus**, TC Gouhier. **2019**. Integrating Coastal Oceanic and Benthic Ecological Approaches for Understanding Large-scale Meta-Ecosystem Dynamics. *Oceanography* 32(3): 38–49, https://doi.org/10.5670/oceanog.2019.309.

Menge B, JE Caselle, JA Barth, F Chan, S Gravem, J Lubchenco, K Milligan, M Novak, JW White, CA Blanchette, L Washburn, M Carr, P Raimondi, MA **McManus**, TC Gouhier. **2019**. Community Responses to Climate-Related Variability and Disease: The Critical Importance of Long-term Research. *Oceanography* 32(3): 72–81, https://doi.org/10.5670/oceanog.2019.313.

<u>Moehlenkamp</u> P, CK<u>Beebe</u>, MA **McManus**, AH Kawelo, K Kotubetey, RA Alegado. **2019**. Kū Hou Kuapā: Cultural Restoration Improves Water Budget and Water Quality Dynamics in He'eia Fishpond.

¹ Nominated for the National Academy of Sciences Cozzarelli Prize

Journal of Sustainability: Special Issue "New Approaches to Fisheries and Aquaculture Sustainability". 11, 161; doi:10.3390/su11010161

Stauffer BA, H Bowers, E Buckley, TW Davis, TH Johengen, R Kudela, MA **McManus**, H Purcell, GJ Smith, A VanderWoude, M Tamburri. **2019.** Considerations in Harmful Algal Bloom Research and Monitoring: Perspectives from an Expert Workshop and Technology Testing. Review, *Frontiers in Marine Science - Ocean Observation.* 16 July 2019 | https://doi.org/10.3389/fmars.2019.00399

<u>Wong-Ala</u> JATK, CM <u>Comfort</u>, JM <u>Gove</u>, MA Hixon, MA **McManus**, BS Powell, JL <u>Whitney</u>, AB Neuheimer. **2018.** How life history characteristics and environmental forcing shape settlement success of coral reef fishes. *Frontiers in Marine Science*, Special Issue: The importance of behavior in the recruitment of marine fauna and flora. Eds CB Paris, E Wolanski. 5(65): 1 - 12. doi: 10.3389/fmars

Chan F, JA Barth, CA Blanchette, RH Byrne, F Chavez, OM <u>Cheriton</u>, RA Feely, G Friederich, T Gouhier, B Gaylord, S Hacker, T Hill, G Hofmann, MA **McManus**, BA Menge, KJ Nielsen, A Russell, E Sanford, J <u>Sevadjian</u> and L Washburn. **2017**. Persistent spatial structuring of coastal ocean acidification in the California Current System. *Nature Scientific Reports*. 7: 2526 | DOI:10.1038/s41598-017-02777-y. http://rdcu.be/s764

<u>Comfort C, K Smith</u>, MA **McManus**, A Neuheimer, J <u>Sevadjian</u> C <u>Ostrander</u>. **2017**. Observations of the Hawaiian mesopelagic boundary layer community in daytime and nighttime habitats using estimated backscatter. *AIMS Geosciences* special issue: Coastal Dynamics Research. 3(3): 304-326. doi: 10.3934/geosci.2017.3.304 (http://www.aimspress.com/article/10.3934/geosci.2017.3.304/fulltext.html)

<u>McCoy</u> D, MA **McManus**, K Kotubetey, AH Kawelo, CW <u>Young</u>, B <u>D'Andrea</u>, KC Ruttenberg, RA Alegado. **2017.** Large scale climactic effects on traditional Hawaiian fishpond aquaculture. *PLOS ONE* 12(11): e0187951. https://doi.org/10.1371/journal.pone.0187951

Tyburczy J, CB<u>Woodson</u>, JA Barth, MH Carr, S Dudas, <u>DJ Hoover</u>, MA **McManus**, PT Raimondi, G Rilov, L Washburn, BA Menge. **2017** A new conceptual model of nearshore larval transport and delivery: Integrating results of an intensive multi-scale bio-oceanographic field campaign. 2017 EAS Annual Meeting.

<u>Gove</u> JM, MA **McManus**, AB Neuheimer, JJ Polovina, JC Drazen, CR Smith, MA Merrifield, AM Freidlander, JS Ehses, CW <u>Young</u>, AK Dillon, GJ Williams. **2016**. Near-island biological hotspots in barren ocean basins. *Nature Communications*. Accepted 30 Dec 2015. 7:10581 doi: 10.1038/ncomms10581.

<u>Kroeker</u> KJ, E Sanford, JM <u>Rose</u>, CA Blanchette, F Chan, FP Chavez, GF <u>Dilly</u>, B Gaylord, B Helmuth, TM Hill, GE Hofmann, KM <u>Laughlin</u>, MA **McManus**, BA Menge, KJ Nielsen, PT Raimondi, AD Russell, L Washburn. **2016.** Interacting environmental mosaics drive geographic variation in mussel performance and species interactions. *Ecology Letters*. doi: 10.1111/ele.12613. Teneva LT, MA **McManus**, C Jerolmon, AB Neuheimer, G <u>Walker</u>, K Kahoohalahala, E Shimabukuro, C <u>Ostrander</u>, JN Kittinger. **2016**. Reef flat sediment regimes and hydrodynamics can inform erosion mitigation on land. *Collabra*. 2(1): 1, pp. 1-12 DOI http://doi.org/10.1525/collabra.25.

<u>Comfort</u> CM, MA **McManus**, SK <u>Clark</u>, DM Karl, CE <u>Ostrander</u>. **2015.** Environmental properties of coastal waters in Mamala Bay, Oahu, Hawaii at the future site of a seawater air conditioning outfall. *Oceanography*. 28(2): 230–239.

<u>Gove JM</u>, GJ <u>Williams</u>, MA **McManus**, JS <u>Clark</u>, JS Ehses. **2015**. Coral reef benthic regimes exhibit non-linear threshold responses to natural physical drivers. *Marine Ecology Progress Series* Vol. 522: 33–48.

Benoit-Bird KJ and MA **McManus**. **2014**. A critical time window for organismal interactions in a pelagic ecosystem". *PlosONE*. 9(5): e97763. doi:10.1371/journal.pone.0097763

Berdalet E, MA **McManus**, ON Ross, H Buchard, F Chavez, JS Jaffe, I Jenkinson, R Kudela, I Lips, A <u>Lucas</u>, D Rivas, MC Ruiz de la Torre, J Ryan, H Yamazaki. **2014**. Understanding harmful algae in stratified systems: Review of progress and future directions. *Deep Sea Research II. Special Issue: Harmful Algal Blooms in Stratified Systems*. R, E Berdalet, MA **McManus**, H Yamazaki (Eds.). 101:4–20.

<u>Fiedler</u> JW, MA **McManus**, MS Tomlinson, EH DeCarlo, ER Pawlak, GF Steward, OD <u>Nigro</u>, RE <u>Timmerman</u>, TS <u>Drupp</u>, JR Wells and CE <u>Ostrander</u>. **2014**. Real-time observations of the February 2010 Chile and March 2011 Japan tsunamis in Honolulu, Hawaii as recorded by the Pacific Islands Ocean Observing System. *Oceanography*. 27(2) 16-30.

Hofmann GE, TG <u>Evans</u>, MW <u>Kelly</u>, JL <u>Padilla-Gamino</u>, CA Blanchette, L Washburn, F Chan, MA **McManus**, BA Menge, B Gaylord, TM Hill, E Sanford, M <u>LaVigne</u>, J <u>Rose</u>, L <u>Kapsenberg</u>, JM <u>Dutton</u>. **2014**. Exploring local adaptation and the ocean acidification seascape – studies in the California Current Large Marine Ecosystem. *Biogeosciences*. *Special Issue: The ocean in a high-CO2 world III*. 11, 1053-1064.

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Ryan, JP, MA **McManus**, RM Kudela, M Lara Artigas, JG Bellingham, FP Chavez, G Doucette, D Foley, M Godin, JBJ Harvey, R Marin III, M Messie, C Mikulski, T Pennington, F Py, K Rajan, I Shulman, Z Wang and Y Zhang. **2014**. Boundary influences on HAB phytoplankton ecology in a stratification-enhanced upwelling shadow. *Deep Sea Research II. Special Issue: Harmful Algal Blooms in Stratified Systems*. Raine R, E Berdalet, MA **McManus**, H Yamazaki (Eds.). 101:63-79.

<u>Sevadjian</u> JC, MA **McManus**, JP Ryan, AT <u>Greer</u>, RK Cowen, CB <u>Woodson</u>. **2014.** Across-shore variability in plankton layering and abundance on the northern Monterey Bay inner shelf. *Continental Shelf Research*. 72:138-151.

Timmerman AVH, MA **McManus**, OM <u>Cheriton</u>, RK Cowen, AT <u>Greer</u>, RM Kudela, KC Ruttenburg and JC <u>Sevadjian</u>. **2014**. Hidden thin layers of toxic diatoms in a coastal bay. *Deep Sea Research II*. *Special Issue: Harmful Algal Blooms in Stratified Systems*. Raine R, E Berdalet, MA **McManus**, H Yamazaki (Eds.). 101: 129–140.

Benoit-Bird KJ, EL Shroyer, MA **McManus**. **2013**. A critical scale in plankton aggregations across coastal ecosystems. *Geophysical Research Letters*. Vol 40: 1-7, doi:10.1002/grl.50747.

<u>Gove JM</u>, G <u>Williams</u>, MA **McManus**, S Heron, S Sandin, O Vetter. **2013**. Quantifying climatological ranges and anomaly frequencies for Pacific Island Reef Ecosystems. *PlosONE*. Vol 8(4) 1-14. http://www.plosone.org/article/info%3Adoi%2F10.1371%2Fjournal.pone.0061974.

<u>Greer</u> AT, RK Cowen, CM Guigand, MA **McManus**, JC <u>Sevadjian</u>, AVH <u>Timmerman</u>. **2013**. Relationships between phytoplankton thin layers and the fine-scale spatial distributions of two trophic levels of zooplankton *Journal of Plankton Research*. 35(5): 939 – 956.

Janekovic I, B Powell, D <u>Matthews</u> and MA **McManus**. **2013**. 4D-Var data assimilation in a nested, coastal ocean model: A Hawaiian case study. *Journal of Geophysical Research* 18, 1–14, doi:10.1002/jgrc.20389.

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McManus MA, JC <u>Sevadjian</u>, KJ Benoit-Bird, OM <u>Cheriton</u>, AVH <u>Timmerman</u>, CM Waluk. **2012**. Observations of thin layers in coastal Hawaiian waters. *Estuaries and Coasts*. Vol 35(4): 1119-1127.

<u>Sevadjian</u>, JS, MA **McManus**, KJ Benoit-Bird, and K Selph. **2012**. Shoreward advection of phytoplankton and vertical re-distribution of zooplankton by episodic near-bottom water pulses on an insular shelf: Oahu, Hawaii. *Continental Shelf Research*. Volumes 50-51, 1 - 15.

<u>Woodson</u> CB, MA **McManus**, JA <u>Tyburczy</u>, JA Barth, L Washburn, JE Caselle, MH Carr, DP Malone, PT Raimondi, BA Menge and SR Palumbi. **2012**. Coastal fronts set recruitment and connectivity patterns across multiple taxa. Limnol. Oceanogr. 57: 582-596.

Carr MH, CB <u>Woodson</u>, OM <u>Cheriton</u>, D Malone, MA **McManus**, P. Raimondi. **2011**. Review: Knowledge through partnership: Integrating marine protected area monitoring and ocean observing systems. *Frontiers in Ecology and the Environment*. 9(6): 342-350.

Tomlinson MS, EH DeCarlo, MA **McManus**, G Pawlak, GF Steward, FJ Sansone, OD <u>Nigro</u>, CE <u>Ostrander</u>, RE <u>Timmerman</u>, J Patterson, SJ <u>Uribe</u>. **2011**. Characterizing the effects of two storms on the coastal waters of the O'ahu, Hawai'i using data from the Pacific Islands Ocean Observing System. *Oceanography*. Vol 24(2):182-199.

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<u>Cheriton</u> OM, MA **McManus**, JV <u>Steinbuck</u>, MT Stacey, JM Sullivan. **2010**. Towed vehicle observations of across-shelf thin layer structure and a low-salinity intrusion in northern Monterey Bay, CA. *Continental Shelf Research. Special Issue: The Ecology and Oceanography of Thin Plankton Layers*. Sullivan JM, MA **McManus** and PL Donaghay (Eds). Vol 30(1): 39-49.

<u>Galindo</u> HM, AS <u>Pfeiffer-Herbert</u>, MA **McManus**, Y Chao, F Chai, SR Palumbi. **2010**. Seascape genetics along a steep cline: Using genetic patterns to test predictions of marine larval dispersal. *Molecular Ecology*. Vol (19), Issue (17) 3489-3835.

