

CURRICULUM VITAE

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Born: May 1st, 1970 in Helsinki, Finland
Citizenship: U.S.A. and Finland

EDUCATION

Ph.D. in Zoology (2003), University of Hawaii at Manoa.
B.A. in Zoology (1993), University of Hawaii at Manoa.

CURRENT AFFILIATIONS

- Hawaii Institute of Marine Biology (HIMB) – Associate Researcher (50% FTE). July 2007 – present. Duties include: Design and execute field projects to assess and acoustically monitor biological activity in marine habitats globally. Lead field investigations of marine mammals. Conduct experimental research on cetacean acoustic behavior.
- Oceanwide Science Institute (OSI) – President (50% FTE). April 1998 - present. Duties include: Create, plan and execute OSI objectives, secure funding for operational costs, implement programs and coordinate the activities of members of the organization (www.oceanwidescience.org).
- Marine Biology Graduate Program, University of Hawaii at Manoa– Graduate Faculty. February 2014 – present. Duties include: Supervise and advise the work of graduate students.
- Department of Biology, University of Hawaii at Manoa – Associate Cooperating Graduate Faculty. July 2014 – present. Duties include: Supervise and advise the work of graduate and undergraduate students.

SUMMARY STATISTICS

Journal publications accepted or in review = 51
Book chapters accepted or in review = 10
Books edited = 1
Funds secured in the past 10 years as PI or as contract lead = \$3,030,408. As co-PI = \$2,101,424
Graduate students supervised = 5
Graduate student committees = 15
Invited presentations = 16
Research Gate Score (www.researchgate.net) = 35.12 (92.5%)

EMPLOYMENT AND RESEARCH HISTORY

Marine Bioacoustician. Joint Institute for Marine and Atmospheric Research, University of Hawaii. Sept. 2007 – Aug. 2012. Duties included: Lead and develop all phases of a passive acoustics

monitoring program for NOAA's Pacific Islands Fisheries Science Center, Coral Reef Ecosystem Division.

Lecturer. Department of Biology – University of Hawaii at Manoa. January 2012 – July 2015. Duties included: Teach BIOL 331 – Biology of Marine Mammals.

Post-Doctoral Fellow. Pacific Islands Fisheries Science Center, Coral Reef Ecosystem Division. April 2003 – July 2007. Duties included: Design and execute field research projects and develop passive acoustic tools, including electronics (e.g. the Ecological Acoustic Recorder, EAR) and analysis algorithms, to assess and monitor biological activity in remote marine habitats in the Pacific. Work with ship-based active acoustic systems to study scattering layer communities around islands and atolls in the Pacific. Supervise the work of graduate and undergraduate students.

Project Leader. SPLASH – Oahu - OSI. January 2004 – April 2006. Duties included: Planning and leading a field effort to photo-ID and biopsy humpback whales (*Megaptera Novaeangliae*) occurring off Oahu, Hawaii as part of the international collaborative project SPLASH (Structure of Populations, Levels of Abundance and Status of Humpback Whales).

Doctoral Student Researcher. Marine Mammal Research Program, HIMB. August 1996 – May 2003. Dissertation research focused on the bioacoustics and behavioral ecology of Hawaiian spinner dolphins (*Stenella longirostris*) and other delphinid species. This work involved extensive development and field application of state-of-the-art electronic instrumentation and data analysis algorithms.

Research Assistant. Marine Mammal Research Program, HIMB. July 1998 – February 1999 and July 2002 – May 2003. Duties included: Creating and implementing the data analysis algorithms for a humpback whale bioacoustics study, analyzing the data and reporting on the results.

Biology Instructor. Biology Program – University of Hawaii at Manoa. August 1996 – July 1999 and August 2000 – July 2002. Duties included: Teaching two weekly introductory biology laboratory courses, guiding student experiments and dissections, grading weekly assignments, and creating, administering and grading laboratory exams.

Project Leader. Whale/ship collision study - OSI. January 2002 – September 2003. Duties included: Designing, conducting and reporting on a study examining the historical occurrence of whale/vessel collisions in Hawaiian waters for the Hawaiian Islands Humpback Whale National Marine Sanctuary.

Project Leader. Kalaeloa Barber's Point Dolphin Survey - OSI. February 2001 – July 2001. Duties included: Designing, conducting and reporting on a field study examining the distribution of humpback whales and dolphins in the vicinity of Kalaeloa Barber's Point Harbor. Aiding with the preparation of a Biological Assessment report to establish the effects of proposed construction activities on local marine mammal populations.

