Kelly J. Benoit-Bird

Monterey Bay Aquarium Research Institute

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Research Interests

My work focuses on the ecological importance of spatial and temporal dynamics in pelagic marine ecosystems. I am particularly interested in the effects of behavior like schooling, cooperation, and other 'group' processes on inter-individual and predator-prey interactions. To address these complex, four-dimensional problems, a significant emphasis of my efforts is the development and thoughtful application of active acoustic techniques, integration of acoustic technologies within novel platforms, and, through collaborations, the combination of these tools with other approaches including passive acoustic listening, optical sampling, animal tagging, behavioral modeling, and environmental DNA.

Experience

Senior Scientist, Monterey Bay Aquarium Research Institute *07/16-present*

Research Chair, Monterey Bay Aquarium Research Institute *02/21-11/25*

Professor, College of Earth, Ocean, & Atmospheric Sciences, Oregon State University *07/04-07/22*
Asst -06/09; Assoc-06/14; Prof with indefinite tenure -07/18; by Courtesy -07/22

Post-Doctoral Fellow, Hawaii Institute of Marine Biology *05/03-07/04*
Research advisor: *Whitlow Au*

Research Assistant, Bottomfish Project, Hawaii Institute of Marine Biology *08/00-05/03*
Research advisors: *Christopher D. Kelley and Whitlow Au*

Research Assistant, Hawaii Institute of Marine Biology *08/99-07/00*

Teaching Assistant, Biology Program, University of Hawaii *08/98-08/99*

Teaching Intern Coordinator, Biology Program, University of Hawaii *01/99-08/99*

Scientific Illustrator, Department of Ecology and Evolution, Brown University *09/95-06/98*
Completed more than 300 scientific illustrations for *The Ecology of Atlantic Seashores*, Mark Bertness, Sinauer Associates, 1998, illustrated a poster for the Ecology Department more than a dozen journal articles

Teaching Assistant, Department of Ecology and Evolution, Brown University *01/98-05/98*

Research Assistant, Duke University Marine Laboratory *01/97-05/97*
Research advisors: *Andrew Read and Heather Koopman*

Research Assistant, Psychology Department, Brown University *12/94-12/96*
Research advisors*: Andrea Simmons and James Simmons*

Education

University of Hawaii at Manoa, Honolulu, Hawaii *2003*
Ph.D., Department of Zoology

Brown University, Providence, Rhode Island *1998*
B.S. with Honors, Aquatic Biology

Duke University Marine Laboratory, Beaufort, North Carolina *1/97-5/97*

Continuing Professional Education

Media 101, Riveter Communications *02/22*
Duarte Designs Visual Storytelling Workshop *02/19*
PopTech! Science Fellows training in communication, presentation design, leadership, and collaboration *10/12*
COMPASS Communications Training Workshop *10/12*
Communicating Ocean Science Workshop, COSEE Pacific Partnerships *02/09*
Science Writing Workshop, Author Julia Whitty hosted by OSU's Spring Creek Project *10/08*
Media Training, OSU News and Communications *12/07*
Donor Training, OSU Foundation *08/07*
Survival Strategies for Faculty New to Teaching, OSU Center for Teaching and Learning *10/06*

Honors and Awards

- **Steinbech Scholar**, Woods Hole Oceanographic Institution *2024*
- **Outstanding Reviewer**, Canadian Journal of Fisheries and Aquatic Sciences *2022*
- **Society for Science,** Named to 'Notable Alumni' List *2022*
- **Outstanding Associate Editor**, Limnology and Oceanography *2021*
- **Feature Article**, Marine Ecology Progress Series *2020*
- **Medwin Prize in Acoustical Oceanography, Acoustical Society of America** *2020*
  For the effective use of sound in the discovery and understanding of biological processes in the sea
- **Slepecky Prize Lecturer,** Syracuse University *2019*
- **Blinks Memorial Lecturer,** Stanford University**,** Hopkins Marine Station *2019*
- **Fellow, Acoustical Society of America** *2017*
- Lead Principal Investigator for the *Strategic Environmental Research and Development Program's* (DoD) **Project of the Year** for Deep mapping of teuthivorous whales and their prey fields *2016*
- Part of the team selected by the *Secretary of Commerce to receive the* **Group Gold Medal for Scientific and Engineering Achievement**, *recognizing the Bering Sea Project as "the most comprehensive integrated ecosystem assessment ever completed, revealing how climate cycles affect the Nation's largest fishery"* *2016*
- **Distinguished Lecturer**, IEEE Oceanic Engineering Society *2012-2019*
- **MacArthur Fellowship** for "*exceptional creativity and promise for important future advances based on a track record of significant accomplishment*" *2010-2015*
- **Kavli Frontiers Fellow,** National Academy of Sciences *2007, 2013, 2014*
  Attendee in 2007, Speaker in 2013, Organizer for 2014
- **Promising Scholar**, Oregon State University *2012-2013*
- **Best Presentation Award,** Pacific Marine Science Organization (PICES) Committee on Monitoring *2009*
- **R. Bruce Lindsay Award,** Acoustical Society of America *2009*
  Presented to an early career member who has been active in the affairs of the Society and contributed substantially to the advancement of acoustics. Citation: "*For contributions to marine ecological acoustics*".
- **Ocean Sciences Early Career Award,** American Geophysical Union *2008*
  For *"innovative application of acoustical techniques*".
- **Presidential Early Career Award for Scientists and Engineers FY 2005 (PECASE)** *2006*
- **Feature Article**, Marine Ecology Progress Series *2006*
- **Women in Acoustics Young Investigator Award,** Acoustical Society of America *2006*
- **Office of Naval Research Young Investigator Award** *2005*
- **Best Young Presenter Award,** European Congress on Underwater Acoustics, Delft, Netherlands *2004*
- **The Future of Animal Bioacoustics and Acoustical Oceanography,** Acoustical Society of America *2004*
  Selected as one of nine young presenters to speak at the Society's 75th Anniversary Celebration Plenary
- **Excellence in Science Communication Award** *2003*
  15th Biennial Conference on the Biology of Marine Mammals, Best Presentation by a Non-Student
- **DIALOG V Symposium Invited Participant,** American Society of Limnology and Oceanography *2003*
- **Best Student Paper in Acoustical Oceanography**
  -145th Meeting of the Acoustical Society of America, Nashville, Tennessee *2003*
  -1st Pan-American/Iberian Meeting on Acoustics, Cancun, Mexico (2nd Prize) *2002*
  -142nd Meeting of the Acoustical Society of America, Ft. Lauderdale, Florida *2001*
  -140th Meeting of the Acoustical Society of America, Newport Beach, California *2000*
- **Best Student Paper in Animal Bioacoustics**
  -145th Meeting of the Acoustical Society of America, Nashville, Tennessee *2003*
  -140th Meeting of the Acoustical Society of America, Newport Beach, California *2000*
- **Excellence in Doctoral Student Research Award** University of Hawaii Regents *2002*
- **National Science Foundation Doctoral Dissertation Improvement** Grant, IBN *2002*
- **Pauley Marine Biology Scholar** Achievement Rewards for College Scientists Foundation *2001*
- **Sigma Xi** Inducted as a Member of the scientific honor society *2001*
- **Albert Tester Memorial Award** for Best Graduate Student Paper, University of Hawaii *2000*
- **Leonida Scholarship Endowment** for Fisheries Research, Oceanography Dept, Univ. of Hawaii *1999*
- **Aspect Technology Fund** Award Recipient for the Development of Novel Technology *1999*

Peer-Reviewed Journal Articles

indicates student/post-doc mentee author

Benoit-Bird, K.J. Au, W.W.L., Brainard, R.E., & Lammers, M.O. 2001 "Diel horizontal migration of the Hawaiian mesopelagic boundary community observed acoustically" Marine Ecology Progress Series, 217:1-14

Benoit-Bird, K.J. & Au, W.W.L. 2001 "Target strength measurements of animals from the Hawaiian mesopelagic boundary community" Journal of the Acoustical Society of America, 110:812-819.

Benoit-Bird, K.J. & Au, W.W.L. 2002 "Energy: Converting from acoustic to biological resource units" Journal of the Acoustical Society of America, 111: 2070-2075.

Benoit-Bird, K.J., Au, W.W.L., Kelley, C.D., Taylor, C.D. 2003 "Acoustic backscattering by deepwater fish measured in situ from a manned submersible." Deep-Sea Research I, 50: 221-229.

Benoit-Bird, K.J. & Au, W.W.L. 2003 "Prey dynamics affect foraging by a pelagic predator (*Stenella longirostris*) over a range of spatial and temporal scales." Behavioral Ecology and Sociobiology, 53:364-373.

Au, W. & **Benoit-Bird, K.J.** 2003 "Dynamic gain control in the echolocation system of dolphins." Nature, 423:861-863.

Benoit-Bird, K.J. & Au, W.W.L. 2003 "Spatial dynamics of a nearshore micronekton sound-scattering layer." ICES Journal of Marine Science, 60:899-913.

Benoit-Bird, K.J. & Au, W.W.L. 2003 "Echo strength and density structure of Hawaiian mesopelagic boundary community patches." Journal of the Acoustical Society of America, 114: 1888-1897.

Benoit-Bird, K.J., Au, W.W.L., & Kelley, C.D. 2003 "Acoustic backscattering by Hawaiian lutjanid snappers I: Target strength and swimbladder characteristics." Journal of the Acoustical Society of America, 114: 2757-2766.

Au, W.W.L. & **Benoit-Bird, K.J.** 2003 "Acoustic backscattering by Hawaiian lutjanid snappers II: Broadband temporal and spectral structure." Journal of the Acoustical Society of America, 114: 2767-2774.

Benoit-Bird, K.J., Würsig, B., & McFadden, C.J. 2004 "Dusky dolphin (*Lagenorhynchus obscurus*) foraging in two different habitats: Active acoustic detection of dolphins and their prey." Marine Mammal Science, 20: 215-231.

Benoit-Bird, K.J. & Au, W.W.L. 2004 "Fine-scale diel migration dynamics of an island-associated sound-scattering layer." Deep-Sea Research I, 51: 707-719.

Benoit-Bird, K.J. 2004 "Prey value and energy needs: Foraging predictions for wild spinner dolphins." Marine Biology, 145:435-444.

Benoit-Bird, K.J., Au, W.W.L. & Kastelein, R.A. 2006 "Testing the acoustic prey debilitation hypothesis: No stunning results." Journal of the Acoustical Society of America, 120: 1118-1123.