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Sullivan JM, MA **McManus**, OM <u>Cheriton</u>, KJ Benoit-Bird, L Goodman, Z <u>Wang</u>, JP Ryan, M Stacey, DV Holliday, C Greenlaw, MA Moline, M <u>McFarland</u>. **2010**. Layered Organization in the Coastal Ocean: An introduction to thin layers and the LOCO project. *Continental Shelf Research*. *Special Issue: The Ecology and Oceanography of Thin Plankton Layers*. Sullivan JM, MA **McManus** and PL Donaghay (Eds). Vol 30(1): 1-6.

<u>Cheriton</u> OM, MA **McManus**, MT Stacey, JV <u>Steinbuck</u>, JP Ryan. **2009**. Physical and biological controls on the maintenance and dissipation of a thin phytoplankton layer. *Marine Ecology Progress Series*. Vol. 378: 55–69.

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<u>Cheriton</u> OM, MA **McManus**, DV Holliday, CF Greenlaw, PL Donaghay, T Cowles. **2007**. Effects of mesoscale physical processes on thin zooplankton layers at four sites along the West Coast of the U.S. *Estuaries and Coasts*. 30(4): 1-16.

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<u>Greer</u> AT, RK Cowen, C Guigand, MA **McManus**, J <u>Sevadjian</u>, AVH <u>Timmerman</u>. **2012**. Small scale changes in gelatinous zooplankton community during upwelling and relaxation events. 2012 Ocean Sciences Meeting. Salt Lake City, Utah.

Invited: Harvey JBJ, JP Ryan, Y Zhang, R Marin III, GJ Doucette, J Bellingham, MA **McManus**, FP Chavez, CA Scholin. **2012**. An interdisciplinary, multi-scale approach to monitoring the development and succession of harmful algal bloom communities in the Monterey Bay. 2012 Ocean Sciences Meeting. Salt Lake City, Utah.

<u>Moniz</u> RJ, DA <u>Fong</u>, SG Monismith, CB <u>Woodson</u>, SK <u>Willis</u>, MT Stacey, MA **McManus**. **2012**. Lateral dispersion in the thermocline on the inner shelf of northern Monterey Bay. 2012 Ocean Sciences Meeting. Salt Lake City, Utah.

<u>Willis</u> SK, MT Stacey, SG Monismith, DA <u>Fong</u>, MA **McManus**, RJ <u>Moniz</u>. **2012**. Characterization of turbulent mixing on the stratified inner shelf of Monterey Bay. 2012 Ocean Sciences Meeting. Salt Lake City, Utah.

<u>Gove</u> JM, GJ <u>Williams</u>, MA **McManus**, S Heron, OJ <u>Vetter</u>, D Foley, SA Sandin. 2012. Island scale metrics for quantifying environmental forcing and exceedance thresholds on coral reefs. International Coral Reef Symposium (ICRS), Queensland, Australia.

Pawlak G, EH DeCarlo, J <u>Fram</u>, B Glazer, MA **McManus**, F Sansone, T Stanton, J Wells. **2012**. The Kilo Nalu Observatory: Seven Years of Discovery. 2012 Ocean Sciences Meeting. Salt Lake City, Utah.

Russell AD, C Blanchette, F Chan, F Chavez, G Friedrich, TM Hill, MA McManus, BA Menge, P Ramondi, E Sanford. **2012**. Variability in pH, T, 0_2 , and Ω , in nearshore waters of the Oregon-California coast and its implications for adaptation of intertidal calcifiers. 2012 Ocean Sciences Meeting. Salt Lake City, Utah.

Tomlinson MS, EH DeCarlo, MA **McManus**, G Pawlak, P <u>Drupp</u>, RE <u>Timmerman</u>, S Jaramillo. **2012**. What have we learned from "routine" IOOS monitoring? 2012 Ocean Sciences Meeting. Salt Lake City, Utah.

Invited: McManus MA and CB <u>Woodson</u>. 2011. Plankton distribution and oceanic dispersal. Integrating Biomechanics and Ecology. *Journal of Experimental Biology* Symposium. Cambridge, England.

Invited: **McManus** MA and CB <u>Woodson</u>. **2011**. Climate, currents, and connectivity: The dynamics of larval dispersal. AAAS Special Session "Beyond lines on maps: MSP for a dynamic world". Washington DC.

Steward GF, B Powell, MA **McManus**, O <u>Nigro</u>, E <u>Wood-Charlson</u>. **2011**. Predicting the abundance of pathogenic Vibrios: A case for time-resolved, mechanistic models. NSF Ocean Sciences Division (OCE) Ecology of Marine Infectious Diseases Workshop. San Juan, Puerto Rico.

Young CW, K Ruttenberg, MA **McManus**. **2011**. Perturbation of tropical coastal nutrient inventories and phytoplankton ecology during storm events, Oahu, Hawaii. ASLO. Puerto Rico.

Pawlak G, M Ericksen, MA **McManus**, A Rocheleau, L <u>Tuthill</u>. **2011**. Real-time ocean water quality monitoring for the Sand Island Outfall. OCEANS 2011. Kona, Hawaii.

Invited: CB <u>Woodson</u>, JA <u>Tyburczy</u>, MA **McManus**, JA Barth, L Washburn, P Raimondi, BA Menge, S Palumbi. **2010.** Persistent fronts and connectivity: A missing piece of the puzzle? 2010 Ocean Sciences Meeting, Portland Oregon.

De Carlo E, MS Tomlinson, MA **McManus**, E Pawlak, G Steward, F Sansone, O <u>Nigro</u>, RE <u>Timmerman</u>, J Patterson, S <u>Jaramillo-Uribe</u>. **2010**. Short term impacts of storm events on water quality in coastal waters of urban Honolulu, Hawaii. 2010 Ocean Sciences Meeting, Portland Oregon.

<u>Galindo</u> HM, AS <u>Pfeiffer-Herbert</u>, MA **McManus**, Y Chao, F Chai, S Palumbi. **2010**. Seascape genetics along a steep cline: Using genetic patterns to test predictions of coastal marine larval dispersal. 2010 Ocean Sciences Meeting, Portland Oregon.

Ryan JP, MA **McManus**, CB <u>Woodson</u>, RM Kudela, JD Paduan. **2010**. Fronts as ecosystem organizers in Monterey Bay. 2010 Ocean Sciences Meeting, Portland Oregon.

Invited: Stacey MS, MA **McManus**, J <u>Steinbuck</u>, OM <u>Cheriton</u>, JP Ryan. **2010**. Turbulent mixing on the inner shelf of Monterey Bay and the implications for biological thin layers. 2010 Ocean Sciences Meeting, Portland Oregon.

Tomlinson, M, E DeCarlo, M **McManus**, G Pawlak, G Steward, F Sansone, O <u>Nigro</u>, RE <u>Timmerman</u>, J Patterson, S Jaramilo-Uribe. **2010**. Monitoring in the Ahupua'a. Monitoring from the summit to the sea. Seventh National Monitoring Conference, Denver, Colorado.

McManus MA, GF Steward, RM Kudela, MW Silver, PL Donaghay, JM Sullivan. **2009.** Cryptic blooms: Are thin layers the missing connection? Coastal Zone Meeting. Boston, Massachusetts.

<u>Cheriton</u> OM, MA **McManus**, E McPhee-Shaw. **2009**. A decade in Carmel Bay: Resolving the complex physical structure and flow patterns in a small, ecologically important bay. Monterey Bay National Marine Sanctuary Symposium. Monterey, California.

Ostrander CE, B Taylor, W Au, B Brooks, E DeCarlo, P Flament, C Fletcher, M Haws, K Holland, R Lukas, D Luther, M **McManus**, D Okimoto, G Pawlak, J Potemra, B Powell, A Shor, G Steward, M Workman. **2009**. Developing the Hawaii and Pacific Islands Ocean Observing Systems. Oceans 09. Venice, Italy.

McManus MA. 2008. Current flows in coastal Maui. Nuisance Algal Bloom EcoHAB Workshop Honolulu Zoo, Discovery Center. Honolulu, HI.

<u>Woodson</u>, CB, JA Barth, DJ <u>Hoover</u>, AR <u>Kirincich</u>, MA **McManus**, JP Ryan, J <u>Tyburczy</u>, L Washburn. **2008**. Upwelling-driven buoyant plume dynamics in northern Monterey Bay. AGU Fall Meeting, San Francisco, California.

<u>Cheriton</u> OM, MA **McManus**, MS Stacey, JV <u>Steinbuck</u>, JP Ryan. **2008.** Physical and biological controls on the maintenance and dissipation of a thin phytoplankton layer. 2008 Ocean Sciences Meeting. Orlando, Florida.

Jones MB, CS Jones, D Barseghian, MA **McManus**, G Pawlak. **2008.** Managing and analyzing cabledseafloor sensor data using Kepler scientific workflows. 2008 Ocean Sciences Meeting. Orlando, Florida.

Sansone FJ, GR Pawlak, TP Stanton, AB <u>Hebert</u>, MA **McManus**, EH DeCarlo, MA Merrifield. **2008.** Kilo Nalu nearshore reef observatory, Oahu, Hawaii: Interdisciplinary observations of physical, geochemical and biological interactions. 2008 Ocean Sciences Meeting. Orlando, Florida.

<u>Sevadjian</u> JC, MA **McManus**, GR Pawlak, CF Greenlaw. **2008.** The influence of physical structure and shoaling internal tides on thin plankton layers in Mamala Bay, Hawaii. 2008 Ocean Sciences Meeting. Orlando, Florida.

Stacey MT, MA **McManus**, JV <u>Steinbuck</u>. **2008.** Convergences and divergences and mixing in thin layers. 2008 Ocean Sciences Meeting. Orlando, Florida

<u>Woodson</u> CB, DJ <u>Hoover</u>, JA Barth, MA **McManus**, PR Raimondi, MH Carr, L Washburn, S Dudas. **2008.** Recruitment in upwelling-dominated regions driven by the movement of nearshore fronts. 2008 Ocean Sciences Meeting. Orlando, Florida.

<u>Solomon</u> RF, CE <u>Ostrander</u>, E Heinen De Carlo, MA **McManus**, FT Mackenzie, KE Fagan, C Sabine, RA Feely. **2007**. Coastal observing at CRIMP-CO₂, Kaneohe Bay, Hawaii: A study of land-ocean interactions and CO₂ exchange between seawater and the atmosphere. 2007 Ocean Carbon Biogeochemistry Workshop. Woods Hole, Massachusetts.

Solomon RF, CE Ostrander, EH De Carlo, MA **McManus**, FT Mackenzie, KE Fagan, C Sabine, RA Feely **2007**. Land-ocean interactions in a coastal embayment, Kaneohe Bay, Hawaii: Nutrient dynamics, productivity, and CO₂ exchange between seawater and atmosphere. 2007 Goldschmidt Conference. Cologne, Germany.

Lubchenco J, F Chan, JA Barth, BA Menge, JM Bane, AR Kirincich, MA **McManus**, KJ Nielsen, SD Pierce, L Washburn. **2007.** Arrhythmias in the coastal ocean off the west coast of the US. Ecological Society of America meeting. San Jose, California.

Invited: <u>Woodson</u> CB and MA **McManus**. **2007**. Behavior and dispersal in the ocean: Can zooplankters remain near high resource patches? ASLO Aquatic Sciences Meeting, Santa Fe, New Mexico.

Pawlak G, T Stanton, D Harries, K Millikan, J Shacat, B <u>McLaughlin</u>, A <u>Hebert</u>, MA **McManus**, EH DeCarlo, F Sansone. **2007**. Kilo Nalu cabled array: Realtime data, power and diagnostic systems. OMAE 2007 Special Symposium on Offshore Measurement and Data Interpretation. San Diego, California.

Solomon RF, CE Ostrander, MF Chung, FS Paquay, LE <u>DeGelleke</u>, M Akiba, KE Fagan, EH DeCarlo, FT Mackenzie, MA **McManus**, CL Sabine, RA Feely. **2006.** The effects of storm events on air-sea CO₂ exchange in southern Kaneohe Bay, Hawaii. 2006 AGU. San Francisco, California.

<u>Swanson</u> M, J <u>Sevadjian</u>, F Sansone, G Pawlak, M **McManus**, E De Carlo, T Stanton, A Hebert, J Shacat, K Millikan, B <u>McLaughlin</u>, J Wells, A Hanson, BH Byrne. **2006**. The Kilo Nalu cabled observatory, Oahu, Hawaii: A flexible platform for integrated physical and biogeochemical adaptive sampling and experimentation. 2006 AGU. San Francisco, California.

Ostrander CE, MA **McManus**, RF <u>Solomon</u>, EH De Carlo, FT Mackenzie. **2006**. Spatial and temporal variability of freshwater plumes derived from storm events in a semi-enclosed estuarine bay system: Kaneohe Bay, Hawaii. Sixth International Symposium on Stratified Flows. Australia.

De Carlo EN, R <u>Solomon</u>, C <u>Ostrander</u>, MA **McManus**, FT Mackenzie, MF Chung, L <u>DeGelleke</u>, C Sabline, R Feely. **2006**. Productivity and CO₂ exchange between the ocean and atmosphere in Kaneohe Bay, Hawaii, a subtropical coastal embayment. 2006 Goldschmidt Conference. Melbourne, Australia.