Project Leader. UDDAS Development Project - OSI. September 2000 – August 2002. Duties included: Designing, building and testing the hardware and software for an Underwater Dolphin Data Acquisition System (UDDAS) capable of obtaining simultaneous video and broadband directional acoustic data from free-ranging dolphins.

Research Assistant. Marine Mammal Research Program, HIMB. January 2000 – July 2000. Duties included: Designing, conducting and reporting on a study examining the distribution of humpback whales and dolphins along SW Oahu, Hawaii and relating findings to the potential impacts of an experimental high-speed ferry system on marine mammals in the area.

Laboratory Technician. HIMB. February 1995 - August 1995. Duties included: Collecting data for coral development and regeneration experiments, conducting field surveys of coral reefs, and managing coral cultures.

Assistant Biologist. Mediterranean Dolphin Association, Cadaques, Spain. June 1994 - December 1994. Duties included: Conducting research on the behavior of four captive bottlenose dolphins (*Tursiops truncatus*).

Laboratory Technician. Pacific Biomedical Research Center, Honolulu, HI. January 1992 - June 1992. Duties included: Conducting experiments on the metamorphosis of invertebrate larvae, managing laboratory cultures and assisting researchers as needed.

Research Assistant. National Marine Fisheries Service, Honolulu, HI. July 1990 - July 1991. Duties included: assisting in tagging and radiotracking efforts of Hawaiian green sea turtles (*Chelonia midas*).

TEACHING HISTORY

Department of Biology – University of Hawaii at Manoa. BIOL 331 – Biology of Marine Mammals. Spring semester 2012 and 2013. Summer term 2014 & 2015.

Biology Department – University of Hawaii at Manoa. BIOL 171L and BIOL 172L – Introductory Biology I & II laboratory. August 1996 to July 1999 and August 2000 to July 2002

PUBLICATIONS AND PRESENTATIONS

Publications:

- Lammers, M.O. and Oswald, J.N. (in review) “Communication in Oceanic Delphinids” In: Acoustic Communication in Cetaceans, Janik, V. and Sayigh L., eds. Springer
- Emmons, C., Hanson, B. and Lammers, M.O. (in review) “Seasonal occurrence of cetaceans along the Washington Coast from passive acoustic monitoring.” Submitted to NW Sci.
- Filous, A., Friedlander, A., Koike, H., Lammers, M.O., Wong, A., Stone, K. and Sparks, R. (in review) “Displacement effects of heavy human use on the coral reef predators within the Molokini Marine Life Conservation District.” Submitted to Mar. Poll. Bul.
- Cascão, I., Lammers, M.O., Domokos, R., Marques, V., Domínguez, R., Santos, R.S. and Silva, M.A. (in review) “Spatio-Temporal Variation in Micronekton Assemblages at Seamounts in the Azores.” Submitted to Front. Mar. Sci.
- Richard, G., Filatova, O.A., Samarra, F.I.P., Fedutin, I.D., Lammers, M.O., and Miller, P.J. (in review) “Diel variation in Icelandic killer whale foraging and acoustic behaviour.” Submitted to Mar. Ecol. Prog. Ser.
- Papale, E., Azzolin, M., Cascao, I., Gannier, A., Lammers, M.O., Martin, V., Oswald, J., Perez-Gil, M., Prieto, R., Silva, M., and Giacomina, C. (in review) “Dolphins' whistles: can they reveal genetic structuring?” Submitted to BMC Biology.
- Blevins, R., Atkinson, S. and Lammers, M.O. (in press) “Spatial and temporal patterns in the calling behavior of beluga whales, *Delphinapterus leucas*, in Cook Inlet, Alaska. Mar. Mamm. Sci.