Au, W.W.L., Kastelein, R.A., **Benoit-Bird, K.J.**, Cranford, T. & McKenna, M. 2006 "Acoustic radiation from the head of echolocating harbor porpoises (*Phocoena phocoena*)." Journal of Experimental Biology, 209:2726-2733.

Benoit-Bird, K.J. & Au, W.W.L. 2006 "Extreme diel horizontal migrations by a tropical nearshore resident micronekton community." Marine Ecology Progress Series, 319: 1-14.

Au, W.W.L, **Benoit-Bird, K.J**, & Kastelein, R.A. 2007 "Modeling the detection range of fish by echolocating bottlenose dolphins and harbor porpoises." Journal of the Acoustical Society of America, 121:3954-3962.

Benoit-Bird, K.J., Gilly, W.F, Au, W.W.L, & Mate, B. 2008 "Controlled and *in situ* target strengths of the jumbo squid *Docidicus gigas* and identification of potential acoustic scattering sources." Journal of the Acoustical Society of America, 123:1318-1328.

Au, W.W.L. & **Benoit-Bird, K.J.** 2008 "Broadband backscatter from individual Hawaiian mesopelagic boundary community animals with implications for spinner dolphin foraging" Journal of the Acoustical Society of America, 123:2884-2894.

McManus, M.A., **Benoit-Bird K.J**., & Woodson, C.B. 2008 "Behavior exceeds physical forcing in the diel horizontal migration of a midwater sound-scattering layer in Hawaiian waters." Marine Ecology Progress Series: 365:91–101.

Benoit-Bird, K.J., Zirbel, M.J., & McManus, M.A. 2008 "Zooplankton spatio-temporal distributions in Hawaiian waters favor diel horizontal migration by midwater micronekton." Marine Ecology Progress Series, 367:109-123.

Benoit-Bird, K.J. & Au, W.W.L. 2009 "Phonation behavior of cooperatively foraging spinner dolphins." Journal of the Acoustical Society of America, 125:539-546.

Benoit-Bird, K.J. & Au, W.W.L. 2009 "Cooperative prey herding by a pelagic dolphin, *Stenella longirostris*." Journal of the Acoustical Society of America, 125:125-137.

Benoit-Bird, K.J. 2009 "Effects of scattering layer composition, animal size, and numerical density on the frequency response of volume backscatter." ICES Journal of Marine Science, 66: 582-593

Benoit-Bird, K.J., Cowles, T.J., Wingard, C.E. 2009 "Edge gradients provide evidence of ecological interactions in planktonic thin layers." Limnology and Oceanography 54:1382-1392.

Au, W.W.L, Branstetter, B.K., **Benoit-Bird, K.J.**, Kastelein, R.A. 2009 "Acoustic basis for fish prey discrimination by echolocating dolphins and porpoise." Journal of the Acoustical Society of America 126: 460-467

Benoit-Bird, K.J., Au, W.W.L., Wisdom, D.W.* 2009 "Nocturnal light and lunar cycle effects on diel migration of micronekton." Limnology and Oceanography 54: 1789-1800

*Kaltenberg, A.M.** & **Benoit-Bird, K.J.** 2009 "Diel behavior of sardine and anchovy schools in the California Current System." Marine Ecology Progress Series 394:247-262.

Benoit-Bird, K.J., Dahood, AD, & Wursig, B. 2009 "Using active acoustics to compare predator-prey behavior of two marine mammal species". Invited Contribution to Special Issue "Applications of Acoustics in Exploring Marine Ecosystems and the Impacts of Anthropogenic Sound" Marine Ecology Progress Series 395: 119–135.

Benoit-Bird, K.J. 2009 "Dynamic three-dimensional structure of zooplankton thin layers is affected by foraging fish." Marine Ecology Progress Series 396: 61–76.

Benoit-Bird, K.J., Moline, M.A., Waluk, C.M, Robbins, I.C. 2010 "Integrated measurements of acoustical and optical thin layers I: Vertical scales of association." Continental Shelf Research, 30: 17-28.

Moline, M.A., **Benoit-Bird, K.J.**, Robbins, I.C, Schroth-Miller, M, Waluk, C.M, Zelenke, B. 2010 "Integrated measurements of acoustical and optical thin layers II: Critical horizontal length scales." Continental Shelf Research, 30: 29-38.

Sullivan, J.M., McManus, M.A., Cheriton, O.M., **Benoit-Bird, K.J.**, Goodman, L., Wang, Z., Ryan, J.P., Stacey, M., Holliday, D.V., Greenlaw, C., Moline, M.A,. & McFarland, M. 2010 "Layered organization in the coastal ocean: An introduction to planktonic thin layers and the LOCO project." Continental Shelf Research, 30:1-6.

Benoit-Bird, K.J., Moline, M.A., Schofield, O.M., Robbins, I.C, & Waluk, C.M. 2010. "Zooplankton avoidance of a profiled open-path fluorometer." Journal of Plankton Research, 32:1413-1419.

*Kaltenberg, A.M.**, Emmett, R., **Benoit-Bird, K.J.** 2010 "Timing of forage fish seasonal appearance in the Columbia River plume and linkage to ocean conditions" Marine Ecology Progress Series, 419: 171–184.

Benoit-Bird, K.J. & Kuletz, K., Heppell, S, Jones, N., Hoover, B. 2011 "Active acoustic examination of the diving behavior of murres foraging on patchy prey" Marine Ecology Progress Series, 443: 217-235.

Benoit-Bird, K.J. & McManus, M.A. 2012 "Bottom-up regulation of a pelagic community through spatial aggregations" Biology Letters, 8: 813-816.

Benoit-Bird, K.J. & Gilly, W.F. 2012 "Coordinated nocturnal behavior of foraging jumbo squid, *Dosidicus gigas*" Marine Ecology Progress Series, 455:211-228.

McManus, M.A., Sevadjian, J.C., **Benoit-Bird, K.J.**, Cheriton, O.M., Timmerman, A.V., & Waluk, C.M. 2012 "Observations of Thin Layers in Coastal Hawaiian Waters" Estuaries and Coasts, 35:1119-1127.

Sevadjian, J.C., McManus, M.A., **Benoit-Bird, K.J.**, & Selph, K.E. 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, 50-51:1-15

Benoit-Bird, K.J., Battaile, B.C., Heppell, S.A., Hoover, B., Irons, D., Jones, N., Kuletz, K.J., Nordstrom, C.A., Paredes, R.A., Suryan, R.M., Waluk, C.M., & Trites, A.W. 2013 "Prey patch patterns predict habitat use by top marine predators with diverse foraging strategies." PLoS ONE, DOI 10.1371/journal.pone.0053348.

Benoit-Bird, K.J., Battaile, B.C, Nordstrom, C.A., & Trites, A.W. 2013 "Foraging behavior of northern fur seals closely matches the hierarchical patch scales of prey." Marine Ecology Progress Series, 479: 283-302

*Kaltenberg, A.M** & **Benoit-Bird, K.J.** 2013 "Intra-patch size clustering in mysid aggregations revealed through multi-frequency acoustics." ICES Journal of Marine Science, 70:883-891.

Nordstrom, C.A., Battaile, B.C., **Benoit-Bird, K. J.**, & Trites, A.W. 2013 "Northern fur seals augment ship-derived ocean temperatures with higher temporal and spatial resolution data in the eastern Bering Sea", Deep-Sea Research II, 94:257-273

Hoving, H.J., Gilly, W.F., Markaida, U, West-Brown, Z., Daniel, P., Campos, B., **Benoit-Bird, K.J.**, and Li, B. 2013 "Extreme plasticity in life-history strategy of jumbo squid (*Dosidicus gigas*) allows a migratory predator to cope with El Niño." Global Change Biology, 19:2089-2103.

Benoit-Bird, K.J., *McIntosh, N.M.**, & Heppell, S.A. 2013 "Nested scales of spatial heterogeneity of juvenile walleye pollock (*Theragra chalcogramma*) in the southeastern Bering Sea." Marine Ecology Progress Series, 479:283-302.

Benoit-Bird, K.J., Shroyer, E.L, & McManus, M.A. 2013 "A critical scale in plankton aggregations across coastal ecosystems" Geophysical Research Letters, 40:3968–3974.

Paredes, R., Orben, R.A., Irons, D.B, Roby, D.D., Harding, A.M.A, Young, R.C., **Benoit-Bird, K.J.**, Ladd, C, Renner, C., Heppell, S., Phillips, R.A., Kitaysky, A. 2014 "Foraging responses of black-legged kittiwakes to prolonged food-shortages around colonies in the Bering Sea Shelf" PLoS ONE, DOI: 10.1371/journal.pone.0092520

Benoit-Bird, K.J., McManus, M.A. 2014 "A critical time window for organismal interactions in a pelagic ecosystem" PLoS ONE, 9(5): e97763. doi:10.1371/journal.pone.0097763

Shroyer, E.L, **Benoit-Bird, K.J.**, Nash, J.D., & Moum, J.M. 2014 "Stratification and mixing regimes in biological thin layers over the Mid-Atlantic bight" Limnology and Oceanography, 59(4), 1349–1363

*Cade, D.E.** & **Benoit-Bird, K.J.** 2014 "An automatic and quantitative approach to the detection and tracking of acoustic scattering layers" Limnology and Oceanography Methods, 12:742-756.

*Cade, D.E.** & **Benoit-Bird, K.J.** 2015 "Depths, migration rates and environmental associations of acoustic scattering layers in the Gulf of California" Deep Sea Research, 102:78-89.

Moline, M.A., **Benoit-Bird, K.J.,** Robbins, I.C. & O'Gorman, D. 2015 "Integration of scientific echosounders with a dynamically adaptable autonomous platform to extend our understanding of animals from the surface to the bathypelagic". Journal of Oceanic and Atmospheric Technology, 32:2173-2186

Benoit-Bird, K.J. & Lawson, G.L. 2016 "Ecological insights from pelagic systems acquired using active acoustic techniques" Annual Reviews of Marine Science, 2016.8:463-490.

Moline, M.A. & **Benoit-Bird, K.J.** 2016 "Sensor Fusion and Autonomy as a Powerful Combination for Biological Assessment in the Marine Environment" Robotics, 5: doi: 10.3390/robotics5010004.