Invited: Ryan JP, MA **McManus**, J Paduan, F Chavez. **2006**. Phytoplankton thin layers within a coastal upwelling system front in Monterey Bay, California. Ocean Sciences Meeting. Honolulu, Hawaii.

Benoit-Bird K, MA **McManus**, BE <u>McLaughlin</u>. **2006**. Thin phytoplankton and zooplankton layers and not so thin micronekton layers off the west coast of Oahu, Hawaii. Ocean Sciences Meeting. Honolulu, Hawaii.

Invited: <u>Cheriton</u> OM, MA **McManus**, DV Holliday, CF Greenlaw, PL Donaghay. **2006**. Coastal Ocean Exploration: Searching For Thin Layers (COESTL). Ocean Sciences Meeting. Honolulu, Hawaii.

Pawlak G, T Stanton, F Sansone, R Wilkens, E De Carlo, A Hebert, MA **McManus**, M Merrifield, K Millikan, M <u>Bandet-Chavanne</u>, M <u>Swanson</u>. **2006**. Kilo Nalu: A Hawaiian coastal observatory. Ocean Sciences Meeting. Honolulu, Hawaii.

Airame S, J Lubchenco, S Gaines, MA **McManus**. **2006**. PISCO (Partnership for Interdisciplinary Studies of Coastal Oceans): Mentoring and training the next generation. Ocean Sciences Meeting. Honolulu, Hawaii.

<u>Pfeiffer-Hoyt</u> AS, MA **McManus**, PT Raimondi, Y Chao. **2006**. Predicting *Balanus glandula* larval dispersal with coupled biological physical modeling. Ocean Sciences Meeting. Honolulu, Hawaii.

De Carlo EH, R F <u>Solomon</u>, F Paquay, C E <u>Ostrander</u>, FT Mackenzie, M A **McManus**, C Sabine, K Fagan, M Chun. **2006**. Elucidation of the response of the coastal ocean to land-derived inputs through use of an instrumented platform. Ocean Sciences Meeting. Honolulu, Hawaii.

<u>Drake</u> PT and MA **McManus**. **2005**. Physical oceanography and marine ecology: Potential oceanographic insights into nearshore ecosystems in the Monterey Bay national marine sanctuary. 2005 Annual Sanctuary Currents Symposium. California State University Monterey Bay, California.

Young CW, DJ <u>Hoover</u>, EH DeCarlo, FT MacKenzie, MA **McManus**. 2005. Impact of storm runoff from subtropical watersheds on coastal water quality and productivity. Goldschmidt Conference. Moscow, Idaho.

<u>Pfeiffer-Hoyt</u> AS, MA **McManus**, Y Chao. **2005.** Modeling the growth, behavior and dispersal of *Balanus glandula* larvae within the hydrography of the central California coast. ASLO. Salt Lake City, Utah.

Blackwell SM, M Moline, MA **McManus**, TM <u>Johnston</u>. **2004**. Bio-optical response to episodic upwelling in Monterey Bay, CA. The Ocean Optics XVII Conference. Fremantle, Australia.

<u>Storlazzi</u> C, D Wingfield, MA **McManus**, M Carr. **2004**. Variability in oceanographic and meteorological forcing along central California and its implications on nearshore physical and biological processes. 2004 PACLIM.

Johnston TM, MA **McManus**, O <u>Cheriton</u>. **2004**. Thin layer formation and breakdown in Monterey Bay. Ocean Sciences Meeting. Portland, Oregon.

<u>Storlazzi</u> CD, MA **McManus**, BE Jaffe, AS Ogston, ME Field. **2004**. Flow and particulate flux along a complex coral reef shoreline: West Maui, Hawaii. AGU. Portland, Oregon.

McManus MA, OM <u>Cheriton</u>, DV Holliday, C <u>Storlazzi</u>, PT <u>Drake</u>, CF Greenlaw, PL Donaghay. **2004**. Thin layers and the transport and retention of marine plankton in coastal systems. ASLO. Honolulu, Hawaii.

<u>McLaughlin</u> B, MA **McManus**, G Griggs, D Croll, R Kudela, F Chavez, J Paduan, S Lonhart. **2004**. The Center for Integrated Marine Technologies (CIMT). ASLO. Honolulu, Hawaii.

Chavez F, M McNutt, MA **McManus**, G Griggs. **2004**. The Central and Northern California Ocean Observing System: CeNCOOS. ASLO. Honolulu, Hawaii.

Bellingham JG, PE Chandler, Y Chao, F Chavez, RE Davis, DM Fratantoni, S Haddock, N Leonard, MA **McManus**, J Paduan, S Ramp, A Robinson. **2003**. AOSN Monterey Bay experiment: Observing and predicting the coastal ocean. American Meteorological Society Meeting. Seattle, Washington.

Barth J, A Baptista, M Kosro, D Martin, J Newton, L Rosenfeld, F Chavez, MA **McManus**, M McNutt, E Terrill, L Washburn, T Garfield. **2003**. An update on the regional ocean observing systems along the US west coast. Eastern Pacific Ocean Conference. Catalina, California.

Invited: Palomino E, MA **McManus**, J Largier, L Washburn, S Morgan, K Stolzenbach, B Sanders, M Stacey. **2003**. Adding value to NEOCO, the Network for Environmental Observations of the Coastal Ocean. Eastern Pacific Ocean Conference. Catalina, California.

Largier J, MA **McManus**, L Washburn, S Morgan, B Sanders, K Stolzenbach, M Stacey, D <u>Lucas</u>, M Carter. **2003**. Early results and historical data from NEOCO (Network for Environmental Observations of the Coastal Ocean). Eastern Pacific Ocean Conference. Catalina, California.

Invited: <u>McLaughlin</u> B, G Griggs, MA **McManus**, D Croll, R Kudela, F Chavez, J Paduan, S Lonhart, A DeVogelaere. **2003**. The Center for Integrated Marine Technologies (CIMT). Eastern Pacific Ocean Conference. Catalina, California.

Invited: **McManus** MA, M Carr, P Raimondi, A <u>Ammann</u>, C <u>Storlazzi</u>. **2003**. Linking the recruitment dynamics of temperate reef fish populations to coastal physical processes. Symposium: Opening the Black Box: Understanding Ecosystem Dynamics in Coastal Oceans. American Association for the Advancement of Science (AAAS). Denver, Colorado.

Donaghay PL, JM Sullivan, C Moore, B Rhoads, MA **McManus**. **2002**. 4-D Measurements of the finescale structure of inherent optical properties in the coastal ocean using the ocean response coastal analysis system (ORCAS). Ocean Optics Meeting. Santa Fe, New Mexico.

Invited: **McManus** MA, A <u>Amman</u>, K <u>Blackhart</u>, C Blanchette, M Carr, J Caselle, C Cudaback, S Gaines, B Gaylord, B Grantham, D Lohse, P Raimondi, C <u>Storlazzi</u>, B Menge, M Nishimoto, N Phillips, R Warner, L Washburn. **2002**. Exploring the coastal ocean and its effects on biological communities. California and the World Ocean Conference. Santa Barbara, California.

Invited: McManus MA, J Largier, S Morgan, B Sanders, M Stacey, K Stolzenbach, L Washburn, L <u>Wilkinson</u>. 2002. Data management techniques for NEOCO, the Network for Environmental Observations of the Coastal Ocean. California and the World Ocean Conference. Santa Barbara, California.

Invited: Largier J, MA **McManus**, L Washburn, S Morgan, B Sanders, K Stolzenbach, M Stacey, D Lucas, M Carter, S Scott. **2002**. Early results and historical data from NEOCO. California and the World Ocean Conference. Santa Barbara, California.

Invited: Donaghay PL, DV Holliday, JEB Rines, JM Sullivan, MA **McManus**. **2002**. The importance of finescale structure (thin layers) in controlling the dynamics and biodiversity of plankton populations in stratified coastal waters. Symposium on Biodiversity. Chicago, Illinois.

Palomino E, MA **McManus**, JL Largier, L Washburn, KD Stolzenbach, SG Morgan, GF Sanders, M. Stacey. **2002**. Network for Environmental Observations of the Coastal Ocean (NEOCO). Eastern Pacific Ocean Conference. Mt. Hood, Oregon.

Invited: **Dekshenieks** MM. **2002**. From wind to whales: Integrating advanced technologies to understand California's upwelling ecosystems. Coastal Observing Technology System Meeting. NOAA Coastal Services Center. Charleston, South Carolina.

Invited: **Dekshenieks** MM. **2002**. Oceanographic data management strategies. Tagging of Pacific Pelagics Conference. Monterey Bay Aquarium. Monterey, California.

Dekshenieks MM, C <u>Storlazzi</u>, A <u>Ammann</u>, MH Carr, PT Raimondi, JD Figurski. **2002**. Temporal and spatial variations of hydrography in Monterey Bay: Implications for larval transport and recruitment. Ocean Sciences Meeting. Honolulu, Hawaii.

Donaghay PL, DV Holliday, JEB Rines, JM Sullivan, CF Greenlaw, DE McGehee, J <u>Miksis</u>, MM **Dekshenieks**. **2002**. Challenges in sampling plankton structure and composition at critical scales in the coastal ocean. Ocean Sciences Meeting. Honolulu, Hawaii.

Wilkinson L, MM **Dekshenieks**, JL Largier, L Washburn, KD Stolzenbach, SG Morgan, GF Sanders, M. Stacey. **2002**. Network for Environmental Observations of the Coastal Ocean (NEOCO). Ocean Sciences Meeting. Honolulu, Hawaii.

Washburn L, C Cudaback, MM **Dekshenieks**, B Gaylord, B Grantham and M Nishimoto. **2002**. Linking coastal oceanographic processes to recruitment through observations. Workshop on the modeling of larval dispersal. Santa Barbara, California.

<u>Blackhart</u> K, C <u>Storlazzi</u>, A <u>Ammann</u>, M Carr, MM **Dekshenieks**, P Raimondi, PT <u>Drake</u>. **2002**. Linking coastal oceanographic processes and recruitment dynamics of temperate reef fishes. PISCO Symposium. Monterey, California.

Dekshenieks MM, PL Donaghay, JM Sullivan, JEB Rines, TR Osborn, DV Holliday, DE McGehee, CF Greenlaw. **2001**. The role of regional and local physical forcing in controlling thin layer formation in a coastal fjord. ASLO. Albuquerque, New Mexico.

Donaghay PL, MM **Dekshenieks**, JM Sullivan, JEB Rines, DV Holliday, DE McGehee, CF Greenlaw. **2001**. Do zooplankton aggregate into thin plankton layers? ASLO Albuquerque, New Mexico.

Austin J, C Cudaback, MM **Dekshenieks**, J Barth. **2000**. Physical oceanography of the inner shelf of the California current ecosystem. PISCO/Mellon Symposium, Oregon State University, Corvallis, Oregon.

Donaghay PL, MM **Dekshenieks**, JM Sullivan, JEB Rines. **2000**. Impact of small-scale physical processes on finescale optical structure in coastal waters. Ocean Optics Meeting. Monaco.

Donaghay PL, MM **Dekshenieks**, AK Hanson, DV Holliday, JM Sullivan, C Moore, JR Zaneveld. **2000**. 4-D systems for assessing episodic events in coastal waters. ASLO Aquatic Sciences Meeting. Copenhagen, Denmark.

Sullivan JM, JEB Rines, PL Donaghay, MM **Dekshenieks**, E Swift. **2000**. The effects of small-scale turbulence on the growth and morphology of ten species of marine dinoflagellates. ASLO Aquatic Sciences Meeting. Copenhagen, Denmark.

Donaghay PL, JM Sullivan, MM **Dekshenieks**, JEB Rines, TR Osborn, DV Holliday, AD Weidemann, D Johnson. **2000**. Critical scales in oceanography: Application of new instrumentation to quantify biological and physical processes across multiple scales. Ocean Sciences Meeting. San Antonio, Texas.

Cowles T, R Desiderio, S MacIntyre, DV Holliday, PL Donaghay, MM **Dekshenieks**, A Alldredge. **2000**. Temporal patterns in planktonic thin layer formation/maintenance as revealed by integrated instrumentation approaches. Ocean Sciences Meeting. San Antonio, Texas.

Invited: **Dekshenieks** MM, PL Donaghay, TR Osborn. **1999**. Factors controlling the circulation in East Sound and the concomitant generation of thin layers. ASLO Aquatic Sciences Meeting. Santa Fe, New Mexico.

Invited: Sullivan JM, PL Donaghay, MM **Dekshenieks**. **1999**. Examination of the temporal and spatial coherence of optical thin-layers using autonomous profilers. ASLO Aquatic Sciences Meeting. Santa Fe, New Mexico.

Invited: **Dekshenieks** MM, PL Donaghay, JM Sullivan, MS Twardowski, JEB Rines. **1998**. Spatial and temporal occurrence of thin layers in relation to environmental forcing. Ocean Sciences Meeting. San Diego, California.