- Mooney, T.A., Kaplan, M.B. and Lammers, M.O. (2016) "High levels of particle motion signals from humpback whale calls and implications for acoustic communication" *Biol. Lett.* 12: 20160381; DOI: 10.1098/rsbl.2016.0381
- Munger, L.M., Lammers, M.O., Cifuentes, M., Würsig, B., Jefferson, T. and Hung, S. (2016) "Indo-Pacific humpback dolphin occurrence north of Lantau Island, Hong Kong based on year-round passive acoustic monitoring." *J. Acoust. Soc. Am.* 140, 2754-2765.
- Lammers, M.O., Howe, M., Engelhaupt, A., Zang, E., Munger, L., and Nosal, E.M. (2016) "Acoustic monitoring of dolphin occurrence and activity in a MINEX training range." *Proc. Mtgs. Acoust.* 27, 010011.
- Lucke, K., Popper, A.N., Hawkins, A.D., Akamatsu, T., André, M., Branstetter, B.K., Lammers, M.O., Radford, C.A., Stansbury, A.L., Mooney, T.A. (2016) "Auditory sensitivity in aquatic animals" *J. Acoust. Soc. Am.* 139, 3097-3101.
- Castellote, M., Small, R., Lammers, M.O., Jenniges, J., Mondragon, J. and Atkinson, S., (2016) "Dual instrument passive acoustic monitoring of belugas in Cook Inlet, Alaska" *J. Acoust. Soc. Am.* 139:2697.
- Gruden, P., White, P., Oswald, J.N., Barkley, Y. Cerchio, S., Lammers, M.O., Baumann-Pickering, S. (2016) "Differences in oscillatory whistles produced by spinner (*Stenella longirostris*) and pantropical spotted (*Stenella attenuata*) dolphins." *Mar. Mamm. Sci.* 32:520-534.
- Lammers, M.O. and Munger, L.M. (2016) "From Shrimp to Whales: biological applications of passive acoustic monitoring on a remote Pacific coral reef." In: *Listening in the Ocean*, Au, W.W.L. and Lammers, M.O., eds. Springer. Pp 61-81
- Au, W.W.L. and Lammers, M.O., eds. (2016) *Listening in the Ocean*. Springer, New York. 416p
- Lammers, M.O. and Oswald, J.N. (2015) "Analyzing the acoustic communication of dolphins" In: *Dolphin Communication & Cognition*, Herzing, D.L. and Johnson, C.M. eds. MIT Press, Cambridge, MA.
- Magnúsdóttir, E.E., Lim, R., Miller, P.J.O., Rasmussen, M.H., Lammers, M.O. and Svavarsson, J (2015). "Humpback whale (*Megaptera novaeangliae*) song unit repertoire progression on a subarctic feeding ground." *J. Acoust. Soc. Am.* 138:3362-3374.
- Freeman, S.E., Buckingham, M.J., Freeman, L.A., Lammers, M.O., and D'Spain, G.L. (2015) "Cross-correlation, triangulation, and curved-wavefront focusing of a horizontal, bi-linear hydrophone array for locating biological sound sources on a coral reef." *J. Acoust. Soc. Am.* 137:30-41.
- Papale, E., Azzolin, M., Cascao, I., Gannier, A., Lammers, M.O., Martin, V., Oswald, J., Perez-Gil, M., Prieto, R., Silva, M., and Giacoma, C. (2014) "Acoustic divergence between bottlenose dolphin whistles from the Central-Eastern North Atlantic and Mediterranean Sea." *Acta Ethologica.* 17:155-165.
- Magnúsdóttir, E.E., Rasmussen, M.H., Lammers, M.O. and Svavarsson, J. (2014) "Humpback whale songs during winter in subarctic waters." *Polar Biol.* 37:427-433
- Azzolin, M., Gannier, A., Lammers, M.O., Oswald, J.N., Papale, E., Buscaino, G., Buffa, G., Mazzola, S. and Giacoma, C. (2014) "Combining whistles acoustic parameters to discriminate Mediterranean odontocetes for their Passive Acoustic Monitoring." *J. Acoust. Soc. Am.* 135:502-512
- Castellote, M., Clark, C.W. and Lammers, M.O. (2014) "Dispersal of North Atlantic fin whales (*Balaenoptera physalus*) into the Mediterranean Sea and exchange between populations: Response to Giménez et al." *Rapid Commun. Mass Spectrom.* 2014, 28, 665-667.
- Au W.W.L., Giorli, G., Chen, J., Copeland, A, Lammers, M.O., Richlen, M., Jarvis, S., Morrissey, R., and Moretti, D. (2014) "Presence and seasonal variation of deep diving foraging odontocetes around Kauai, Hawaii using remote autonomous acoustic recorders." *J. Acoust. Soc. Am.* 135:521-530