Benoit-Bird, K.J., Southall, B., & Moline, M.A. 2016 "Predator guided sampling reveals biotic structure in the bathypelagic" Proceedings of the Royal Society of London B, 283:20152457.

Benoit-Bird, K.J., Moline, M.A., & Southall B. 2017 "Prey in oceanic sound scattering layers organize to get a little help from their friends" Limnology and Oceanography, 62:2788–2798. doi:10.1002/lno.10606

*Sato, M.** & **Benoit-Bird, K.J.** 2017 "Spatial variability of deep scattering layers shapes the Bahamian mesopelagic ecosystem" Marine Ecology Progress Series, 580:69-82

Arranz, P., **Benoit-Bird K.J.**, Southall, B.L., Calambokidis J., Friedlaender A.S., and Tyack, P.L. 2018 "Risso's dolphins plan foraging dives" Journal of Experimental Biology, 221: jeb165209.

*Dunlop, K.**, Jarvis, T., Caress, D., Thomas, H., **Benoit-Bird, K. J**., Waluk, C.W., Smith, K. 2018 "Detection and characterisation of deep-sea benthopelagic animals from an autonomous underwater vehicle with a multibeam echosounder: a proof of concept and description of data-processing methods" Deep Sea Research, 134: 64-79.

*Sato, M**., Barth, J.A., **Benoit-Bird, K.J.**, Pierce, S.D., Cowles,. T.J., Brodeur, R.D., Peterson, W.T. 2018 "Coastal upwelling fronts as a boundary for fish distributions" Marine Ecology Progress Series, 595: 171–186.

Benoit-Bird, K.J., Welch, T.P., Waluk, C.M., Barth, J.A., Wangen, I., McGill, P., Okuda, C., Hollinger, G.A., *Sato, M.**, & McCammon, S. 2018 "Equipping an underwater glider with a new echosounder to explore ocean ecosystems" Limnology and Oceanography: Methods, 10.1002/lom3.10278.

Southall, B., **Benoit-Bird, K.J**, Moline, M.A., & Moretti, D. 2019 "Deep-water biological heterogeneity affects beaked whale foraging energetics" Journal of Applied Ecology, 56:1040-1049, doi:10.1111/1365-2664.13334

Benoit-Bird, K.J., Waluk, C.M., & Ryan, J.P. 2019 "Forage species swarm in response to upwelling" Geophysical Research Letters, 46:1537-1546, doi:10.1029/2018GL081603

Arranz, P., **Benoit-Bird, K.J**., Friedlaender, A.S., Hazen, E.L., Goldbogen, J.A., Stimpert, A.K., DeRuiter, S.L., Calambokidis, J, Southall, B.L., Fahlman, A, Tyack, P.L. 2019 "Diving behavior and fine-scale kinematics of free-ranging Risso's dolphins foraging in shallow and deep-water habitats" Frontiers in Ecology and Evolution, 7:53. doi: 10.3389/fevo.2019.00053.

Lombard, F. , Boss, E., Waite, A.M., Uitz, J., Stemmann, L., Sosik, H.M., Schulz, J., Romagnan, J.-B., Picheral, M., Pearlman, J., Ohman, M.D., Niehoff, B., Möller, K.O., Miloslavich, P., Lara-Lopez, A., Kudela, R.M., Mendez Lopes, R., Karp-Boss, L., Kiko, R., Jaffe, J.S., Hvitfeldt Iversen, M., Irisson, J.-O., Hauss, H., Guidi, L., Gorsky, G., Carolin Giering, S.L., Gaube, P., Gallager, S., Dubelaar, G., Cowen, R.K., Carlotti, F., Briseño-Avena, C., Berline, L., **Benoit-Bird, K.J.**, Bax, N.J., Batten, S.D., Ayata, S.D., and Appeltans, W. 2019 "Globally consistent quantitative observations of planktonic ecosystems" Frontiers in Marine Science, doi: 10.3389/fmars.2019.00196

McCammon, S.,* Welch, T.P., Waluk, C.M., **Benoit-Bird, K.J.**, Barth, J.A, Hollinger, G.E. 2019 "Onboard Autonomy System for the Slocum Glider" In Oceans 2019 MTS/IEEE Seattle (pp. 1-7). IEEE.

Ryan, J.P., Cline, D.E., Joseph, J.E., Margolina, T, Santora, J.A, Kudela, R.M., Chavez, F.P, Pennington, J.T., Wahl, C., Michisaki, R., **Benoit-Bird, K.J**., Forney, K.A., Stimpert, A.K, DeVogelaere, A, Black, N., Fischer, M. 2019 "Humpback whale song occurrence reflects ecosystem variability in feeding and migratory habitat of the northeast Pacific" PLOS One, doi: 10.1371/journal.pone.0222456.

*Dunlop, K.**, **Benoit-Bird, K.J**., Waluk, C.M., Henthorn, R. 2019 "Ecological insights into abyssal bentho-pelagic fish at 4000 m depth using a multi-beam echosounder on a remotely operated vehicle" Deep Sea Research II, doi: 10.1016/j.dsr2.2019.104679.

Benoit-Bird, K.J., Southall, B.L., Moline, M.A. 2019 "Dynamic foraging in Risso's dolphins revealed in four-dimensions" Marine Ecology Progress Series, 613:221-234, doi: 10.3354/meps13157.

Benoit-Bird, K.J., Waluk, C.M. 2020 "Exploring the promise of broadband fisheries echosounders for species discrimination with quantitative assessment of data processing effects" Journal of the Acoustical Society of America,147:411-427.

Benoit-Bird, K.J., Southall, B.L., Moline, M.A, Claridge, D.E, Dunn, C.A., Dolin, K.A., Moretti, D.J. 2020 "Critical threshold identified in the functional relationship between beaked whales and their prey" Marine Ecology Progress Series, 654:1-16 doi.org/10.3354/meps13521.

Zhang, Y., Kieft, B., Hobson B., Raanan, B., *Urmy, S.**, Pitz, K., Preston, C., Roman, B., **Benoit-Bird, K.J.**, Birch, J., Chavez, F., Scholin, C. 2021 "Persistent Sampling of Vertically Migrating Biological Layers by an Autonomous Underwater Vehicle within the Beam of a Seabed-Mounted echosounder" IEEE Journal of Ocean Engineering, doi: 10.1109/JOE.2020.2982811.

Benoit-Bird, K.J. Moline, M.A. 2021 "Vertical migration timing illuminates the importance of visual and non-visual predation pressure in the mesopelagic" Limnology and Oceanography, doi: 10.1002/lno.11855.

*Urmy, S.S.**, **Benoit-Bird, K.J.** 2021 "Fear dynamically structures the ocean's pelagic zone" Current Biology, 31:1-7

Benoit-Bird, K.J., Waluk, C.M. 2021 "Remote acoustic detection and characterization of fish schooling behavior" Journal of the Acoustical Society of America, 150:4329–4342.

*Portner, E.J.**, **Benoit-Bird, K.J.**, Waluk, C.M., Hazen, E.L., Robinson, C.J., Gilly, W.F. 2022 "Depression and recovery of pelagic acoustic backscattering following El Niño events in the Gulf of California, Mexico" Progress in Oceanography, 206, doi: 10.1016/j.pocean.2022.102823.

Ryan, J.P., **Benoit-Bird, K.J.**, *Oestreich, W**, Goldbogen, J, Leary, P, Smith, K, Waluk, C.M., Cade, D, Fahlbusch, J, Southall, B.L, Joseph, J, Margolina, T, Calambokidis, J, DeVogelaere, A. 2022. "Oceanic giants dance to atmospheric rhythms: Ephemeral wind-driven resource tracking by blue whales" Ecology Letters, 25:2435–2447, doi: 10.1111/ele.14116. (Cover article)

Benoit-Bird, K.J., Waluk, C.M., Martin, E.J., Reisenbichler, K.R., Sherlock, R.E., McGill, P.E, Robison, B.H. 2023 "Schrödinger's fish: Examining the robotic observer effect on pelagic animals" Limnology and Oceanography: Methods, 21: 563–580, doi: 10.1002/lom3.10565.

Hin, V. de Roos, A.M., **Benoit-Bird, K.J**., Claridge, D.E., DiMarzio, N, Durban, J.W., Falcone, E.A., Jacobson, E.K., Jones-Todd, C.M, Pirotta, E., Schorr, G.S., Thomas, L., Watwood, S, Harwood, J. 2023 "Using individual-based bioenergetic models to predict the aggregate effects of disturbance on populations: a case study with beaked whales and Navy sonar" PLOS ONE. DOI:10.1371/journal.pone.0290819.

Benoit-Bird, K.J. 2024 "Resource patchiness as a resolution to the food paradox in the sea" The American Naturalist: 203, 1: 1-13. DOI:10.1086/727473.

*Sato, M.**, **Benoit-Bird, K. J.** 2024 "Diel vertical migrators respond to short-term upwelling events" Geophysical Research Letters. 51, e2023GL105387. DOI: 10.1029/2023GL105387.

Zhang, Y., Kieft, B., Hobson, B., Shemet, Q., Preston, C., Wahl, C., Pitz, K., **Benoit-Bird, K.J.**, Birch, J., Chavez, F.P., and Scholin, C. 2024 "Coordinated and Collaborative Sampling by Two Long-Range Autonomous Underwater Vehicles" IEEE Journal of Oceanic Engineering, 49: 1371-1382. DOI: 10.1109/JOE.2024.3408889.

Oestreich, W.K.*, **Benoit-Bird, K.J**., Abrahms, B, Margolina, T, Joseph, J.E., Zhang, Y, Rueda, C.A., Ryan, J.P. 2025 "Evidence for seasonal migration by a cryptic top predator of the deep sea" Movement Ecology. 12(65):1-14. DOI: 10.1186/s40462-024-00500-x

Ryan, J.P., *Oestreich, W.K.**, **Benoit-Bird, K.J.**, Waluk, C.M., Rueda, C.A., Cline, D.E., Zhang, Y, Cheeseman, T. Calambokidis, J., Fahlbusch, J.A., Barkowski, J., Fleming, A.H., Turner Tomaszewicz, C.N., Santora, J.A., Margolina, T., Joseph, J.E., Friedlaender, A.S., Goldbogen, J.A., Margolina, T., Joseph, J.E. 2025 "Audible changes in marine trophic ecology: Baleen whale song tracks foraging conditions in the eastern North Pacific" PLoS ONE, 20(2): e0318624. DOI: 10.1371/journal.pone.0318624.