Donaghay PL, MM **Dekshenieks**, JEB Rines, JM Sullivan, MS Twardowski. **1998**. Physical and biological control of the formation, maintenance and dissipation of thin phytoplankton layers in the pycnoclines of stratified coastal waters. Ocean Sciences Meeting. San Diego, California.

<u>Merrell</u> JR, DJ Gifford, PL Donaghay, MM **Dekshenieks**, MS <u>Twardowski</u>, JM Sullivan. **1998**. Finescale vertical distributions of microplankton in thin layers. Ocean Sciences Meeting. San Diego, California.

Rines JEB, JM Sullivan, PL Donaghay, MM **Dekshenieks**, MS <u>Twardowski</u>. **1998**. Physical mixing processes and phytoplankton species composition of finescale bio-optical structures in coastal waters. Ocean Sciences Meeting. San Diego, California.

<u>Twardowski</u> MS, PL Donaghay, JM Sullivan, MM **Dekshenieks**, JEB Rines. **1998**. Finescale production of chromophoric DOM associated with a persistent phytoplankton thin layer. Ocean Sciences Meeting. San Diego, California.

Hofmann EE, JM Klinck, MM **Dekshenieks**, EN Powell. **1997**. The effect of environmental and biological factors on the larvae of the eastern oyster (*Crassostrea virginica*) larvae: Simulation results. ICES Symposium on the Role of Physical and Biological Processes in the Recruitment Dynamics of Marine Populations. Baltimore, Maryland.

Dekshenieks MM, MS Twardowski, PL Donaghay, JM Sullivan, JEB Rines. **1997**. Physical flow fields and phytoplankton distribution: Implications for transport. ASLO Aquatic Sciences Meeting. Santa Fe, New Mexico.

Donaghay PL, MM **Dekshenieks**, MS Twardowski, JM Sullivan, JEB Rines. **1997**. Quantification of the zooplankton ambit. ASLO Aquatic Sciences Meeting. Santa Fe, New Mexico.

Twardowski MS, JM Sullivan, MM **Dekshenieks**, JEB Rines, PL Donaghay. **1997**. Spectral dissolved absorption signatures in coastal waters. ASLO Aquatic Sciences Meeting. Santa Fe, New Mexico.

Dekshenieks MM, EE Hofmann, EN Powell, JM Klinck. **1996**. Size- and depth-dependent larval mortality: A modeling study. 88th Annual National Shellfisheries Association Meeting. Baltimore, Maryland.

Invited: **Dekshenieks** MM, EE Hofmann, EN Powell, JM Klinck. **1996**. The effects of environmental change on the spatial distribution of the Eastern oyster: A modeling study. Ocean Sciences Meeting. San Diego, California.

Powell EN, EE Hofmann, JM Klinck, MM **Dekshenieks**. **1995**. The fate of Galveston Bay oyster populations in the first 50 years of the 21st century under the Texas water plan. 2nd Annual Marine and Estuarine Shallow Water Science and Management Conference. Atlantic City, New Jersey.

Dekshenieks MM, EE Hofmann, JM Klinck, EN Powell. **1995**. Spatial patterns of oyster distribution: A modeling study. 23rd Annual Marine Benthic Ecology Meeting. Mobile, Alabama.

Dekshenieks MM, EE Hofmann, JM Klinck, EN Powell. **1994**. Factors determining recruitment success of *Crassostrea virginica* in a temperate latitude estuary: A modeling study. 86th Annual National Shellfisheries Association Meeting. Charlestown, South Carolina.

Dekshenieks MM, EE Hofmann, JM Klinck, EN Powell. **1994**. A model of the growth, behavior and vertical distribution of oyster larvae. Ocean Sciences Meeting. San Diego, California.

Dekshenieks MM, EE Hofmann, JM Klinck, EN Powell. **1994**. Effect of environmental conditions on the population structure of the oyster: A modeling study. In: Proceedings from the Chesapeake Research Conference Toward a Sustainable Coastal Watershed: The Chesapeake Experiment. Norfolk, Virginia.

Powell EN, EE Hofmann, JM Klinck, MM **Dekshenieks**. **1994**. *Perkinsus marinus*: Triggering mechanisms for epizootics: A modeling study. In: Proceedings from the Chesapeake Research Conference Toward a Sustainable Coastal Watershed: The Chesapeake Experiment. Norfolk, Virginia.

Dekshenieks MM, EE Hofmann, JM Klinck, EN Powell. **1993**. A modeling study of the environmental and behavioral factors controlling the vertical distribution of oyster larvae. 85th Annual National Shellfisheries Association Meeting. Portland, Oregon.

Dekshenieks MM, EE Hofmann, JM Klinck, EN Powell. **1993**. A modeling study of the environmental and behavioral factors controlling the vertical distribution of oyster larvae. 21st Annual Marine Benthic Ecology Meeting. Charlestown, South Carolina.

Dekshenieks MM, EE Hofmann, JM Klinck, EN Powell. **1992**. A physiologically based model, considering differing temperature and salinity regimes. 84th Annual National Shellfisheries Association Meeting. San Diego, California.

Dekshenieks MM, EE Hofmann, JM Klinck, EN Powell. **1992**. A physiologically based oyster larval model considering differing temperature and salinity regimes. Ocean Sciences Meeting. New Orleans, Louisiana.

VI. Conference Session Chair

2021	Workshop Co-Chair, the Alliance for Coastal Technologies Great Lakes Demonstration for Drone operated Hyperspectral Remote Sensing, Maumee Bay State Park, Toledo, OH, August 10-13.
2021	Workshop Chair, the Alliance for Coastal Technologies Coastal Hyperspectral Best Practices Workshop. Remote during pandemic from Honolulu, HI. April 28, 29.
2020	Workshop Chair, the Alliance for Coastal Technologies Coastal Hyperspectral Algorithm Demonstration Workshop. Remote during pandemic from Honolulu, HI. May 20-22.
2018	Workshop Chair, the Alliance for Coastal Technologies Hyperspectral Imaging of Coastal Waters Workshop, University of Hawaii at Manoa, East West Center, May
2018	Workshop Chair, the Alliance for Coastal Technologies National Coastal Ecosystem Moorings Workshop. University of Washington, Seattle Washington, March 2018
2012	Co-Convener, GEOHAB Workshop "Advances and challenges for the understanding physical-biological interactions in HABs in Stratified Environments". MBARI. Moss Landing, California.
2010	Co-Convener, Special Session "From field observations to modeling connectivity in the nearshore and back again". 2010 Ocean Sciences Meeting, Portland Oregon.

2008	Co-Convener, Special Session "Oceanography and ecology of thin plankton layers". 2008 Ocean Sciences Meeting, Orlando Florida.
2008	Co-Convener, Special Session "The inner shelf: Connecting shore to coastal ocean". 2008 Ocean Sciences Meeting, Orlando Florida.
2006	Co-Convener, Special Session "Oceanography and ecology of thin plankton layers". 2006 Ocean Sciences Meeting, Honolulu.

VII. University Seminar Series

Invited. **McManus** MA. **2018**. The Coastal Physical Oceanography and Marine Ecosystems Group. Department of Oceanography, University of Hawaii at Manoa, Honolulu, Hawaii.

Invited. **McManus** MA. **2017**. Understanding the Effects of a Changing Ocean Environment on the Marine Ecosystem. Lyell Centre, Heriot-Watt University, Edinburgh, Scotland.

Invited. **McManus** MA. **2013**. Understanding the effects of a changing ocean environment on the marine ecosystem. Physics Department. California Polytechnic State University. San Luis Obispo, California.

Invited. **McManus** MA. **2013**. Uniform Circular Motion. Physics Department. California Polytechnic State University. San Luis Obispo, California.

Invited. **McManus** MA. **2011**. Plankton Distribution and Ocean Dispersal. Department of Civil & Environmental Engineering, Massachusetts Institute of Technology (M.I.T.). Cambridge, Massachusetts.

Invited: McManus MA. 2010. Understanding the effects of a changing ocean environment on planktonic organisms. Environmental Earth System Science (EESS). Stanford University. Palo Alto, California.

Invited: McManus MA. 2010. Understanding the effects of a changing ocean environment on planktonic organisms. Hopkins Marine Laboratory. Monterey, California.

Invited: **McManus** MA. **2005**. Dynamics of marine coastal ecosystems. University of Hawaii at Hilo. Departmental Seminar. Hilo, Hawaii.

Invited: McManus MA. 2004. Coupling biological and physical processes across a range of scales in the coastal ocean. University of Hawaii. GES Seminar Series. Honolulu, Hawaii.

Invited: McManus MA. 2004. Coupling biological and physical processes in the coastal ocean. California State University, Moss Landing Marine Laboratories. Moss Landing, California.

Invited: McManus MA. 2002. Thin layers in the sea: Linking physical and biological processes using new autonomous instrumentation. University of Hawaii, Department of Oceanography Seminar Series. Honolulu, Hawaii.

Invited: McManus MA. 2002. Thin layers in the sea: Linking physical and biological processes using new autonomous instrumentation. University of California Santa Cruz, Ocean Sciences Department, Seminar Series. Santa Cruz, California.

Invited: **Dekshenieks** MM. **2001**. The role of regional and local physical forcing in controlling thin layer dynamics in a coastal fjord. University of California, Bodega Marine Laboratory. Bodega Bay, California.

Invited: **Dekshenieks** MM. **2001**. The role of regional and local physical forcing in controlling thin layer dynamics in a coastal fjord. Moss Landing Marine Laboratory, Moss Landing, California.

Invited: **Dekshenieks** MM. **1999**. Observations of general circulation patterns in East Sound, Washington. Invited Lecturer: Coastal and Estuarine Geophysical Fluid Dynamics Class. University of Washington, Friday Harbor Laboratories. Friday Harbor, Washington.

Invited: **Dekshenieks** MM. **1999**. Observations of general circulation patterns in East Sound, Washington. Seminar Series: Summer Program for Undergraduate Researchers. University of Rhode Island, Graduate School of Oceanography. Narragansett, Rhode Island.

Invited: **Dekshenieks** MM. **1999**. Observations of general circulation patterns in East Sound, Washington. Seminar Series: Oceanography Department Seminar. University of Washington, Department of Oceanography. Seattle, Washington.

Invited: **Dekshenieks** MM. **1997**. Modeling larval growth, behavior and mortality in response to environmental factors. Seminar Series: Oceanography Department. University of Connecticut, Department of Marine Sciences. Groton, Connecticut.

Invited: **Dekshenieks** MM. **1997**. Modeling larval growth, behavior and mortality in response to environmental factors. Seminar Series: Biological Oceanography. University of Rhode Island, Graduate School of Oceanography. Narragansett, Rhode Island.

VIII. Public Outreach Lecture

Invited: **McManus MA**. **2016**. Marine Conservation. Crossroads in Conservation. Wo International Center, Student Global Leadership Institute, Punahou School. Honolulu ,HI.

Invited: **McManus** MA. **2015**. Understanding the Effects of a Changing Ocean Environment on the Marine Ecosystem. Science Café. Honolulu, HI.

Invited: Steward GF and MA McManus. 2011. The Ala Wai Canal. Iolani School. Honolulu, HI

RESEARCH FUNDING

I. Current Research Support

Funding Agency: National Oceanic and Atmospheric Administration (NOAA) *Project Title:* Alliance for Coastal Technologies (ACT 2016): National Scale Efforts Towards Evaluation of Observing Technologies

Project Period: 06/2016-05/2017 FY16 Award to UHM: \$181,000 Project Period: 06/2017-05/2018 FY17 Award to UHM: \$280,000 Project Period: 06/2018-05/2019 FY18 Award to UHM: \$180,000 Project Period: 06/2019-05/2020 FY19 Award to UHM: \$225,000 Project Period: 06/2020-05/2021 FY20 Award to UHM: \$250,000 project Period: 06/2020-05/2021 FY20 Award to UHM: \$250,000

Principal Investigators: **PI:** Tamburri (CBL/UMCES), **Co-PIs:** Johengen (UM/GLOS), Smith (MLML), **McManus** (UHM). Affiliate Investigators Stauffer (ULL), Morrison (NERACOOS), Pellerin (USGS), Kudela (UCSC), Davis (NOAA GLER)

Funding Agency: National Science Foundation (NSF)
Project Title: PAGE: Halau Ola Honua "Our living world, living laboratory"
Project Period: 10/2016-09/2021
Total Award: \$2,621,774
Award to UHM: \$810,422
Principal Investigators: PI: Eschenberg (WCC), Co-PIs: McCoy (WCC), Dire (UH Kauai CC),
Taylor (UH Kauai CC), Guidry (UHM), McManus (UHM), Ferguson (UHHCC), Roberts-Deutsch (UHHCC)

 Funding Agency: National Oceanic and Atmospheric Administration, IOOS Program Office Project Title: Pacific Islands Ocean Observing System (PacIOOS)
 Near Shore Sensor Group Project Period: 06/2016-05/2017 FY16 Award to McManus: \$138,953 Project Period: 06/2017-05/2018 FY17 Award to McManus: \$141,260 Project Period: 06/2018-05/2019 FY18 Award to McManus: \$159,700

Project Period: 06/2019-05/2020 FY19 Award to McManus: \$167,933

Project Period: 06/2020-05/2021 FY20 Award to McManus: \$150,000

Wave Buoy Group

Project Period: 06/2017-05/2018 *FY17 Award to McManus:* **\$441,627** *Project Period:* 06/2018-05/2019 *FY18 Award to McManus:* **\$451,588** *Project Period:* 06/2019-05/2020 *FY19 Award to McManus:* **\$444,748** *Project Period:* 06/2020-05/2021 *FY20 Award to McManus:* **\$441,000**

Principal Investigator: **PI** Iwamoto (UHM). **Co-PIs:** McManus, Cheung, Flament, Holland, Luther, Potemra, Powell (all UHM). Colbert (UH Hilo). Ellis (MERIP).