- Lammers, M.O., Pack, A.A., Lyman, E., and Espiritu, L. (2013). "Trends in whale/vessel collisions in Hawaiian waters" *J. Cetacean Res. Manage.* 13:73-80.
- Hanson, B, Emmons, C., Ward, E., Nystuen, J. and Lammers, M.O. (2013) "Assessing the coastal occurrence of endangered killer whales using autonomous passive acoustic recorders." *J. Acoust. Soc. Am.* 134:3486-3495.
- Papale, E., Azzolin, M., Cascao, I., Gannier, A., Lammers, M.O., Martin, V., Oswald, J., Perez-Gil, M., Prieto, R., Silva, M., and Giacomina, C. (2013) "Macro and micro geographic variation of short-beaked common dolphin's whistles between the Mediterranean Sea and Atlantic Ocean." *Ethol. Ecol. Evol.* doi: 10.1080/03949370.2013.851122
- Madsen, P.T., Lammers, M.O., Wisniewska, D.M. and Beedholm, K. (2013) "Sound production in echolocating delphinids (*Tursiops truncatus* and *Pseudorca crassidens*) is dynamic, but unilateral: clicking on the right side and whistling on the left side." *J. Exp. Biol.* 216:4091-4102.
- Lammers, M.O., Castellote, M., Small, R., Atkinson, S., Jenniges, J., Rosinski, A., Moore, S., Chris Garner, C., Au, W.W.L. (2013) "Passive acoustic monitoring of Cook Inlet beluga whales (*Delphinapterus leucas*)." *J. Acoust. Soc. Am.* 134:2497-2504
- Papale, E., Azzolin, M., Cascao, I., Gannier, A., Lammers, M.O., Martin, V., Oswald, J., Perez-Gil, M., Prieto, R., Silva, M., and Giacomina, C. (2013) "Geographic variability in the acoustic parameters of striped dolphin's (*Stenella coeruleoalba*) whistles." *J. Acoust. Soc. Am.* 133:1126-1134.
- Au W.W.L., Giorli, G., Chen, J., Copeland, A, Lammers, M.O., Richlen, M., Jarvis, S., Morrissey, R., Moretti, D., and Klinck, H. (2013) "Nighttime foraging by deep diving echolocating odontocetes off the Hawaiian islands of Kauai and Ni'ihau as determined by passive acoustic monitors" *J. Acoust. Soc. Am.* 133:3119-3127.
- Oswald, J.N., Rankin, S., Barlow, J., Oswald, M. and Lammers, M.O. (2013) "Real-time Odontocete Call Classification Algorithm (ROCCA): software for species identification of delphinid whistles" In: Detection, classification and localization of marine mammals using passive acoustics. 2003-2013: 10 years of international research. Adams, O. Ed. Association DIRAC
- Azzolin, M., Papale, E., Lammers, M.O., Gannier, A., and Giacomina, C. (2013) "Geographic variation of whistles of the striped dolphin (*Stenella coeruleoalba*) within the Mediterranean Sea" *J. Acoust. Soc. Am.* 134:694-705.
- Ou, H., Au, W.W.L., Zurk, L. and Lammers, M.O. (2013) "Automated Extraction and Classification of Time-Frequency Contours in Humpback Vocalizations" Accepted for publication in *J. Acoust. Soc. Am.* 133:301-310.
- Munger, L.M., Lammers, M.O., Fisher-Pool, P., and Wong, K. (2012) "Humpback whale (*Megaptera novaeangliae*) song occurrence at American Samoa in long-term passive acoustic recordings, 2008–2009." *J. Acoust. Soc. Am.* 132:2265-2272.
- Vaughn-Hirshorn, R.L., Hodge, K.B, Würsig, B, Sappenfield, R.H., Lammers, M.O. and Dudzinski, K.M. (2012) "Characterizing dusky dolphin sounds from Argentina and New Zealand" *J. Acoust. Soc. Am.* 132:498-506.
- Castellote, M, Clark, C.W. and Lammers, M.O. (2012) "Acoustic and behavioral changes by fin whales (*Balaenoptera physalus*) in response to shipping and airgun noise." *Biol. Conserv.* doi:10.1016/j.biocon.2011.12.021
- Lammers, M.O., Small, R., Atkinson, S., Castellote, M., Jenniges, J., Rosinski, A., Moore, S., Chris Garner, C., Au, W.W.L. (2012). "Acoustic monitoring of beluga whales (*Delphinapterus leucas*) in Cook Inlet, Alaska." In: Effects of Noise on Aquatic Life. Popper, A. N. and Hawkins, A. eds. Springer Science+Business Media, LLC, New York. Pp. 341-344.
- Au, W. W. L., Richlen, M., Lammers, M. O. (2012). "The Soundscape of a Nearshore Reef near an Urban Center," In: Effects of Noise on Aquatic Life. Popper, A. N. and Hawkins, A. eds. Springer Science+Business Media, LLC, New York.