Other Publications

Benoit, K.J., 1996 "Auditory triggers of the alarm response in *Rana catesbeiana* larvae", Undergraduate Honors Thesis, Brown University, 55 pages.

Bertness, M.D., **Benoit-Bird, K.J.**, Illustrator "The Ecology of Atlantic Shorelines", Sinauer Associates, 1998.

Benoit-Bird, K.J., "Dynamics of the Hawaiʻian Mesopelagic Boundary Community and their effects on Predator Foraging", Ph.D. Dissertation. Department of Zoology, University of Hawaii, 272 pages, 2003.

Benoit-Bird, K.J. 2005 (Invited) "Review of Echolocation in Bats and Dolphins. J. A. Thomas, C. F. Moss, and M. Vater, eds.", Marine Mammal Science, 21: 173-174

Jochens, A., D. Biggs, **K. Benoit-Bird**, D. Engelhaupt, J. Gordon, C. Hu, N. Jaquet, M. Johnson, R. Leben, B. Mate, P. Miller, J. Ortega-Ortiz, A. Thode, P. Tyack, and B. Würsig. 2008. "Sperm whale seismic study in the Gulf of Mexico: Synthesis report". U.S. Dept. of the Interior, Minerals Management Service, Gulf of Mexico OCS Region, New Orleans, LA. OCS Study MMS 2008-006. 341 pp

Churnside, J., Brodeur, R., Horne, J.K., Adam, P., **Benoit-Bird, K.J.**, Reese, D.C., Kaltenberg, A.M., Brown, E. 2009. "Combining techniques for remotely assessing pelagic nekton: Getting the whole picture" Edited Conference Proceedings of The American Institute of Fishery Research Biologists.

Dahood, A.* & **Benoit-Bird, K.J.** 2009 "Nocturnal foraging of dusky dolphins" Peer-reviewed book chapter in "Dusky Dolphins: Master Acrobats of the Ocean".

Duce, R, **Benoit-Bird, K**, Ortiz, J, Woodgate, R, Bontempi, P, Delaney, M, Gaines, S, Harper, S, Jones, B, While, L 2012 "NSF OCE Urban Myths and the Report of the 2012 Committee of Visitors" EOS, 93: 533-534.

Benoit-Bird, K.J. 2019 "A Journey Through Unseen Oceans", Acoustics Today, American Institute of Physics, 15:3 71-75. doi: 10.1121/AT.2019.15.3.71

Fischetti, M., **Benoit-Bird, K.J**., Morét, S., Christiansen, J. 2022 "How the Ocean Sustains Complex Life: Detailed data about a host of physical and chemical forces are shaping a new view of the sea" Scientific American, 327:2, 65-69, August issue

Invited Seminars

Woods Hole Oceanographic Institution, Steinbech Lecture, Biology Seminar, and student discussion	*July 2024*
Swedish University of Agricultural Sciences*,* Aquatic Sciences Seminar	*March 2023*
University of New Hampshire, Ocean Mapping/Ocean Engineering Seminar	*May 2022*
University of Rhode Island, Ocean Engineering Seminar	*December 2021*
Marie Tharp Lecture, Geomar	*September 2021*
Slepecky Prize Lecture, Syracuse University	*April 2019*
Syracuse University, Biology Department	*April 2019*
Blinks Memorial Lecture, Stanford University**,** Hopkins Marine Station	*March 2019*
Moss Landing Marine Laboratories, San Jose State University	*March 2018*
Stanford University, Hopkins Marine Station	*February 2018*
University of California, Santa Cruz, Ocean Sciences Seminar	*April, 2017*
Scripps Institution of Oceanography, Ecology Seminar Series	*February 2017*
Monterey Bay Aquarium	*January 2017*
San Francisco State University, Romberg-Tiburon Center	*October 2016*
University of Rhode Island, Vetlesen Distinguished Lecture	*November 2015*
University of Aberdeen, Aberdeen, Scotland	*May 2015*
Willamette University, Biology Department Colloquium	*February 2015*
Swarms with a Purpose, Radcliffe Institute, Cambridge, MA	*December 2014*
SERDP/ESTCP Webinar	*November 2014*
Hatfield Marine Science Center, Newport, OR	*October 2014*
Monterey Bay Aquarium Research Institute, Moss Landing, CA	*September 2014*
Marine Biology Student Association Seminar, California State University, Long Beach**,** CA	*May 2013*
Harvard University, Organismic and Evolutionary Biology Department, Cambridge, MA	*March 2013*
University of Delaware, College of Earth, Ocean and Environment, Lewes	*February 2013*
Duke University Marine Laboratory, Beaufort, North Carolina	*September 2011*
Booz/Allen/Hamilton Distinguished Colloquium, University of Maryland	*September 2010*
Northwest Fisheries Science Center, Seattle Washington	*January 2010*
Oregon Institute of Marine Biology, University of Oregon, Charleston.	*August 2007*
Office of Naval Research, Young Investigator Seminar Series, Washington, D.C.	*February 2007*
Louisiana State University, Department of Oceanography and Coastal Sciences	*March 2006*
University of Washington, School of Aquatic and Fishery Sciences	*March 2005*
Office of Naval Research, Washington, D.C.	*June 2004*
Rutgers University, Institute of Marine and Coastal Sciences	*May 2004*
Scripps Institute of Oceanography, University of California at San Diego, Ecology Program	*May 2004*
Woods Hole Oceanographic Institution, Applied Ocean Physics and Engineering	*March 2004*
University of Washington, Applied Physics Laboratory	*February 2004*
Oregon State University, College of Oceanic and Atmospheric Sciences	*January 2004*
University of Connecticut, Avery Point	*March 2003*
University of Hawaii, Oceanography Seminar	*November 2000*

Invited Conference Presentations

Fear, Physics, and Food Drive Collective Behavior in the Ocean's Pelagic Zone. Animal Behavior Society, Collective Behavior Symposium, Portland, OR, July 11-15, 2023.

A Sound Resolution to the Food Paradox in the Sea. Medwin Prize Lecture, Acoustical Society of America Meeting, Seattle, WA, Nov 29-Dec 3, 2021.

Riding the Wave of Oceanography's Robot Revolution to Advance Fisheries Acoustics. Special Session on new techniques in fisheries acoustics, Acoustical Society of America Meeting, Seattle, WA, Nov 29-Dec 3, 2021.

Acoustical Ocean Ecology in the Era of the Robot Revolution. Special Session on New Technologies, Acoustical Society of America Meeting, San Diego, CA, December 2-6, 2019

The Ocean has Music for those who Ping and Listen. Special Session on Combining Active and Passive Acoustics, Acoustical Society of America/Canadian Acoustical Association Joint Meeting. Victoria, BC Canada, November 5-9, 2018

Ecological Insights from Pelagic Habitats Acquired Using Active Acoustic Techniques. Ocean Acoustics, National Security, and Walter Munk: A Symposium in Honor of Walter Munk on the occasion of his Centennial. La Jolla, CA August 28-30, 2017

Biotic Patterns in the Briny Deep Control Food Webs. The Ocean - Understanding Big Blue Symposium, National Academy of Sciences, Washington, D.C., May 2, 2016.

Causes and Consequences of Heterogeneity of Organisms in the Ocean: From Phytoplankton to Dolphins. Plenary Lecture, Ocean Sciences 2012 (AGU, ASLO, TOS joint meeting). February 20-24, 2012.

Using acoustics to reveal patchiness in the coastal ocean and its ecological consequences for plankton, fish, birds, and marine mammals, Session on Active Acoustic Applications to Bioacoustics Research, 161st Meeting of the Acoustical Society of America. Seattle, WA. May 23-27, 2011.

Finding My Voice: Experiences Communicating Research with the Media. Effective Communication between Scientists and the Media 161st Meeting of the Acoustical Society of America. Seattle, WA. May 23-27, 2011.

Trophic cascades in Hawaii's nearshore ecosystem: Using observing technology to understand ecological interactions. PICES Annual Meeting, Jeju, Korea. October 23-November 1, 2009.

Three-Dimensional Structure of Thin Zooplankton Layers is Impacted by Foraging Fish. Acoustics '08. Paris, France. June 30-July 4, 2008.

Effects of Scattering Layer Composition, Animal Size, and Numerical Density on the Frequency Response of Volume Backscatter. 4th Meeting of the Acoustical Societies of America and Japan. Honolulu, HI. Nov 28-Dec 2, 2006.

Advancing from Pattern to Process in Hawaii's Nearshore Pelagic Ecosystem, 150th Meeting of the Acoustical Society of America. Minneapolis, MN. October 17-21, 2005.

Echolocation Click Rates and Behavior of Foraging Hawaiian spinner dolphins (*Stenella longirostris*). 7th European Conference on Underwater Acoustics. Delft, Netherlands. July 5-8, 2004.

Acoustics will Play an Important Role in Revealing the Biological Secrets of the Ocean. Celebratory Plenary Session: The Future of ASA, 75th Anniversary Meeting of the Acoustical Society of America, New York, NY. May 24-28, 2004.

Light and lunar cycle as cues to diel migration of a sound-scattering layer. 75th Anniversary Meeting of the Acoustical Society of America, New York, NY. May 24-28, 2004.

Using Acoustics to Study the Ecology of Hawaii's Mesopelagic Zone. 2004 Ocean Sciences Meeting, American Geophysical Union. Portland, OR. January 26-30, 2004.

Using Active Acoustics to Study Marine Mammal Behavior. Pauley Foundation Workshop on the acoustics of whales and dolphins; Hawaii Institute of Marine Biology. Kaneohe, HI. August 10, 2001.

Foraging Behavior of the Hawaiian Spinner Dolphin Observed with Active Acoustics. 140th Meeting of the Acoustical Society of America; William Cummings session on the acoustics of whales and dolphins. Newport Beach, CA. December 3-8, 2000.

Submitted Conference Presentations

Resolving the Interacting Time and Space Scales of Life in the Pelagic. Ocean Sciences Meeting, New Orleans, LA, February 19-23, 2024.

Vertical Migration of The Ocean's Deep Scattering Layer Affects the Health of The Planet. Acoustical Society of America Meeting, Chicago, IL, May 8-12, 2023.

Echo Sounding atop The Wave of Oceanography's Robot Revolution. ICES Fisheries and Zooplankton Acoustics Symposium, Portland, ME, March 27-30, 2023.