Funding Agency: Office of Naval Research *Project Title:* Subtask 6.3 SWAC Monitoring *Project Period:* 12/2017 – 6/2021 *Award to McManus:* **\$150,000** *Principal Investigator:* **PI: McManus** Funding Agency: Barrel Tax

Project Title: Subtask 6.3 SWAC Monitoring *Project Period:* 12/2017 – 6/2021 *Award to McManus:* **\$138,825** *Principal Investigator:* **PI: McManus**

Funding Agency: Office of Naval Research *Project Title:* Subtask 6.2 Ocean Modeling *Project Period:* 6/2016-6/2021 *Award to UHM:* **\$105,350** *Principal Investigator:* **Co-PIs: McManus,** Powell

Funding Agency: Commerce Department, National NOAA Federal *Project Title:* Enhancing disaster and climate resilience in the Republic of the Marshall Islands through improved disaster preparedness and infrastructure. *Total Award Requested:* **\$254,935** *Principal Investigators:* **PI:** Iwamoto, **Co-PI: McManus**

Funding Agency: Palau National Weather Service *Project Title:* Enhancing disaster and climate resilience in the Republic of Palau through improved disaster preparedness and infrastructure. *Total Award Requested:* **\$265,463** *Principal Investigators:* **PI:** Iwamoto, **Co-PI: McManus**

II. Pending Research Support

Funding Agency: National Oceanic and Atmospheric Administration (NOAA)
Project Title: RER 2021 Coral Reef Species Habitat Usage and Connectivity within an MPA Network in American Samoa
Total Award Requested: \$1,999,954
Time Period: 10/1/2021-09/30/2025
Principal Investigators: PI: Honarvar, Co-PI: Franklin, McManus, Toonen

Funding Agency: Integrated Ocean Observing System (IOOS[®]) Program, National Ocean Service (NOS), National Oceanic and Atmospheric Administration (NOAA), Department of Commerce Project Title: Empowering Ocean Stakeholders:
Advancing the Pacific Islands Ocean Observing System (PacIOOS)
Total Award Requested: \$30,000,000
Time Period: 6/1/2021-5/31/2026 (Wave Buoys McManus \$3,640,930 over five years; Water Quality McManus \$1,868,327 over five years)
Principal Investigators: PI: Iwamoto, Co-PI: Chen, Briggs, Cheung, Stopa, Flament, Luther,
McManus, Powell, Potemra, Holland, Meyer, Colbert (UH Hilo), Ellis (MERIP), Hutchinson (NOAA PIFSC)

Funding Agency: Marine Corps Base Hawaii, Environmental Department *Project Title:* Biodiversity Characterization, Water Quality Monitoring, Environmental Threshold Analysis, Pond and Sediment Volume Estimates, and Characterization of Water Exchange and Residence Time for Nu'upia Pond, Marine Corps Base Hawaii *Total Award Requested:* \$420,530 *Time Period:* 7/1/2021 – 6/30/2023 *Principal Investigators:* **PI:** Franklin, **Co-PI:** Glazer, **McManus**, Toonen

III. Past Research Support

Funding Agency: Hawaii Department of Health, Clean Water Branch *Project Title:* Water Quality Sampling in Maunalua Bay *Project Period:* 6/2019 – 6/2020 *Award to McManus:* **\$85,553** *Principal Investigator:* **PI: McManus**

Funding Agency: Hawaii Sea Grant
Project Title: Enabling real-time predictive modeling of microbial pathogen risk along the Honolulu shoreline
Project Period: 2/2018-1/2020
Total Award Requested: \$60,000
Principal Investigators: PI: Nelson, Co-PI: McManus, Steward, Neuheimer

Funding Agency: National Oceanic and Atmospheric Administration (NOAA)
Project Title: Surface Lines in Coastal Kona Study (SLICKS)
Project Period: 08/2016 – 07/2017
Principal Investigator: PI: Gove (NOAA PIFSC). Cooperating Faculty: McManus (UHM),
Neuheimer (UHM)

Funding Agency: Hawaii Sea Grant *Project Title:* Water Budget and Pathogen Dynamics in He'eia Fishpond During Restoration Regimes *Project Period:* 01/17-12/17 *Total Award Requested:* **\$10,000** *Principal Investigators:* **PI: McManus, Co-PI:** Alegado (both at UHM)

Funding Agency: Office of Naval Research (ONR)
Project Title: Asia Pacific Research Initiative for Sustainable Energy Systems (APRISES) - Sea Water Air Conditioning (SWAC)
Project Period: 10/2013 - 11/2017
Award to UHM: \$197,358
Principal Investigators: PIs Ostrander, McManus (both at UHM)

Funding Agency: Harold K. L. Castle Foundation *Project Title:* FISH FLOW: Following Kane'ohe Bay fish from spawning to supper *Project Period:* 01/2015 – 05/2017 *Total Award to UHM:* **\$153,825** *Principal Investigators:* **PI:** Hixon, **CoPIs:** Bowen, Donahue, Franklin, Karl, **McManus**, Powell, Toonen (all UHM)

Funding Agency: National Science Foundation (NSF), subcontract from University of Guam Project Title: Guam Ecological Collboratorium
Project Period: 01/2015-7/2017
Award to UHM: \$140,000+ \$40,385.82
Principal Investigator: PIs McManus, Ostrander (both at UHM)

Funding Agency: Hawaii Sea Grant College Program
Project Title: Linking physical variability to the geochemistry and biology of the He'eia fishpond
Project Period: 04/01/2014-03/31/2015
Award to McManus: \$9,999
Total Award to UH: \$9,999
Principal Investigator: PI McManus. Co-PI Ruttenberg (both at UHM)

Funding Agency: Conservation International *Project Title*: Near-shore hydrography and sediment movement on East Lana'i reef flat *Project Period:* 06/2014-10/2014 *Award to McManus:* **\$9,178.06**. *Total Award:* **\$9,178.06** *Principal Investigators:* **PI: McManus** (UHM)

Funding Agency: National Science Foundation, Division of Ocean Sciences, Ocean Acidification
Project Title: Collaborative Research: Acclimation and adaptation to ocean acidification of key
ecosystem components in the California Current Large Marine Ecosystem (CCLME)
Project Period: 09/2010 – 08/2014 (I)
Award to McManus: \$33,115.
Total Award: \$1,268,133
Principal Investigators: PIs: Menge (OSU), Chavez (MBARI), Hofmann (UCSB), Palumbi (Stanford),
McManus (UHM), Sanford (UC Davis), Raimondi (UCSC). Co-PIs: Barth (OSU), Chan (OSU),

Gaylord (UC Davis), Hill (UC Davis), Russell (UC Davis), Blanchette (UCSB), Washburn (UCSB)

Funding Agency: National Science Foundation, Division of Ocean Sciences, Ocean Acidification *Project Title:* Ocean Acidification – Collaborative Research: OMEGAS II – Linking ecological and organismal responses to the ocean acidification seascape in the California Current System. *Project Period:* 10/2012 – 09/2013 (II)

Award to McManus: \$13,820.

Principal Investigators: **PIs**: Menge (OSU), Chavez (MBARI), Hofmann (UCSB), Palumbi (Stanford), **McManus** (UHM), Sanford (UC Davis), Raimondi (UCSC). **Co-PIs:** Barth (OSU), Chan (OSU), Gaylord (UC Davis), Hill (UC Davis), Russell (UC Davis), Blanchette (UCSB), Washburn (UCSB)

Funding Agencies: Gordon and Betty Moore Foundation, David and Lucille Packard Foundation *Project Title:* Partnership for the Interdisciplinary Study of the Coastal Ocean (PISCO) *Project Period:* 10/2004-06/2014 *Award to McManus:* **\$629,402**

Total Award: \$29,500,000.00

Principal Investigators: **PI** : Lubchenco (OSU); **CoPIs** Menge (OSU), Barth (OSU), Raimondi (UCSC), Carr (UCSC), **McManus** (UHM), Palumbi (Stanford), Denny (Stanford), Somero (Stanford), Gaines (UCSB), Washburn (UCSB), Warner (UCSB), Hofmann (UCSB). **Prior PI** /NOAA)

Funding Agency: Hawaii Sea Grant *Project Title*: Impact of invasive mangrove removal on He'eia Fishpond biogeochemistry *Project Period*: 02/2012 – 01/2014 *Award to McManus: partial GSR support stipend Total Award to UHM*: **\$60,000** *Principal Investigators*: **PIs** Ruttenberg, Glazer, **McManus** (all UHM)

Funding Agency: Hawaii Sea Grant
Project Title: Biological and Physical Coupling in Mamala Bay: Completing our Understanding of the
Field Ecology of Alatina moseri in Hawaiian Waters
Project Period: 01/02012 - 12/2012
Award to McManus: \$9,999.
Principal Investigators: PIs: McManus, Angel Yanigihara (both at UHM)

Funding Agency: National Science Foundation, Division of Ocean Sciences, Physical Oceanography Program
Project Title: Collaborative Research: Lateral mixing and dispersion on the inner shelf
Project Period: 09/2009-08/2012
Award to McManus: \$378,008
Total Award: \$1,346,921
Principal Investigators: PIs McManus (UHM), Monismith (Stanford), Stacey (UC Berkeley). Co-PI
Powell (UC Berkeley)

Funding Agency: The Office of Naval Research, Marine Mammals & Biological Oceanography Program
Project Title: Importance of thin plankton layers in Hawaiian food web interactions: Research spanning from physical circulation to spinner dolphins.
Project Period 1: 07/2008 – 10/2010
Project Period 2: 10/2010 – 06/2012
Award 1 to McManus: \$285,735 (UHM)
Award 2 to McManus: \$58,547
Principal Investigators: PI McManus (UHM)

Funding Agency: Hawaii Sea Grant
Project Title: The role of bottom sediments in nutrient cycling in He'eia Fishpond
Project Period: 03/2007 – 02/2012
Award to McManus: partial GSR support stipend
Total Award to UH: \$89,176
Principal Investigators: PI Ruttenberg (UHM). Co-PIs McManus (UHM), Glazer (UHM), Holl (OI)

Funding Agency: National Oceanic and Atmospheric Administration, IOOS Program Office

Project Title: Developing the Hawaii-Pacific Ocean Observing and Information System (year 4) *Project Period*: 10/2007-09/2012

Award to McManus: \$83,119

Amount of Award to UH: **\$1,196,538.89**

Principal Investigators: **PI** Brian Taylor. **Co-PIs** Whit Au, Benjamin Brooks, Glenn Carter, Eric H DeCarlo, Yi-Leng Chen, Kwock Fai Cheung, EPPierre Flament, Charles Fletcher, Kim Holland, Doug Luther, Margaret McManus, Mark Merrifield, Chris Ostrander, EPPGeno Pawlak, James Potemra, Brian Powell, Alexander Shor (all UHM)

Funding Agency: National Oceanic and Atmospheric Administration, IOOS Program Office Project Title: Developing the Hawaii-Pacific Ocean Observing and Information System
Project Period: 10/2007-05/2016
Award to McManus: \$513442.52
Total Amount of Award: \$6,465,819
Principal Investigators: PI Taylor (UHM). Co-PIs Au, Brooks, Carter, DeCarlo, Chen, Cheung, Flament, Fletcher, Holland, Luther, McManus, Merrifield, Ostrander, Pawlak, Potemra, Powell, Shor

(all SOEST UHM)

Funding Agency: Office of Naval Research
Project Title: Quantification of the interacting physical, biological, optical and chemical properties of thin layers in the sea
Project Period: 02/2004-12/2009
Award to McManus: \$598,360
Total Amount of Award: \$890,500.68
Principal Investigators: PI McManus (UHM). Co-PIs Ryan (MBARI), Stacey (Berkeley)

Funding Agency: Office of Naval Research
Project Title: Quantification of the interacting physical, biological, optical and chemical properties of thin layers in the sea
Project Period: 10/2008-12/2009
Award to McManus: \$16,540
Principal Investigators: PI McManus (UHM). Co-PIs Ryan (MBARI), Stacey (Berkeley)

Funding Agency: National Oceanic and Atmospheric Administration
Project Title: Circulation influence on sediment/ordnance transport on the Waianae coast of O'ahu
Project Period: 4/2009-6/2011
Total Amount of Award: \$176,889
Principal Investigators: PI Powell (UHM). Co-PI McManus (UHM)

Funding Agency: City of Honolulu
Project Title: Real time monitoring and establishment of an "Early Warning System" for the Sand
Island ocean outfall effluent plume
Project Period: 11/2008 to 12/2009
Total Amount of Award: \$160,400
Principal Investigators: PI: Pawlak (UHM). Co-PI McManus (UHM)

Funding Agency: The National Science Foundation
Project Title: Benthic boundary layer geochemistry and physics at the Kilo Nalu Observatory
Project Period 1: 01/2006-12/2008
Project Period 2: 12/2008-8/2010
Total Amount of Award 1: \$2,085,000
Total Amount of Award 2: \$371,350
Principal Investigators: PI Pawlak (UHM). Co-PIs DeCarlo (UHM), McManus (UHM), Sansone (UHM), Stanton (NPS)

Funding Agency: Office of Naval Research: Defense University Research Instrumentation Program *Project Title:* Autonomous sensing of layered structures in Hawaiian waters *Project Period:* 03/2007 – 06/2008 *Award to McManus:* **\$112,842** *Principal Investigator:* **PI McManus** (UHM)

Funding Agency: Hawaii Sea Grant

Project Title: Impact of coastal zone productivity driven by land derived inputs on carbon dioxide exchange between Kaneohe Bay and the atmosphere.