Vertical Migration's Why and When Revisited with New Technology. Ocean Sciences Meeting, San Diego, CA, February 17-21, 2020.

Exploring The Promise of Broadband Fisheries Echosounders For Species Discrimination. Session on Bioacoustical Oceanography, Acoustical Society of America Meeting, San Diego, CA, December 2-6, 2019.

The When and Why of Up and Down Revisited with New Technology. Deep Sea Biology Symposium, Monterey, California, Sep 10-14, 2018.

Behavioral Responses of Swarming Species to Intra-Seasonal Variation in Upwelling. Ocean Sciences Meeting, Portland, Oregon, Feb 12-16, 2018.

Beaked Whales Bring the Secrets of the Deep to Light: Biological 'Hotspots' in the Bathypelagic Drive Habitat Use in Deep-Diving Predators. Society for Marine Mammalogy 22nd Biennial Meeting, Halifax, NS Canada, Oct 22-27, 2017.

Using Acoustics to Examine Odontocete Foraging Ecology: Predator-Prey Dynamics in the Mesopelagic, Joint Meeting of the Acoustical Societies of America and Japan, Nov 20-Dec 3, 2016.

Foraging Ecology of Risso's Dolphins. Biennial Conference on the Biology of Marine Mammals, San Francisco, CA Dec 14-18, 2015.

Predator-Prey Dynamics: Micronekton Schooling Inside the Deep Scattering Layer in Response to Foraging Risso's Dolphins. ICES Marine Ecosystem Acoustics Symposium, Nantes, France, May 25-28, 2015.

Deep-Diving Autonomous Underwater Vehicle Provides Insights into Scattering Layer Dynamics. 167th Meeting of the Acoustical Society of America, Providence, RI, May 5-9, 2014.

The Way to A Whale's Habitat Is through His Stomach. Ocean Sciences 2014, Honolulu, February 24-28, 2014.

Active Acoustic Examination of the Diving Behavior of Murres Foraging on Patchy Prey. 162nd Meeting of the Acoustical Society of America, San Diego, October 31- 4 November, 2011.

Spatial Variation in the Small-Scale Distribution of Juvenile Walleye Pollock (Theragra Chalcogramma) In the Southeastern Bering Sea. 162nd Meeting of the Acoustical Society of America, San Diego, October 31- 4 November, 2011.

Planktonic Layers: New Insights Stimulated by Van Holliday. 162nd Meeting of the Acoustical Society of America, San Diego, October 31- 4 November, 2011.

Advances In the Methods for Quantifying The Distribution And Abundance of Seabird Prey. 1st World Seabird Conference, Victoria, BC, Canada, September 7-11, 2010.

Active Acoustic Examination of The Diving Behavior of Murres on Patchy Prey During the Breeding Season. 2010 Ocean Sciences Meeting, Portland, OR Feb 22-18, 2010.

Seasonal Timing of Zooplankton and Forage Fish in The Columbia River Plume and Effects on Marine Juvenile Salmon Survival. 2010 Ocean Sciences Meeting, Feb 22-18, 2010.

Aggregation Characteristics of Prey Determine Blue Whale Distribution at the Costa Rica Dome. 2010 Ocean Sciences Meeting, Portland, OR Feb 22-18, 2010.

Assessing the Ecological Role of Planktonic Thin Layers. 2010 Ocean Sciences Meeting, Portland, OR Feb 22-18, 2010.

Spatial Variation in The Distribution and Energy Density of Juvenile Walleye Pollock in The Southeastern Bering Sea. 2010 Ocean Sciences Meeting, Portland, OR Feb 22-18, 2010.

Acoustical and Optical Measurements Provide Evidence of Ecological Interactions in Planktonic Thin Layers. 157th Meeting of the Acoustical Society of America. Portland, OR. May 18-22, 2009.

Temporal Patterns of Fish and Mesozooplankton Near the Columbia River Plume. 157th Meeting of the Acoustical Society of America. Portland, OR. May 18-22, 2009.

Humboldt Squid Distribution in Three-Dimensional Space as Measured by Acoustics in the Gulf of California. 157th Meeting of the Acoustical Society of America. Portland, OR. May 18-22, 2009.

Three-Dimensional Structure of Thin Zooplankton Layers is Impacted by Foraging Fish. 2008 Ocean Sciences Meeting, Orlando, FL. March 3-7, 2008.

The Influence of Zooplankton Prey Abundance and Daylight on Pelagic Schooling Fish Behavior. 2008 Ocean Sciences Meeting, Orlando, FL. March 3-7, 2008.

Thin Phytoplankton and Zooplankton Layers and Not So Thin Micronekton Layers off the West Coast of Oahu, Hawaii. 2006 Ocean Sciences Meeting, Honolulu, HI. Feb. 20-24, 2006.

Acoustic Properties of the Hawaiian Mesopelagic Boundary Sound Scattering Layer. 2006 Ocean Sciences Meeting, Honolulu, HI. February 20-24, 2006.

Spatial and Temporal Patterns in Planktonic Thin Layers: The Interplay Between Vertical Shear, Mixing, and Plankton Behavior. 2006 Ocean Sciences Meeting, Honolulu, HI. February 20-24, 2006.

Lidar Signatures in Regions with Thin Layers in the Coastal Ocean. 2006 Ocean Sciences Meeting, Honolulu, HI. February 20-24, 2006.

A Study of Sardines in the NE Pacific Using Multiple Platforms and Technologies. 2006 Ocean Sciences Meeting, Honolulu, HI. February 20-24, 2006.

Effects of Lunar Phase on Biomass at Four Trophic Levels Along Oahu, Hawaii's Leeward Coast. 2006 Ocean Sciences Meeting, Honolulu, HI. February 20-24, 2006.

Testing the Prey Debilitation Hypothesis: No Stunning Results. 16th Biennial Conf on The Biology of Marine Mammals. San Diego, CA. Dec 15-18, 2005.

Testing the Prey Debilitation Hypothesis: No Stunning Results. 148th Meeting of the Acoustical Society of America. San Diego, CA. November 15-18, 2004.

Predator Avoidance by Midwater Micronekton: Differences Between Visual and Non-Visual Predators. Ecological Society of America, Portland, Oregon. August 1-7, 2004.

Echolocation Click Rates and Behavior of Foraging Hawaiian Spinner Dolphins (Stenella longirostris). Acoustical Society of America, New York, NY. May 24-28, 2004.

Observing the Diel Migration Dynamics of an Island-Associated Sound-Scattering Layer. ASLO/TOS Ocean Research Conference. Honolulu, HI. February 15-20, 2004.

Echolocation Click Rates and Behavior of Foraging Hawaiian Spinner Dolphins (*Stenella longirostris*). 15th Biennial Conference on the Biology of Marine Mammals. Greensboro, NC. December 14-19, 2003.

Hawaiian Spinner Dolphins Aggregate Midwater Food Resources through Cooperative Foraging. 146th Meeting of the Acoustical Society of America. Austin, TX. November 10-14, 2003.

Sound-Scattering Layers and The Foraging Ecology of Pelagic Marine Mammals. 88th Annual Meeting of the Ecological Society of America. Savannah, GA. August 3-8, 2003.

Behavior of Dusky Dolphins Foraging on the Deep-Scattering Layer in Kaikoura Canyon, New Zealand. 145th Meeting of the Acoustical Society of America. Nashville, TN. April 22-May 2, 2003.

Target Strength and Density Structure of Hawaiian Mesopelagic Boundary Community Patches. 145th Meeting of the Acoustical Society of America. Nashville, TN. April 22-May 2, 2003.

Fine-Scale Diel Migration Dynamics of an Island-Associated Sound-Scattering Layer. First Pan-American/Iberian Meeting on Acoustics. Cancun, Mexico. December 2-6, 2002.

Acoustic Backscattering by Deepwater Fish Measured in situ from a Manned Submersible. First Pan-American/Iberian Meeting on Acoustics. Cancun, Mexico. December 2-6, 2002.

Dynamics of the Hawaiian Mesopelagic Boundary Community Studied with Active Acoustic Moorings. ICES Symposium on Acoustics in Fisheries and Aquatic Ecology. Montpellier, France. June 10-14, 2002.

Two New Submersible Techniques for Deepwater Fisheries Research in Hawaii. 2002 Ocean Sciences Meeting. Honolulu, HI. February 11-15, 2002.

Energy: Converting from Acoustic to Biological Resource Units. 142nd Meeting of the Acoustical Society of America. Ft. Lauderdale, FL. December 3-7, 2001.

Foraging Behavior of the Hawaiian Spinner Dolphin, Stenella longirostris. 14th Biennial Conference on the Biology of Marine Mammals. Vancouver, BC. November 28-December 3, 2001.

Foraging Behavior of The Hawaiian Spinner Dolphin Observed with Active Acoustics. Animal Behavior Society; W. C. Allee Session. Corvallis, OR. July 15-18, 2001.

Acoustic Investigation of the Hawaiian Mesopelagic Boundary Community. 140th Meeting of the Acoustical Society of America. Newport Beach, CA. December 3-8, 2000.

Spinner Dolphin Foraging and the Mesopelagic Boundary Community. 25th Annual Albert Tester Symposium, University of Hawaii. April 13-14, 2000. Published in: Pacific Science, 55:99.

Grant and Contract Support

My research program has attracted funding from diverse sources including the National Science Foundation, Office of Naval Research, National Oceanic and Atmospheric Administration, National Oceanographic Partnership Program, Minerals Management Service, North Pacific Research Board, Strategic Environmental Research and Development Program (DoD), and Packard and Keck Foundations, totaling more than $12 million to my home institution.

Office of Naval Research 2024-2027
Principal Investigator ($950,000)
'Resource Drivers of the Behavior of Teuthivorous Whales
Collaborators: John Ryan, MBARI; Brandon Southall, Southall Environmental Associates

National Science Foundation, Office of Polar Programs 2019-2025
Co-Principal Investigator ($323,836)
'Linking Predator Behavior and Resource Distributions: Penguin-directed Exploration of an Ecological Hotspot'
Collaborators: Mark Moline, University of Delaware; Megan Cimino, University of California at Santa Cruz

Office of Naval Research, Marine Mammal Biology 2018-2022
Co-Principal Investigator ($28,000)
'Integrating Information on Displacement Caused by Mid-Frequency Active Sonar and Measurements of Prey Field into a Population Consequences of Disturbance Model for Beaked Whales'
Collaborators: Nancy DiMarzio, Naval Undersea Warfare Center Division; John Harwood & Len Thomas, University of St. Andrews; Andre de Roos & Vincent Hint, University of Amsterdam

Office of Naval Research, Marine Mammal Biology 2017-2020
Co-Principal Investigator ($15,200)
'The use of navy range bottom-mounted, bi-directional transducers for long-term, deep-ocean prey mapping'
Collaborator: David Moretti, National Undersea Warfare Center

Office of Naval Research, Marine Mammal Biology 2015-2018
Principal Investigator ($681,355)
'Linking deep-water prey fields with odontocete population structure and behavior'
Collaborators: Mark Moline, University of Delaware; Brandon Southall, Southall Environmental Associates; Diane Claridge, Bahamas Marine Mammal Research Org; David Moretti, National Undersea Warfare Center

Keck Foundation 2015-2019
Co-Principal Investigator ($1,000,000)
'Revolutionizing our Understanding of Ocean Ecosystems'
Collaborators: Jack Barth and Geoffrey Hollinger, Oregon State University

Office of Naval Research, Ocean Acoustics 2011-2016
Principal Investigator, Chief Scientist for the Fish Acoustics Basic Research Challenge ($1,395,628)
'Acoustical scattering, propagation, and attenuation caused by two abundant Pacific schooling species: Humboldt squid and hake'; Collaborators: Joseph Warren, Stony Brook; Dezhang Chu, NOAA

Strategic Environmental Research and Development Program, Department of Defense 2012-2017
Principal Investigator ($1,566,000)
'Deep mapping of teuthivorous whales and their prey fields'
Collaborators: Mark Moline, University of Delaware; Brandon Southall, Southall Environmental Associates

National Science Foundation, Biological Oceanography RAPID 2013-2014
Principal Investigator ($75,993)
'Collaborative Research: Adaptable life history strategy of a migratory large predator in response to El Nino and climate change', Collaborators: William Gilly, Stanford University

National Science Foundation, Biological Oceanography 2009-2012
Principal Investigator ($463,873)
'Collaborative Research: Physiological limits to vertical migrations of the pelagic, jumbo squid, *Dosidicus gigas*, in the Gulf of California',
Collaborators: William Gilly, Stanford University; Brad Seibel, University of Rhode Island

North Pacific Research Board, Bering Sea Integrated Ecosystem Research Program 2007-2012, Principal Investigator
'Patch Dynamics of Forage Fish' ($375,647)
'Bogoslof Island: Patch Dynamics of Forage Fish' ($596,009)

Office of Naval Research, Marine Mammals & Biological Oceanography Program 2009-2011
Co-Principal Investigator ($518,856)
'Factors influencing the acoustic behavior and nearshore residence of the gray whale (*Eschrichtius robustus*) along their migration route'. Collaborators: Timothy Cowles and David Mellinger, Oregon State University

Office of Naval Research, Marine Mammals & Biological Oceanography Program 2008-2012
Principal Investigator ($338,881)
'Importance of thin plankton layers in Hawaiian food web interactions: Research spanning from physical circulation to spinner dolphins' Collaborator: Margaret McManus, University of Hawaii

National Science Foundation, Major Research Instrumentation 2006-2010, Co-Principal Investigator
'ROV-based System for Sampling Planktonic Thin Layers' ($584,119)
Collaborators: Timothy Cowles, Oregon State University; Mark Benfield, Louisiana State University

Office of Naval Research, Young Investigator Program 2005-2010, Principal Investigator
'Predator effects on dense zooplankton aggregations in the coastal ocean' ($596,609)

Packard Foundation 2008-2009, Co-Principal Investigator ($56,609)
'Biomass estimates of jumbo squid in the Gulf of CA and incorporation into a squid fishery management plan.'
Collaborator: William Gilly, Stanford University

National Oceanographic Partnership Program 2005-2008, Principal Investigator, Project Director
'Novel acoustic techniques to measure schooling in pelagic fish in the context of an operational coastal ocean observatory' Collaborators: Oscar Schofield, Rutgers; Christopher Jones, Univ of Washington ($423,614)

National Oceanographic Partnership Program 2005-2008, Co-Principal Investigator
'A novel technique to detect epipelagic fish and map their habitat' ($230,549)
Collaborators: James Churnside, Richard Brodeur, NOAA; John Horne, U of Washington; Evelyn Brown, UAF

Minerals Management Service, Sperm Whale Seismic Study 2005-2008, Co-Principal Investigator ($36,454)
Collaborators: Bruce Mate

Office of Naval Research, Ocean Optics and Biology Program 2004-2007, Principal Investigator
'Factors Influencing the Nearshore, Sound-Scattering Layer in Hawaiian Waters' ($234,000)

Oregon State University, Research Council Award 2005, Principal Investigator
'The way to a whale's habitat is through his stomach: Adding prey to sperm whale assessment' ($10,000)

NOAA Fisheries Pacific Islands Fisheries Science Center 2004-2005, Principal Investigator
'Fisheries data analysis' ($31,000)

Measurements and Signature Intelligence, Defense Intelligence Agency 2004-2006, Co-Principal Investigator
'Acoustic characterization of the mesopelagic boundary community' ($120,000)
Collaborator: Whitlow Au

University of Hawaii SeaGrant College Biennial 2003-2005, Co-Investigator
'The Role of Mesopelagic Boundary Community Dynamics in Hawaiian Fisheries' ($123,761)
Collaborator: Whitlow Au

Defense University Research Instrumentation Program 2004, Co-Principal Investigator
'Mesopelagic processes and underwater noise effects on marine mammals' ($399,500)
Collaborator: Whitlow Au

Office of Naval Research, Marine Mammal Program 2002-2003, Co-Principal Investigator ($197,291)
'Dynamics of the Hawaiian Mesopelagic Boundary Community and their Effects on Spinner Dolphin Foraging'
Collaborator: Whitlow Au

National Science Foundation Doctoral Dissertation Improvement Grant 2002, IBN, Co-PI ($9,065)
'Fine-scale pelagic predator-prey interactions: Hawaiian spinner dolphins and the mesopelagic boundary'

University of Hawaii SeaGrant College Biennial 2001-2003, Co-Investigator ($137,600)
'The Dynamics of the Mesopelagic Boundary Community and their Role in Hawaiian Coastal Fisheries'
Collaborator: Whitlow Au

Professional Activities

Research Oversight Committee, *Monterey Bay Aquarium* *09/22-present*
IEEE Oceanic Engineering Society Technical Committee on Underwater Acoustics *01/06-present*
Acoustical Society of America
- Website Task Force *08/25-present*
- Animal Bioacoustics Technical Committee *12/02-12/04, 05/05-05/08, 12/16-present*
- Executive Council (elected board) *05/21-05/24*
- Administrative Council on Outreach *05/21-05/24*
- Administrative Council on Outreach Chair *05/23-05/24*
- Audit Committee *07/21-12/24*
- Strategic Leadership Summit participant *07/24*
- Audit Committee Chair *05/22-05/23*
- Nominating Committee *10/14-12/15*
- Strategic Leadership for the Future Summit participant *01/15*
- Public Relations Committee *05/04-05/18*
- Acoustical Oceanography Technical Committee *05/08-05/14*
- Outreach Committee on Posters *04/09-04/13*
- Website Committee *04/09-05/13*
- Vision 2010 Retreat Participant, the future of the Society after 75 years *11/04*
- Student Council *2002-2003*

Editorial Board, *Limnology and Oceanography* *01/18-01/24*
DARPA/ISAT, *Underwater Omniscience Workshop*, Invited Speaker *12/24*
Workshop to Identify National Ocean Exploration Priorities in the Pacific Participant, Consortium for Ocean Leadership & NOAA Office of Exploration and Research *07/20-11/20*
Meeting of the Acoustical Society of America, Organizer and Co-Chair for sessions in Acoustical Oceanography and Animal Bioacoustics *12/18-12/19*
Speaker, *Discovery of Sound in the Sea Webinar Series: Echosounders* *10/19*
Organizer and Chair, *IEEE Workshop on Acoustics in Autonomous Platforms* *01/18-3/19*
Ocean Sciences Meeting 2018, Session Organizer and Co-Chair for two sessions *06/17-02/18*
California State Lands Commission Technical Advisory Group *09/17-06/18*
Consortium for Ocean Leadership
- Industry Forum on Ocean Noise participant *11/16*
- Advisory Team member: facilitate collaborative community program on ocean noise *11/16-09/17*

5th Joint Meeting of the Acoustical Society of America and Acoustical Society of Japan, Organizer and Co-Chair for sessions in Acoustical Oceanography and Animal Bioacoustics *06/15-11/16*
Ocean Sciences Meeting 2016, Session Organizer and Co-Chair *06/15-02/16*
Office of Naval Research Fish Acoustics Basic Research Challenge, Chief Scientist for research program involving 19 Principal Investigators under 10 different grants *2010-2015*
ICES Symposium on Marine Ecosystem Acoustics, Scientific Steering Committee *10/13-05/15*
167th Meeting of the Acoustical Society of America, Session Organizer and Co-Chair *01/13-04/14*
Ocean Sciences Meeting 2014, Session Organizer and Co-Chair *06/13-02/14*
National Science Foundation, Committee of Visitors Member, Division of Ocean Sciences *2012*
Advancing to Professorship in Biology, Ecology, and Earth Sciences, NSF Advance Discussion Leader *04/12*
19th Biennial Conference on the Biology of Marine Mammals, Ecology Session Chair *12/11*
D.V. Holliday Memorial Session, Session Co-Chair, Acoustical Society of America Meeting, San Diego *10/11*
Acoustic Challenges in Aquatic Ecosystem Assessment, Scientific Committee, A Joint Special Workshop of the Acoustical Society of America and the American Fisheries Society *2010-2011*
Oceanography in 2025 Workshop, Plenary Speaker & Invited Participant, Sponsored by the National Academy of Sciences' Ocean Studies Board and the U.S. Office of Naval Research *01/09*
Society for Marine Mammalogy
- Education Committee *01/00-11/09*
- Hawaii Student Chapter Organizer *02/00-05/03*

Cooperative Institute for Marine Resources Studies
- Scientific Advisory Council *10/04-04/09*

Fish Acoustics Science Review Invited Speaker, Participant, and ONR DRI Working Group Leader *11/07*
Autonomous and Lagrangian Platforms and Sensors Workshop Invited Participant *11/05*
Western Pacific Regional Fisheries Management Council, Presenter and Scientific Advisor *03/04-05/04*
Hawaiian Islands Stranding Response Group Volunteer *12/02-07/04*

Referee

Average 8 manuscripts/year, 6-7 proposals/year as a reviewer, 20/year as Associate Editor for L&O
Named *Outstanding Reviewer* by Deep-Sea Research in 2018, *Outstanding Associate Editor* by Limnology & Oceanography in 2021, *Outstanding Reviewer* by the Canadian Journal of Fisheries and Aquatic Sciences in 2022

Selected Journals: Journal of the Acoustical Society of America, Limnology and Oceanography, Canadian Journal of Fisheries and Aquatic Sciences, Aquatic Mammals, Deep-Sea Research I & II, Fisheries Research, Journal of Marine Systems, Scientia Marina, Aquatic Living Resources, Marine Mammal Science Book Reviews, Animal Behaviour, Marine Ecology Progress Series, Marine Biology, Canadian Journal of Zoology, Fisheries Oceanography, Nature Communications, Sea Grant College Programs, Journal of Physical Oceanography, Biology Letters, Journal of Plankton Research, Limnology and Oceanography, Limnology and Oceanography: Methods, Ecospheres, ICES Journal of Marine Science, Behavioral Ecology and Sociobiology, Society for Marine Mammalogy Biennial Conference Abstract Reviewer (Bioacoustics, Ecology, and Behavioral Ecology divisions).