Project Period: 03/2005-02/2009

Total Amount of Award: **\$311,758** (with additional GSR support stipend ~100,000 over 42 years) Principal Investigators: **PI** DeCarlo. **Co-PIs** Mackenzie, **McManus** (all at UHM)

Funding Agency: Office of Naval Research
Project Title: Importance of Thin Plankton Layers in Hawaiian Food Web Interactions: Research
Spanning From Physical Circulation to Spinner Dolphins.
Project Period: 10/2010-09/2011
Total Amount of Award: \$115,547
Total Amount of Award to McManus: \$58,547
Principal Investigators: PI Benoit-Bird (OSU). Co-PI McManus (UHM)

Funding Agency: Office of Naval Research *Project Title:* Factors influencing the nearshore sound-scattering layer in Hawaiian waters *Project Period:* 11/2004-11/2007 *Award to McManus:* **\$264,166** *Principal Investigators:* **PI McManus. Co-PI** Benoit-Bird (OSU)

Funding Agency: Hawaii Sea Grant
Project Title: The effect of storms on circulation patterns, stratification and physical mixing processes in Kaneohe Bay (Program Development Project)
Project Period: 06/2006 – 05/2007
Award to McManus: \$9,999
Principal Investigator: PI McManus (UHM)

Funding Agency: Office of Naval Research *Project Title:* Spatial analyses and three-dimensional structure of thin layers in Monterey Bay, CA Project Period: 05/2005-05/2006 Award to McManus: **\$61,764** Principal Investigator: **PI McManus** (UHM)

Funding Agency: Hawaii Sea Grant *Project Title:* Response of Kaneohe Bay to storm runoff input (Program Development Project) *Project Period:* 03/2005 – 02/2006 *Award to McManus:* **\$9,999** *Principal Investigator:* **PI McManus** (UHM)

Funding Agency: National Oceanic and Atmospheric Administration
Project Title: The Center for Integrated Marine Technology (CIMT)
Project Period: 07/2002-07/2005
Total Amount of Award: \$6,445,000
Principal Investigators: PIs Griggs (UCSC), Chavez (MBARI), Paduan (NPS), McManus (UCSC),
Croll (UCSC), Kudela (UCSC)

Funding Agency: UC Coastal Environmental Quality Initiative: UC Marine Council Project Title: Network for Environmental Observations of the Coastal Ocean (NEOCO)
Project Period: 06/2001-06/2005
Total Amount of Award: \$682,517
Principal Investigators: PI McManus (UCSC). Co-PIs Largier (UC Davis), Washburn (UCSB),
Stolzenbach (UCLA), Sanders (UCI), Morgan (UC Davis), Stacey (Berkeley)

Funding Agency: Office of Naval Research *Project Title:* Adaptive Ocean Sampling Network II (AOSN II) *Project Period:* 11/2002-03/2004 *Award to McManus:* **\$106,575** *Principal Investigators:* **PI McManus** (UCSC). **Co-PI** Chavez (MBARI)

Funding Agency: Office of Naval Research *Project Title:* Coastal Ocean Exploration-Searching for Thin Layers (COESTL) *Project Period:* 01/2002-12/2003 *Award to McManus:* **\$105,000** *Principal Investigators:* **PI McManus** (UCSC)

Funding Agency: Office of Naval Research *Project Title:* Large-scale physical forcing of thin layer dynamics *Project Period:* 10/2001-10/2003 *Award to McManus:* **\$115,000** *Principal Investigators:* **PI McManus** (URI)

Funding Agency: National Ocean Partnership Program *Project Title:* Ocean Response Coastal Analysis System (ORCAS) autonomous underwater profiler development *Project Period:* 08/2000-08/2002 Award to McManus: \$70,000 Total Amount of Award: \$4,374,550 Principal Investigators: PI Donaghay (URI). Co-PI McManus (URI)

Funding Agency: Office of Naval Research
Project Title: Large-scale physical forcing of thin layer dynamics
Project Period: 10/1999-10/2001
Total Amount of Award: \$142,000
Principal Investigators: PI McManus (URI). Co-PIs Osborn (JHU), Donaghay (URI)

Funding Agency: Office of Naval Research
Project Title: Quantifying the role of physical processes in thin layer formation and maintenance
Project Period: 10/1997-10/1999
Total Amount of Award: \$40,000
Principal Investigators: PI McManus (URI). Co-PIs Osborn (JHU), Donaghay (URI)

INSTRUCTIONAL ACTIVITIES

I. Courses taught

Courses taught at the University of California Santa Cruz (2000-2003)

Quarter	Year	Course	Level	Enrolled	Taught %	Evaluation Grade
Winter	2001	Physical Oceanography	Graduate	9	100	90.62
Spring	2001	Introduction to Oceanography	Undergraduate	44	50	90.56
Fall	2001	Physical Oceanography	Graduate	24	100	84.76
Winter	2002	Coupled Biological- Physical Oceanography	Graduate	4	100	94.61
Spring	2002	Introduction to Oceanography	Undergraduate	148	100	94.07
Fall	2002	Physical Oceanography	Graduate	10	100	94.47
Fall	2002	Introduction to Oceanography	Undergraduate	156	100	88.29
Spring	2003	Coupled Biological- Physical Oceanography	Graduate	11	100	98.91
Fall	2003	Introduction to Oceanography	Undergraduate	179	100	94.13
Fall	2003	Teaching in Ocean Sciences	Graduate	8	100	97.80

Average teaching evaluation grade UCSC 92.82

Courses taught at the University of Hawaii at Manoa (2004 – Present)

Semester	Year	Course		Level	Enrolled	Taught %	Evaluation Grade
Fall	2004	Communication of Research Results	OCN490	Undergraduate	8	100	A
Fall	2005	Communication of Research Results	OCN490	Undergraduate	3	100	А
Spring	2006	Coupled Biological- Physical Oceanography	OCN480	Undergraduate	4	100	А
Spring	2006	Communication of Research Results	OCN490	Undergraduate	12	100	A
Summer	2006	Coupled Biological- Physical Oceanography	EEB633	Graduate	15	33	*
Fall	2006	Communication of Research Results	OCN490	Undergraduate	6	100	A
Fall	2006	Department Seminar Series	OCN780	Graduate	8	-	*
Fall	2006	Directed Research	OCN699	Graduate	1	100	*
Spring	2007	Coupled Biological- Physical Oceanography	OCN480	Undergraduate	3	100	A
Spring	2007	Ecology of Pelagic Marine Animals	OCN627	Graduate	20	Guest lecturer	*
Spring	2007	Proposal Development	OCN791	Graduate	15	Guest lecturer	*
Spring	2007	Thesis Research	OCN700	Graduate	1	100	*
Fall	2007	Communication of	OCN490	Undergraduate	4	100	A

		Research Results					
Spring	2008	Coupled Biological-	OCN680	Graduate	4	100	A
1 0		Physical Oceanography	OCN480	Undergraduate	5		
Summer	2008	Coupled Biological-	EEB633	Graduate	21	33	Α
T 11	2000	Physical Oceanography	0.01210	TT 1 1 /	25		*
Fall	2008	Global Environmental	OCN310	Undergraduate	35	Guest	ጙ
T 11	2000	Change	0.001700	G 1 /	1	Lecturer	*
Fall	2008	Thesis Research	OCN700	Graduate	1	100	*
Spring	2009	Ecology of Pelagic Marine	OCN627	Graduate	20	Guest	*
C	2009	Animals Communication of	OCN490	II. I I	11	lecturer	4
Spring	2009	Research Results	UCN490	Undergraduate	11	100	Α
Samina	2009	Undergraduate Thesis	OCN499	Undergraduate	1	100	*
Spring Fall	2009	Global Environmental	OCN499 OCN100		14	Guest	*
Fall	2009	Science Seminar	OCN100	Undergraduate	14	Lecturer	
Fall	2009	Undergraduate Thesis	OCN499	Undergraduate	1	100	*
	2009	Coupled Biological-	OCN499 OCN680	Graduate	11	100	A
Spring	2010	Physical Oceanography	OCN680 OCN480	Undergraduate	4	100	A
Spring	2010	Undergraduate Thesis	OCN480 OCN499	Undergraduate	2	100	*
	2010	Directed Research	OCN499 OCN699	Graduate	1	100	*
Spring Spring	2010	Ecology of Pelagic Marine	OCN699 OCN627	Graduate	12	Guest	*
Spring	2010	Animals	OCN027	Graduate	12	lecturer	
Fall	2010	Directed Research	OCN699	Graduate	2	100	*
	2010	Communication of	OCN699 OCN490		10	100	A
Spring	2011	Research Results	UCIN490	Undergraduate	10	100	A
Spring	2011	Directed Research	OCN699	Graduate	2	100	*
Fall	2011	Directed Research	OCN699	Graduate	1	100	*
Spring	2011	Thesis Research	OCN099 OCN700	Graduate	1	100	*
Spring	2012	Coupled Biological-	OCN/00 OCN680	Graduate	*	100	A
spring	2012	Physical Oceanography	OCN080 OCN480	Undergraduate	*	100	A
Spring	2012	Ecology of Pelagic Marine	OCN400 OCN627	Graduate	5	Guest	*
Spring	2012	Animals	0011027	Graduate	5	lecturer	
Spring	2013	Communication of	OCN490	Undergraduate	15	100	A
oping	2013	Research Results	0011170	Chaergradaate	10	100	21
Spring	2013	Undergraduate Thesis	OCN499	Undergraduate	1	100	*
Spring	2013	Directed Research	OCN699	Graduate	1	100	*
Spring	2014	Coupled Biological-	OCN680	Graduate	10	100	A
8		Physical Oceanography	OCN480	Undergraduate	4		
Fall	2014	Undergraduate Thesis	OCN499	Undergraduate	2	100	*
	-	8	75360W	6			
Fall	2014	Directed Research	OCN699	Graduate	1	100	*
Spring	2015	Undergraduate Thesis	OCN499	Undergraduate	1	100	*
Spring	2015	Directed Research	OCN699	Graduate	1	100	*
Spring	2015	Communication of	OCN490	Undergraduate	13	100	A
1 0		Research Results		Ŭ			
Spring	2015	Ecology of Pelagic Marine	OCN627	Graduate	14	Guest	*
1 0		Animals				lecturer	
Summer	2015	Directed Reading	OCN399	Undergraduate	1	100	*
Fall	2015	Thesis Research	OCN700	Graduate	1	100	*
Spring	2016	Thesis Research	OCN700	Graduate	1	100	*
Fall	2016	Directed Research	OCN699	Graduate	1	100	*
Fall	2016	Thesis Research	OCN700	Graduate	1	100	*
Spring	2017	Directed Research	MBIO699	Graduate	1	100	*
Spring	2017	Directed Research	OCN699	Graduate	1	100	*

Spring	2017	Communication of	OCN490	Undergraduate	18	100	A
		Research Results					
Fall	2017	Directed Research	OCN699	Graduate	1	100	*
Fall	2017	Thesis Research	OCN700	Graduate	1	100	*
Spring	2018	Coupled Biological-	OCN680	Graduate	5	100	Α
		Physical Oceanography	OCN480	Undergraduate	2		
Spring	2018	Directed Research	OCN699	Graduate	1	100	*
Spring	2018	Thesis Research	OCN700	Graduate	1	100	*
Summer	2018	Halau Ola Honua –	OCN 199	Undergradaute	11	10	*
		Bringing Native Hawaiian					
		Students into Geosciences					
Fall	2018	Thesis Research	OCN700	Graduate	1	100	*
Spring	2019	Communication of	OCN490	Undergraduate	10	100	A
		Research Results					
Spring	2019	Thesis Research	OCN700	Graduate	2	100	*
Summer	2019	Halau Ola Honua –	OCN 199	Undergradaute	11	10	*
		Bringing Native Hawaiian					
		Students into Geosciences					
Fall	2019	Thesis Research	OCN499	Undergraduate	1	100	*
				11			
Spring	2020	Undergraduate Thesis	OCN499	Undergraduate	1	100	*
Fall	2020	Undergraduate Thesis	OCN499	Undergraduate	1	100	*
Spring	2021	Communication of	OCN490	Undergraduate	20	100	In progress
		Research Results		_			
Spring	2021	Undergraduate Thesis	OCN499	Undergraduate	1	100	In progress

In the 16 years I have been teaching at UHM, I have received an A for teaching evaluation in every class with evaluations * *No evaluation grade requested from students*

II. Mentoring

In addition to the courses that I teach in the classroom, I am dedicated to the mentoring of undergraduate and graduate students, as well as to the guidance of postdoctoral researchers through the early stage of their careers. The following is a list of the undergraduate and graduate students whom I have supported and mentored, the graduate committees (dissertation, qualifying and advisory) on which I have served, and the postdoctoral researchers with whom I have had the pleasure of working.

i. University of Hawaii at Manoa

Graduate Students – Major Advisor

Ms. Anna Pfeiffer-Hoyt (MS 2005)³ (UCSC). Thesis Title: "Modeling the development, behavior, and dispersal of barnacle larvae within the hydrography of the central California coast."