Funding groups: Joint Industry Programme, Natural Science and Engineering Research Council of Canada, North Pacific Research Board, National Science Foundation (Major Research Instrumentation, Ocean Sciences, and Polar Programs), NOAA, National Geographic Society, SeaGrant (Alaska, Hawaii, California)

Professional Associations

American Association for the Advancement of Science; Acoustical Society of America; American Geophysical Union; Society for Marine Mammalogy; American Society for Limnology and Oceanography; Institute of Electrical and Electronics Engineers, Oceanic Engineering Society

Advising

Ciarra Willis, Postdoctoral Fellow — ***Advisor***
Monterey Bay Aquarium Research Institute — *11/25-present*

Will Oestreich, Postdoctoral Fellow — ***Research Mentor***
Monterey Bay Aquarium Research Institute — *06/22-present*

Astrid Leitner, Postdoctoral Fellow *(Currently Asst Prof at Oregon State University)* — ***Research Mentor***
Monterey Bay Aquarium Research Institute — *01/19-01/24*

Danielle Haulsee, Postdoctoral Fellow *(Currently Chief Science Officer at Hubbs-Seaworld Research Institute)* — ***Outside Mentor***
Stanford University — *01/20-12/22*

Sam Urmy, Postdoctoral Fellow (Currently Scientist at the Minderoo Foundation) — ***Advisor***
Monterey Bay Aquarium Research Institute — *02/18-02/20*

Elan Portner, Ph.D. Student *(Currently Postdoctoral Fellow at Scripps)* — ***Research Mentor***
Department of Biology, Stanford University — *01/17-4/19*

Mei Sato, Postdoctoral Associate *(Currently Tenure Track Scientist at WHOI)* — ***Advisor***
CEOAS, Oregon State University — *06/15-01/18*

David Cade, M.S. Student *(Currently Research Scientist at Stanford)* — ***Committee Chair***
CEOAS, Oregon State University — *09/11-04/14*

Amanda Kaltenberg, Postdoctoral Associate *(Currently Chair of Marine Sciences at Savannah State University)* — ***Advisor***
CEOAS, Oregon State University — *06/10-12/11*

Neal McIntosh, M.S. Student *(Currently Natural Resource Management Specialist at NOAA)* — ***Committee Chair***
COAS, Oregon State University — *09/08-05/11*

Amanda Olson Kaltenberg, Ph.D. Student *(Currently Chair of Marine Sciences at Savannah State)* — ***Committee Chair***
College of Oceanic and Atmospheric Sciences, Oregon State University — *06/05-06/10*

Robyn Matteson, M.S. Student — ***Co-Advisor***
College of Oceanic and Atmospheric Science, Oregon State University — *09/07-10/09*

Daniel Wisdom, Marine Resource Management M.S. — ***Committee Chair***
College of Oceanic and Atmospheric Sciences, Oregon State University — *09/06-12/08*

Joy Smith, B.S. Student *(Currently NOAA Scientist)* — ***REU Mentor***
Coastal Carolina University, HMSC REU Program — *06/05-08/05*

Kristine Hiltunen, B.S. Student *(Currently Regulatory and Policy Branch Chief at NOAA)* — ***REU Mentor***
Texas A&M University, University of Hawaii SOEST REU Program — *06/01-08/01*

Other Mentoring

Chloe Malinka, Ph.D. Student — ***Outside Opponent***
Aarhus University — *06/21*

Natalie Mastick, Ph.D. Student — ***Committee Member***
Department of Fisheries and Wildlife, Oregon State University — *01/15-01/16*

Florence van Tulder, M.S. Student — ***Committee Member***
Department of Fisheries and Wildlife, Oregon State University — *09/14-01/16*

Sheanna Steingass, Ph.D. Student — ***Committee Member***
Department of Fisheries and Wildlife, Oregon State University — *04/14-01/16*

Marisa Litz, Ph.D. Student — ***Committee Member***
Department of Fisheries and Wildlife, Oregon State University — *01/13-01/16*

Sarah Guermond, M.S. Student — ***Committee Member***
Department of Integrative Biology, Oregon State University — *12/13-08/14*

Renee Albertson, Ph.D. Student — ***Committee Member***
Department of Fisheries and Wildlife, Oregon State University — *10/10-12/14*

Joshua Baker, M.S. Student — ***Committee Member***
Mechanical Engineering, Oregon State University — *01/13-12/13*

Marina Milligan, M.S. Student — ***Outside Thesis Reader***
Dalhousie University — *07/13*

Michael Summers, M.S. Student — ***Graduate Representative***
Mechanical Engineering, Oregon State University — *04/13-12/13*

Sheanna Steingass, M.S. Student — ***Committee Member***
Department of Fisheries and Wildlife, Oregon State University — *04/13-12/13*

Martin Hoecker-Martinez, Ph.D. Student — ***Committee Member***
College of Oceanic and Atmospheric Science, Oregon State University — *10/09-01/13*

Andrew Szabo, Ph.D. Student — ***Committee Member***
Department of Fisheries and Wildlife, Oregon State University — *04/05-12/11*

Luke Whitman, M.S. Student — ***Committee Member***
Department of Fisheries and Wildlife, Oregon State University — *07/08-12/10*

Gregory Kowalke, M.S. Student — ***Committee Member***
College of Oceanic and Atmospheric Sciences, Oregon State University — *09/08-08/10*

Renee Gibb, M.S. Student — ***Committee Member***
Department of Fisheries and Wildlife, Oregon State University — *09/07-06/09*

Ladd Irvine, M.S. Student — ***Committee Member***
College of Oceanic and Atmospheric Sciences, Oregon State University — *12/05-12/07*

Alyson Azzara, M.S. Student — ***Outside Research Advisor***
Department of Oceanography, Texas A&M University — *06/05-12/06*

Jennifer Pettis, M.S. Student — ***Outside Thesis Reader***
Georgetown University — *12/04-06/05*

Teaching

Synthesis in Pelagic Ecology (OC649) — *Spring 14, Winter 15*
Ocean Ecological Dynamics (OC523) — *Spring 14*
Zooplankton Ecology (OC441/541) — *Spring 06; 08, Winter 10*
Acoustical Oceanography (OC679) — *Spring 07; Winter 11; 13, 16*
MathCamp Guest Lecturer — *09/13, 09/15*
Honors College Introduction to Oceanography (OC331H) Guest Lecturer — *11/05*
Applications in Ocean Ecology and Biogeochemistry (OC599) Guest Lecturer & Lab Instructor — *Spring 12; 13*

Outreach Activities

UCSC Science Communications Program, Science expert and mentor *01/23*

Heyman Foundation STEM Fellows Speaker
Discussed STEM careers with underrepresented high school students *01/23*

PaleoNerds Podcast, Guest with hosts Ray Troll and David Strass *11/22*

Into the Deep, Monterey Bay Aquarium exhibition contribution, ~2 million visitors/year *05/22*

Seneca's 100 Women to Hear, Podcast guest with host Ambassador Melanne Verveer *03/22*

Connecticut Junior Science and Humanities Symposium, Keynote Speaker, UCONN *03/05/22*

Navigating STEM *2021*
Worked with MBARI Communication Fellow Madison Pobis as a subject in her video series documenting various career pathways in STEM.

7x7 project *2020-2021*
Collaborated with artists Mendi + Keith Obadike as part of Rhizome.org's 7x7 project that brings together artists and technologists to create something new. We presented our collaboration on the behavior of ocean predators through a live-streamed event hosted by New York City's New Museum. A sound installation piece with a mirrored exhibit at the Kusthall Stavanger contemporary art museum in Norway will premier later this year

American Museum of Natural History
Ocean Luminaries event speaker *03/02/18*
Unseen Oceans Exhibit *03/2018-present*
Participated in the development of a feature piece on my research for the exhibit. This temporary exhibit attracted 1 million visitors at the main museum in New York City and is now traveling to other museums around the country.

Worked with educators to develop K-12 educational materials to pair with the exhibit

Monterey Bay Aquarium
Board Meeting Speaker *09/2017*
Presenter to aquarium volunteers *09/2017*

Scientists and Fishermen Exchange (SAFE) *09/04-05/16*
Participant in this group of fishermen and scientists working together to build trust and a mutual understanding of the industry and ocean sciences. Sponsored by Oregon Sea Grant

Discovering the Scientist Within, Keynote speaker for middle school girls' event 02/*14*

TEDYouth, Spoke to 500 high school students live, presentation streamed to 48 countries, part of TEDEd *11/12*

PopTech, Conference Speaker to innovators across fields of engineering, business, and social policy *10/12*

Connecticut Science and Engineering Fair, Awards Ceremony Opening Speaker (by video) *03/12*

Intel International Science and Engineering Fair, Awards Ceremony Remote Speaker *05/11*

Acoustics for Kids, profiled scientist for the poster and guidebook for middle school students, ASA *2011*

Song for the Blue Ocean: Science, Arts, & Ethics, Spring Creek Project co-speaker with writer Julia Whitty *02/11*

Columbia Forum Food for the Mind Dinner Lecture Speaker *03/10*

COSEE NOW (Centers for Ocean Sciences Education Excellence - Networked Ocean Now) Podcast *02/09*

SeaFest Featured Speaker, Hatfield Marine Science Center Open House and Marine Science Festival *06/05*

Oregon Ocean Science and Math Collaborative Program
Technical Advisor, Keynote Speaker, Teacher at Sea Program Host *09/04-5/05*
This is the largest single initiative of the Office of Community College and Workforce Development for the State of Oregon. It aims at integrating the expertise of scientists and educators in a collaborative project designed to incorporate ocean sciences into science, math, critical thinking as part of adult education.