Mr. Chris Ostrander (MS 2007) (UHM). Thesis Title: "Physical factors controlling the temporal and spatial variability of freshwater plumes in Kaneohe bay, Hawaii."

³ Prior to coming to the University of Hawaii at Manoa, I was a faculty member in the Ocean Sciences Department at the University of California Santa Cruz. Ms. Anna Pfeiffer-Hoyt (now Pfeiffer-Herbert), and Dr. Olivia Cheriton were my students at UCSC. They remained my students at UCSC through my move to UH, and each successfully graduated under my guidance.

Dr. Olivia Cheriton (PhD 2008) (UCSC). Dissertation Title: "Thin layers of plankton and the influences of physical processes in the coastal ocean."

Mr. Jeff Sevadjian (MS 2008) (UHM). Thesis Title: "The effects of physical structure and processes on thin zooplankton layers in Mamala Bay, Hawaii."

Mr. Charles Young (MS 2011) (Co-advised with Dr. Kathleen Ruttenberg) (UHM). Thesis Title: "Perturbation of nutrient inventories and phytoplankton community composition during storm events in a tropical coastal system: He'eia Fishpond, Oahu, Hawaii."

Ms. Amanda Timmerman (MS 2012) (UHM). Thesis Title: "Hidden thin layers of toxic diatoms in a coastal bay"

Mr. Jamison Gove (PhD 2013) (UHM) Dissertation Title: "Biological-physical interactions in Pacific coral reef ecosystems" (UHM)

Mr. Conor Jerolmon (MS 2016). (UHM) Thesis Title: "A physical-biological model of Oahu's windward coastal waters: Implications for larval transport"

Ms. Paula Moehlenkamp (MS 2018) (UHM) Thesis Title " $K\bar{u}$ Hou Kuap \bar{a}^4 : Increase of water exchange rates and changes in microbial source tracking markers resulting from restoration regimes at He'eia Fishpond" (Co-advised with Dr. Rosanna Alegado)

Ms. Shilpa Lal (MS 2019) (Co-advised with Dr. Anna Neuheimer) (UHM) Thesis Title: Contribution of Life History Characteristics to Larval Settlement and Connectivity of *Acanthurus triostegus* in Windward O'ahu

Ms. Carleigh Vollbrecht (MS 2019) (UHM) Thesis Title: Long term presence of the island mass effect in Tiputa, Channel, Rangiroa, French Polynesia.

Global Environmental Sciences Undergraduate Program Advisees – Major Advisor

Mr. Kyle Bosworth (BS 2008). Thesis Title: "*Temporal and spatial analysis of storm induced freshwater plumes in southern Kaneohe Bay, Hawaii*."

Ms. Shandy Buckley (BS 2009). Thesis Title: "Biological and physical comparison of cyclonic eddies in an open sea region and in a coastal channel."

Ms. Lindsey Benjamin (BS 2010). Thesis Title: "Characterization of the physical environment in He'eia Fishpond, Oahu, Hawaii."

Ms. Amanda Vinson (BS 2010). Thesis Title: "The effects of physical oceanographic structure and processes on biological patchiness in the coastal ocean."

⁴ $K\bar{u}$ Hou Kuapā: Let the wall rise again

Mr. Daniel McCoy (BS 2011). Thesis Title: "Improving sample collection and time series analyses of environmental data in He'eia fishpond Oahu Hawaii 2007-2011."

Mr. Brandon D'Andrea (BS 2015) Thesis Title: *"Water exchange and circulation in He'eia fishpond: Building blocks for establishing a water budget."*

Ms. Camilla Tognacchini (BS 2015) Thesis Title: "The effects of man-made and climatic changes on a tropical coastal system: A comparative study"

Mr. Shaun Wriston – (BS 2020) Thesis Title: "Trends in coastal ocean conditions on O'ahu, Hawai'i's urban shores"

Ms. Diana Lopera – (BS 2020) Thesis Title: "Understanding change: Examining the effect of *Ahupua'a restoration efforts on water circulation in loko i'ao He'eia, a native Hawaiian Fishpond.*"

Ms. Mariam Moreno - Thesis in progress

Mr. Peter Felicijan - Thesis in progress

Postdoctoral Associates – Major Advisor

Dr. Brock Woodson (2006-2009) (Associate Professor University of Georgia)
Dr. Dan Hoover (2008-2009) (Oceanographer USGS)
Dr. Olivia Cheriton (2008-2012) (Oceanographer USGS)
Dr. Katharine Smith (2016-2019) (Instructor UH)
Dr. Jonathan Whitney (2016-2019) (Marine Ecologist NOAA)
Dr. Maxime Grand (2017) (Assistant Professor Moss Landing Marine Laboratories)

Ph.D. Advisory Committees (OCN unless otherwise noted)

Ms. Yvonne Barkley (Marine Biology) (PhD 2020) Dr. Christina Bradley (PhD 2013) Dr. Rebecca Briggs (PhD 2011) Dr. Richard Coleman (Biology) (PhD 2019) Ms. Chelsea Counseil (PhD 2018) Dr. Patrick Drupp (PhD 2015) Dr. Jamison Gove (PhD 2013) Dr. Iuri Herzfeld (PhD 2011) Ms. Danielle Hull Dr. Kaleonani Hurley (Zoology) (Phd 2020) Dr. Christopher Jury (PhD 2016) Dr. Sam Kahang (PhD 2006) Ms. Lucy Knor Dr. Astrid Leitner (PhD 2018) Dr. Sherril Leon Soon (PhD 2017) Ms. Kanoe Morishige Dr. Jennifer Murphy (PhD 2012) Ms. Krissy Remple Dr. Michael F. Richlen (Department of Zoology) (PhD 2018) Dr. Yoshimi Rii (PhD 2015) Ms. Maria Steadmon Ms. Kirstin Thompson Dr. Seth Travis (PhD 2020) Mr. Eric Tong Dr. Jamie Sziklay-Caldwell (Department of Biology) (PhD 2017) Dr. Katharine Smith (PhD 2016) Dr. Alison Stimpert (PhD 2009) (Department of Zoology) Dr. Rebecca Wagner (Education) (PhD 2019) Ms. Gabrielle Weiss Dr. Jonathan Whitney (Department of Biology) (PhD 2016) Dr. Johanna Wren (PhD 2016) Dr. Amanda Ziegler (Defense proxy) (PhD 2019)

Ph.D. PQE/Comprehensive Exam Committees (OCN unless otherwise noted)

Dr. Lydia Baker (PhD 2017) Ms. Anamica Bedi de Silva Dr. Christina Bradley (PhD 2013) Dr. Rebecca Briggs (PhD 2011) Dr. Anela Choy (PhD 2012) Dr. Fabio C DeLeo (PhD 2012) Dr. Patrick Drupp (PhD 2015) Dr. Jamison Gove (PhD 2013) Dr. Brittany Graham (PhD 2007) Dr. Iuri Herzfeld (PhD 2011) Ms. Danielle Hull Dr. Chris Jury (PhD 2016) Ms. Lucy Knor Ms. Morgan Linney Dr. Astrid Leitner (PhD 2018) Dr. Jennifer Murphy (PhD 2012) Ms. Jessica Perelman Ms. Krissy Remple Dr. Shimi Rii (PhD 2015) Dr. Rebecca Simpson (PhD 2015) Dr. Katharine Smith (PhD 2016) Ms. Gabrielle Stedman Dr. Alison Stimpert (PhD 2009) (Department of Zoology) Ms. Alma Carolina Castillo Trujillo (PhD 2018) Ms. Rebecca Wagner (Education) Ms. Gabrielle Weiss

Dr. Johanna Wren (PhD 2015) Ms. Michele Yungbluth (PhD 2016)

M.S. Advisory Committees (OCN unless otherwise noted)

Ms. Christina Bradley (MS 2009) Ms. Jessica Bullington Ms. Anela Choy (MS 2008) Ms. Susan Jeanette Clark (MS 2013) Ms. Pollyanna Fisherpool (Department of Zoology) (MS 2015) Ms. Kristen Fogaren (MS 2010) Mr. Conor Jerolmon (MS 2016) Ms. Shilpa Lal (MS 2019) Mr. Sean Mahaffey Mr. William Misa (MS 2012) Ms. Paula Moehlenkamp (MS 2018) Mr. Chris Ostrander (MS 2007) Ms. Lisa Oswald (MS 2009) Ms. Sitara Palecanda (Marine Biology) Ms. Jessica Perelman Mr. Jeff Sevadjian (MS 2008) Ms. Victoria Sindorf (MS 2018) Ms. Rachel Solomon (MS 2008) Ms. Maria Steadman Ms. Amanda Timmerman (MS 2012) Ms. Sarah Tucker (Marine Biology) Ms. Kanoe Ulalani (Marine Biology) Mr. Oliver Vetter (MS 2007) Ms. Carleigh Vollbrecht Ms. Kim Weersing (MS 2007) Mr. Charles (Chip) Young (MS 2011)

Global Environmental Sciences Undergraduate Program Advisees

Mr. Brandon D'Andrea (BS 2015) Ms. Ghizlane Ahrouch (BS 2009) Ms. Christine Babiano (BS 2015) Ms. Lindsey Benjamin (BS 2010) Mr. Kyle Bosworth (BS 2008) Ms. Shandy Buckley (BS 2009) Ms. Erin Dougherty Ms. Carla Marie Esquival Ms. Julia Fiedler (BS 2011) Ms. Maya Galante Mr. Philippe Galicinao Mr. Shaun Giancaterino (BS 2010) Ms. Brittany Graham (BS 2008) Ms. Reagan Grant (BS 2011) Mr. Michael Gray (BS 2010) Mr. David Hashisaka (BS 2015) Ms. Cherryle Heu Ms. Olivia Hughes Ms. Renee Lee-Agcaoili Ms. Ariel Lorenzen (BS 2018) - External Thesis Reviewer Mr. Daniel McCoy (BS 2011) Ms. Lauren Mathews (BS 2016) Ms. Harlee Meyers M. Dino Nastasi Ms. Velvet Park (transfer) Ms. Adrienne Poulain (BS 2012) Mr. Chase Roberts (BS 2012) Ms. Camilla Tognacchini (BS 2015) Ms. Amanda Vinson (BS 2010) Mr. Shaun Wriston Ms. Maika Yanagishita Ms. Eleanor Yuan

Hollings Scholar Advisees

Ms. Diana Lopera

Visiting International Students

Ms. Violaine Piton (2013) (Institut Mediteranneen D'Oceanologie (MIO) Marseille, France) Ms. Silvana Simone Batista Penninck (1 September 2019 - 29 February 2020). University of São Paulo, Brazil

Department of Defense Military to Civilian Transition Program

Mr. Tucker Hull (2019)

Visiting Undergraduate Student Mentoring

Mr. Olowatoberu (Tobe) Thomas (San Francisco State University) (2005) Mr. Daren Martin, C-MORE Scholar (Windward Community College) (2013-present) Ms. Gabrielle Jensen, DePauw University, Indiana (winter quarter 2017) Ms. Esme Kline Pitzer College (2017)

High School Students Advising

Ms. Clarissa Honeker Mid Pacific Institute (2013-2017)

Mr. Charles McManus Mid Pacific Institute (2017)

ii. University of California Santa Cruz

Graduate Students – Major Advisor (Thesis and dissertation titles listed previously)

Dr. Olivia Cheriton (PhD 2008) Ms. Anna Pfeiffer-Hoyt (MS 2005)