Hawaii State Science Fair, Judge, High School Biological Sciences Division *04/02, 4/04*

Community Seminar Series, Keynote Speaker, Kula Nai'a Foundation & Kohala Center, Waimea, Hawaii *04/04*

Selected Media & Website Coverage

National Geographic Magazine Quoted source in coverage of blue whale heat wave paper *07/25*

NPR Expert source for 'Octopuses and fish share leadership — and enforcement — in group hunting', *09/24*

PBS Studios Vertical migration *04/23*

NPR Expert source for 'Toothed whales use 'vocal fry' to hunt for food', carried by >50 additional outlets *03/23*

Muse Magazine 'Tiny Critters, Massive Migration' *03/23*

BBC video story 'Vertical Migration' featured guest *10/22*

Popular Science and >80 other outlets**.** 'Blue whales dance with the wind' paper coverage *10/22*

Scientific American 'Discoveries from the Deep Sea' issue, quoted source in several stories, consultant on introductory story *08/22*

CBS Mornings 'Into the Deep' segment showcasing MBARI, vertical migration, and climate 28.1 million viewers, >250 additional media mentions *04/22*

The Scientist and various Swedish news outlets on fear in the ocean *01/22*

ASA press release, news conference, 2 CBC radio interviews on the Food Paradox in the Sea *12/21*

MBARI web story**, Outdoor Life** online magazine story on vertical migration *07/21*

North State Public Radio The Sound of Science in the Sea interview *12/19*

Christian Science Monitor Into the twilight zone: An age of discovery unfolds beneath the waves *07/19*

talkRADIO UK guest for morning show science segment focusing on our beaked whale foraging work *01/19*

New York Times featured in an article on the AMNH *Unseen Oceans* Exhibit *02/18*

National Wildlife Magazine research featured in an article on diel vertical migration *10/17*

Women in Oceanography featured in the *Oceanography* Special Issue *03/15*

Ocean News and Technology Magazine Cover story on our AUV echosounder development *07/13*

Science Illustrated European, Thai, and Australian Magazine covered jumbo squid research *07/13*

National Public Radio, Academic Minute On Air story on PLoS ONE paper *03/13*

Science Daily, redOrbit, KVAL TV, Covered research presented in Jan 2013 PLoS ONE paper *01/13*

Fast Company Magazine story An Autonomous Sub Speaks Whale to Explore the Deepest Ocean *11/12*

Discover Magazine Covered research presented in 2012 Marine Ecology Progress Series paper on squid *10/12*

Amazing Planet, MSNBC Covered research presented in May 2012 Biology Letters paper *05/12*

Smithsonian Magazine Squid research featured in Call of the Leviathan *12/11*

The Scientist Magazine Scientist to Watch story *04/11*

SmartPlanet.net Feature scientist profile *02/11*

Exploring How Jumbo Squid Use Oxygen to Survive US News and World Reports story on our NSF-funded research in collaboration with William Gilly, Stanford and Brad Seibel, URI *10/10*

MacArthur Fellowship Covered by National Public Radio's All Things Considered, Oregon Public Broadcasting, The New York Times, USA Today, The Washington Post, The Oregonian, Popular Science and Atlantic Magazines, and others *09/10*

Mother Jones Magazine Research featured in cover story on the BP oil spill *08/10*

Malamalama University of Hawaii Alumni Magazine Volume 34:1 feature article *03/09*

Honolulu Star Bulletin, Story: Underwater Dance by Helen Alton about spinner dolphin foraging *11/10/08*

Discovery Channel Canada, Daily Planet Taped interview about spinner dolphin research *aired 10/22/08*

Spinner dolphin foraging research featured on Bio-Medicine.org, Sciencecentric.com, Physorg.com, Innovations-Report.de, ScienceDaily.com, ScienceNewsDaily.org, FirstScience.com, DrTom.tv, BiologyNews.net, ScienceCodex.com, NSF.gov's homepage banner, and the AAAS website *10/21/08*

National Public Radio Guest for story on the Bering Sea Integrated Ecosystem Research Program *aired 08/11/08*

NSF's Live Science Squid research featured by this public outreach website *06/08*

Discovery of Sound in the Sea *12/05*

Served as a scientific expert for www.dosits.org, an outreach website about the recently controversial topic of the use of sound in the ocean. I did an on camera interview for the Scientists Gallery of the website, provided figures and information for the site, and fact checked the final pages.

Women in Oceanography featured in the *Oceanography* Special Issue Vol. 18, No. 1 *03/05*

One of a series of autobiographical sketches of modern women in oceanography

Press Conference Panel Member for the 2004 Ocean Sciences Meeting *01/04*

Acoustical Society of America, Press Room *05/03, 12/01*

Prepared Lay-Language Papers for meeting website, fielded press questions at meeting press conferences

Institutional Service: Committees

Intellectual Property Committee, MBARI	*09/21-present*
Director of Marine Operations Search Committee, MBARI	*05/23-12/23*
Strategic Roadmap Steering Committee, MBARI	*05/20-05/23*
AUV Users Committee, MBARI	*05/17-present*
Microbiology PI Search Committee, MBARI	*2021*
Seafloor PI Search Committee, MBARI	*2021*
Website Redevelopment Committee, MBARI	*10/20-12/22*
Building G Replacement Subcommittee, MBARI	*10/20-09/22*
Principal Engineer Search Committee, MBARI	*2021*
Telepresence Committee, MBARI	*08/20-05/21*
Mentoring Brown Bag Organizer, MBARI	*2021*
Marine Operations Manager Search Committee, MBARI	*10/19-06/20*
Engineering Technician Search Committee, MBARI	*01/18*
Communications Director Search Committee, MBARI	*05/17-09/17*
Research Engineer Review Committee, MBARI	*05/17*
Scientist V Review Committee, MBARI	*08/16*
Strategic Planning and Hiring Committee, CEOAS	*09/15-08/16*
Oregon State University Faculty Senate	*12/04-01/08, 01/14-08/16*
Promotion and Tenure Committee, CEOAS	*09/07-06/08, 09/14-06/15*
External Awards, CEOAS	*09/14-06/15*
Discipline Exam Committee, Ocean Ecology and Biogeochemistry Discipline Group	*01/12-06/15*
Ship Operations, College of Earth, Ocean, and Atmospheric Sciences	*09/06-09/07, 09/10-08/15*
Publications Director Search Committee, College of Earth, Ocean, and Atmospheric Sciences	*02/14-05/14*
Peer Review of Teaching Committee, College of Earth, Ocean, and Atmospheric Sciences	*09/14-06/14*
College Advisory Committee, College of Earth, Ocean, and Atmospheric Sciences	*09/12-08/14*
Geospatial Scientist Search Committee, College of Earth, Ocean, and Atmospheric Sciences	*03/13-04/14*
OEB Curriculum Committee Chair, CEOAS	*09/13-05/13*
Marine Technician Superintendent Search Committee, CEOAS	*02/13-04/13*
Cetacean Ecologist Search Committee, Dept of Fisheries and Wildlife, COMES	*09/12-05/13*
Marine Superintendent Hiring Committee, CEOAS	*09/10-01/11, 01/13-03/13*
Associate Dean for Research Search Committee, CEOAS	*06/11-09/11*
Strategic Planning Committee, College of Oceanic and Atmospheric Sciences	*09/10-01/11*
Faculty Hiring Committee, College of Oceanic and Atmospheric Sciences	*12/07-01/11*
Peer Review of Teaching, College of Oceanic and Atmospheric Sciences	*09/09-09/10*
Dean's Advisory Committee, College of Oceanic and Atmospheric Sciences	*09/06-09/07, 09/08-08/09*
Frontiers Seminar Series Committee, College of Oceanic and Atmospheric Sciences	*09/07-09/08*
Director Search Committee, Oregon Sea Grant	*09/07-06/08*
Branding Committee, College of Oceanic and Atmospheric Sciences	*09/06-09/07*
Scientific Facilities Committee, College of Oceanic and Atmospheric Sciences	*09/05-09/06*
Cetacean Biologist Search Committee, Dept of Fisheries and Wildlife, COMES	*11/04-12/05*
Instructional Programs Committee, College of Oceanic and Atmospheric Sciences	*09/04-09/05*

Other Institutional Service

MBARI Board, Day of Engineering, Science, and Technology speaker/tour presenter	*06/22, 23, 24*
External Review Committee, speaker	*02/20*
MBARI Board, Presenter	*09/19*
MBARI Board, Science tour presenter	*03/19*
MBA Board, Presenter	*09/17*
MBARI Board, DOEST science tour presenter	*06/17*

California State Lands Commission MBARI representative to the Technical Advisory Group on Low-Energy Geophysical Survey Regulation *06/16-06/17*
MBARI Board Science presenter *11/16*
ARCS Foundation Luncheon speaker *10/14*
Senate, State of Oregon Invocation speaker for University Day *04/11*
ARCS Foundation Speaker for the College to this scholarship organization *04/11*
Terra Magazine Interviewed for article on recent research and MacArthur Award *10/10*
Media Listed on OSU's *Faculty Experts* website, I am regularly contacted by the press to talk about my research or comment on science in the news
Terra Magazine Interviewed for article Sounding the Deep on my recent squid research *07/08*
OSU Foundation Campaign for OSU feature article and banner *2007-2008*
Worked with the Development Office on materials representing my work at OSU which included several interviews and a photo-shoot
OSU University Advancement *05/07*
Participated in meetings with the Vice President for University Advancement focusing on the impacts of advancement on the broader implications of research
Oregon State University Board of Trustees Presenter at annual meeting *09/06*
OSU University Advancement Presenter *05/06*
OSU University Advancement Faces of OSU banner subject *01/06*
COAS Board of Advisors Presenter at annual meeting *07/05*