Graduate Student Advisory Committees

Mr. Arnold Ammann (MS 2002) Dr. Meredith Armstrong (PhD 2008) Ms. Kristen Blackhart (MS 2005) Dr. Olivia Cheriton (PhD 2008) Dr. Jared Figurski (PhD 2010) Mr. Spencer Fire (MS 2004) Ms. Theresa Ish (MS 2004) Dr. Dawn Osborn (PhD 2005) Ms. Anna Pfeiffer-Hoyt (MS 2005) Ms. Lindsay Starrett (MS 2010) Dr. Andi Stephens (PhD 2007) Ms. Andrea VanderWoude (PhD 2007)

Postdoctoral Associates

Dr. Shaun Johnston (now at Scripps) Dr. Curt Storlazzi (now at USGS)

SERVICE

Department of Oceanography, University of Hawaii at Manoa, Service

- 2020-present Chairwoman of the Department of Oceanography
- 2020-present Graduate Student Chairwoman for the Department of Oceanography
- 2020-present Committee on the Instruction of Life Sciences
- 2014-present The Committee for Women in SOEST, Charter Member
- 2012-present The Committee for Women in Oceanography, Charter Member
- 2018-2019 Search Committee Three Faculty Members Department of Oceanography
- 2019 Search Committee for Oceanography Faculty
- 2017-2018 Departmental Personnel Committee (Elected by Department Faculty)
- 2016-2017 Departmental Personnel Committee (Elected by Department Faculty)
- 2015-2017 Joint Institute for Marine and Atmospheric Research (JIMAR) Senior Fellow
- 2006-2020 Steering Committee: Global Environmental Sciences Undergraduate Program
- 2014-2015 Associate Chair, Department of Oceanography
- 2012-2015 Physical Oceanography Division Head
- 2014-2015 Chair Space Committee Department of Oceanography
- 2015 Search Committee Member: Permanent institutional and student support position
- 2014 Graduate Student Handbook, Student Presentation Committee
- 2013-2014 New Degree Committee
- 2011-2012 Teaching Evaluation Committee (TEC) Chairperson
- 2011-2012 Asian-Pacific Economic Cooperation (APEC) Committee
- 2012-2013 Departmental Personnel Committee (Elected by Department Faculty)
- 2011-2012 Departmental Personnel Committee (Elected by Department Faculty) Respectfully declined.

2010-2011	Departmental Personnel Committee - (Elected by Department Faculty)
2009-2010	Departmental Personnel Committee - Associate Chair (Elected by Department Faculty)
2007-2008	Departmental Personnel Committee (Elected by Department Faculty) Respectfully declined
2006-2008	Chairperson - Graduate Student Handbook Committee
2006	Search Committee: Marine Biogeochemistry Position
2005-2006	Departmental Personnel Committee (Elected by Department Faculty)
2004-2005	Departmental Personnel Committee (Elected by Department Faculty)
2004	Ocean Sciences Bowl, Science Judge (Volunteer)
School of Oce	ean and Earth Science and Technology (SOEST) <u>, Service</u>
2020-present	SOEST Academic Committee
2019-present	Hawaii Natural Energy Institute R3/R4 Associate/Assistant Researcher Selection Committee
2019-2021	Hawaii Institute of Marine Biology Director, Search Committee
2017-2018	SOEST faculty workload policy task force
2014 - 2015	Co-Chair, Kikowaena Scholarship Campaign
2013 - 2015	Hawaii Institute of Marine Biology Director, Search Advisory Committee
2012 - 2015	SOEST Research Council
2007-2010	Pacific Ocean Observing System (PacIOOS) Steering Committee
2006-2010	Advisory Committee: Hawaii Ocean Observing System (HiOOS)
2007-2008	Search Committee Member: Six Tenure Track Ocean Observing Positions
2006	Invited lecturer, SOEST a 'Imi 'Ike Summer Institute
2005 - 2006	Selection Committee: SOEST Young Investigator Program
2003	SOEST Public Display, Aloha Towers (Volunteer)

2002 SOEST Open House, "Ask a Scientist" session (Volunteer)

University of Hawaii at Manoa, Service

- 2016 2017 Tenure and Promotion Review Committee
- 2013 present Marine Biology Graduate Program Faculty Member

National/International Service

2020-present Alliance for Coastal Technologies, Hyperspectral Sensor Best Practices Steering Committee 2019-present Co-Chief Scientist Alliance for Coastal Technologies 2017-2020 Alliance for Coastal Technologies, Hyperspectral Sensor Steering Committee 2017-2018 Lead: National Coastal Ecosystem Moorings Steering Committee 2011 - 2014 GEOHAB: IOC-SCOR (Global Ecology and Oceanography of Harmful Algal Blooms: International Oceanographic Commission - Scientific Committee on Oceanic Research). Subcommittee for stratified systems. 2010 Executive Committee: Chair, Central California Region. Ocean Margin Ecosystems Group for Acidification Studies (OMEGAS). 2004 - 2009 Scientific Executive Committee, Layered Organization in the Coastal Ocean (LOCO) Office of Naval Research 2006 Office of Naval Research (ONR) Working Group on Small-scale Lateral Mixing 2006 Steering Committee, Partnership for Interdisciplinary Studies of Coastal Oceans 2005 - 2006 Oversight Committee, Office of Naval Research West Coast Programs 2004 Grant Proposal Liaison Team, Partnership for Interdisciplinary Studies of Coastal Oceans (PISCO) 2003 California Representative, Regional Observing Systems Summit, Washington, DC 2002 Ocean.US Advisory Panel, Integrated Ocean Observing System, Warrenton, VA 2001 US ECOHAB Review Panel, Washington DC

Reviewer - Journal Articles

Continental Shelf Research, Deep Sea Research, Ecology, Estuaries and Coasts, Journal of Experimental Biology, Journal of Marine Research, Journal of Plankton Research, Limnology and Oceanography, Limnology and Oceanography – Methods, Marine Ecology Progress Series, National Oceanic and Atmospheric Administration. Kona Integrated Ecosystem Assessment initiative, Proceedings of the National Academy of Sciences, Stanford Journal of Law, Science and Policy

Reviewer - Proposals

Ecology and Oceanography of Harmful Algal Bloom (ECOHAB) program, National Science Foundation (NSF), National Science Foundation, Polar Ocean Postdoctoral Program, NOAA Coastal Services Center: Integrated Ocean Observing System (IOOS), NOAA Coastal Ocean Program

Guest Editor

- 2008-2010 *Continental Shelf Research* Special Issue: The Ecology and Oceanography of Thin Plankton Layers. Sullivan JM, MA McManus and PL Donaghay (Eds). Vol 30(1). January 2010.
- 2011-2013 *Deep Sea Research Special Issue:* Harmful Algal Blooms (HABS) in stratified systems. Raine R, H Yamazaki, MA McManus and E Berdelet.

HONORS & ACHIEVEMENTS

- 2020 Recipient of the Na Kama Kai Excellence in Mentorship Award by the graduate student body of the Department of Oceanography
- 2020 Nominated for the University of Hawaii at Manoa Graduate Council's Peter V. Garrod Distinguished Graduate Mentoring Award.
- 2019 Nominated for the University of Hawaii at Manoa Excellence in Teaching Award
- 2019 Ambassador. Breaking Waves, Breaking Barriers: Celebrating Women's Instrumental Role in Ocean Science, Leadership, and Mentorship. Ocean Obs19.
- 2019 Established a University of Hawaii Commission on the Status of Lesbian, Gay, Bisexual, Transgender, and Intersex (LGBTI) Equality Safe Zone
- 2018 Nominated for the University of Hawaii at Manoa Graduate Council's Peter V. Garrod Distinguished Graduate Mentoring Award.

2017	Nominated for the University of Hawaii at Manoa Graduate Council's Peter V. Garrod Distinguished Graduate Mentoring Award.
2016	Nominated for the University of Hawaii at Manoa Graduate Council's Peter V. Garrod Distinguished Graduate Mentoring Award
2016	Nominated for the University of Hawaii at Manoa Excellence in Teaching Award
2014	Nominated for the University of Hawaii at Manoa Excellence in Teaching Award
2012	Nominated for the University of Hawaii at Manoa Excellence in Teaching Award (by 24 separate students and faculty)
2011	<i>Invited</i> – To attend the Journal of Experimental Biology Symposium on Integrating Biomechanics and Ecology. Cambridge University, England.
2005-2006	Aldo Leopold Leadership Fellow

Certifications/Training

- 2021 URGE: Unlearning Racism in Geosciences NSF Funded
- 2021 ADVANCE GEO: Improving Our Work Climate: Bystander Intervention Training and Responding to Hostile Behaviors. NSF Funded
- 2020 COVID-19 Safety Training Certification
- 2020 Campus Security Authority Training
- 2020 Preventing Harassment and Discrimination, the University of Hawai'i's online Title IX, Title VII, & VAWA/Clery training
- 2020 University of Hawai'i's Workplace Conduct training
- 2020 Bystander Intervention in the Workplace Training (Hollaback)

OCEANOGRAPHIC CRUISES & FIELD RESEARCH

- 1994 Seward Johnson/Sea Link submersible cruise. Gulf of Mexico (NURP)
- 1995 Gamma submersible cruise. Lee Stocking Island, Bahamas (NURP)
- 1996 Thin layers instrument testing. East Sound, WA (ONR)
- 1996 Holographic camera instrument testing. East Sound, WA (NSF)
- 1996 Thin layers instrument testing. East Sound, WA (ONR)
- 1997 Global Ocean Ecosystem Dynamics GLOBEC cruise. Georges Bank
- 1997 Thin layers fieldwork. East Sound, WA (ONR)

- 1998 Fjord circulation experiment. East Sound, WA (ONR)
- 1998 Thin layers experiment. East Sound, WA (ONR)
- 1999 Instrument development & testing. Narragansett Bay, RI (NOPP)
- 2000 Instrument development & testing. Narragansett Bay, RI (NOPP)
- 2001 Instrument development & testing. East Sound, WA (NOPP)
- 2001 US NAVY diver-visibility cruises. Gulf of Mexico (NOPP)
- 2002 COESTL acoustic and optic experiment (I). Gulf of Mexico (ONR)
- 2002 COESTL acoustic and optic experiment (II). Newport, OR (ONR)
- 2002 COESTL acoustic and optic experiment (III). Monterey Bay, CA (ONR)
- 2003 Coral Larval Transport Experiment (I). Maui, Hawaii (USGS)
- 2003 COESTL acoustic and optic experiment (IV). Santa Barbara, CA (ONR)
- 2003 Coral Larval Transport Experiment (II). Maui, HI (USGS)
- 2003 AOSN II (I) shelf circulation experiment. Monterey Bay, CA (ONR)
- 2003 AOSN II (II) shelf circulation experiment. Monterey Bay, CA (ONR)
- 2004 Layered Organization in the Coastal Ocean (LOCO) field test. Monterey Bay, CA (ONR)
- 2005 Physical oceanography & mesopelagic boundary layer cruises (I). Ko'Olina, Oahu, HI (ONR)
- 2005 Surface drifter instrument testing. Kaneohe Bay, Oahu, HI (Sea Grant)
- 2005 Layered Organization in the Coastal Ocean (LOCO) cruises, Monterey Bay, CA (ONR)
- 2006 Hydrographic Assessments. Kaneohe Bay, Oahu, HI (Sea Grant)
- 2006 Physical oceanography & mesopelagic boundary layer cruises (II). Waianae, Oahu, HI (ONR)
- 2006 PISCO summer course cruises (I). Monterey Bay, CA (GBMF & DLPF)
- 2006 Layered Organization in the Coastal Ocean (LOCO) cruises, Monterey Bay, CA (ONR)
- 2007 PISCO Coupled biological-physical experiment cruises. Monterey Bay, CA (GBMF & DLPF)
- 2008 PISCO summer course cruises (II). Monterey Bay, CA (GBMF & DLPF)
- 2009 Autonomous profiler deployment. Honolulu, Oahu, HI (NSF)
- 2009 Physical oceanography & mesopelagic boundary layer cruises (III). Waianae, Oahu, HI (ONR)
- 2010 Physical oceanography & mesopelagic boundary layer cruises (IV). Waianae, Oahu, HI (ONR)
- 2010 Lateral mixing experiment cruises (I). Monterey Bay, CA (NSF)
- 2010 Lateral mixing experiment cruises (II). Monterey Bay, CA (NSF)
- 2013 Sea Water Air Conditioning (SWAC) monitoring. Mamala Bay, HI
- 2014 Sea Water Air Conditioning (SWAC) monitoring. Mamala Bay, HI
- 2014 Lanai Coastal Sediment Study, Lanai, HI
- 2015 Sea Water Air Conditioning (SWAC) monitoring. Mamala Bay, HI
- 2016 Sea Water Air Conditioning (SWAC) monitoring. Mamala Bay, HI
- 2016 Guam Ecological Collaboratorium, Pago Bay,
- 2016 Alliance for Coastal Technologies, Nutrient Sensor Challenge, Coconut Island, HI
- 2016 Sea Water Air Conditioning (SWAC) monitoring. Mamala Bay, HI
- 2017 Halau Ola Honua. Mamala Bay, HI
- 2018 Sea Water Air Conditioning (SWAC) monitoring. Mamala Bay, HI