- Castellote, M, Clark, C.W. and Lammers, M.O. (2011) "Fin whale (*Balaenoptera physalus*) population identity in the western Mediterranean Sea." Mar. Mamm. Sci. DOI: 10.1111/j.1748-7692.2011.00491.x
- Lammers, M.O., Fisher-Pool, P., Au, W.W.L., Wong, K., Meyer, C. and Brainard, R., (2011). "Humpback whale *Megaptera novaeangliae* song reveals wintering activity in the Northwestern Hawaiian Islands" Mar. Ecol. Prog. Ser. 423:261-268.
- Fossa, F., Lammers, M.O. and Orsi Relini, L. (2011) "Measuring interactions between common bottlenose dolphin (*Tursiops truncatus*) and artisanal fisheries in the Ligurian Sea." Biol. Mar. Mediter. 18: 180-183.
- Dudzinski, K., Brown, S., Lammers, M.O., Lucke, K., Mann, D., Simard, P., Wall, C, Rasmussen, M., Magnúsdóttir, E.E., Tougaard, J. and Eriksen, N. (2011). "Trouble-shooting deployment and recovery options for various stationary passive acoustic monitoring devices in both shallow and deep water applications." J. Acoust. Soc. Am. 129:436-448
- Wiener, C. and Lammers, M.O. (2010). "Sound & Observation: Listening for Clues Using Real-Life Acoustic Recorders." Am. Biol. Teach. 72:365-368.
- Au, W.W.L., Lammers, M.O. and Yin, S. (2010). "Acoustics of dusky dolphins" In: Dusky Dolphins: Master Acrobats Off Different Shores. Eds. Würsig, B. & Würsig, M. Elsevier. pp. 75-97.
- Hoeke, R., Gove, J., Smith, E., Wong, K.B., Brainard, R.E., Fisher-Pool, P., Lammers, M.O., Merritt, D., Vetter, O.J. and C.W. Young, (2009) "Coral Reef Ecosystem Integrated Observing System (CREIOS): In situ oceanographic observations at the U.S. Pacific islands and atolls." J. Oper. Oceano. 2:3-12.
- Lammers, M.O. and Castellote, M. (2009). "The beluga whale produces two pulses to form its sonar signal" Biol. Lett. 5:297-301.
- Lammers, M.O., Brainard, R.E. and Au, W.W.L., Mooney, T.A. and Wong K. (2008). "An Ecological Acoustic Recorder (EAR) for long-term monitoring of biological and anthropogenic sounds on coral reefs and other marine habitats." J. Acoust. Soc. Am. 123:1720-1728
- Au, W. W. L. and Lammers, M.O. (2007). "Cetacean acoustics" In: Handbook of Acoustics. Ed. T. Rossing. Springer-Verlang. pp. 805-837.
- Oswald, J.N., Rankin, S., Barlow, J. and Lammers, M.O. (2007) "ROCCA: A new tool for real-time acoustic species identification of delphinid whistles". J. Acoust. Soc. Am. 122:587-595.
- Rankin, S., Oswald, J.N., Barlow, J. and Lammers, M.O. (2007). "Vocalizations of the northern right whale dolphin (*Lissodelphis borealis*)." J. Acoust. Soc. Am. 121: 1213-1218.
- Lammers, M.O., Brainard, R.E. and Au, W.W.L (2006). "Diel trends in the mesopelagic biomass community of the Northwestern Hawaiian Islands observed acoustically." Atoll Research Bulletin, 543:391-407.
- Rasmussen M.H., Lammers M.O., Beedholm K. and Miller L.A. (2006). "Source levels and directionality of white-beaked dolphin (*Lagenorhynchus albirostris*) whistles". J. Acoust. Soc. Am. 120:510-517.
- Au, W. W. L., Pack, A.A., Lammers, M.O., Herman, L.M., Deakos, M. and Andrews, K. (2006). "Acoustic properties of humpback whale song". J. Acoust. Soc. Am. 120:1103-1110.
- Lammers, M.O., Schotten, M. and Au, W.W.L. (2006). "The spatial context of whistle and click production in pods of Hawaiian spinner dolphins (*Stenella longirostris*)." J. Acoust. Soc. Am. 119: 1244-1250.
- Lammers, M.O. (2004). "Occurrence and behavior of Hawaiian spinner dolphins (*Stenella longirostris*) along Oahu's leeward and south shores." Aqua. Mamm. 30:237-250.
- Lammers, M.O., Au, W.W.L. and Aubauer, R. (2004). "A comparative analysis of echolocation and burst-pulse click trains in *Stenella longirostris*." In: Echolocation in Bats and Dolphins. Eds. Thomas, J., Moss, C. & Vater, M. University of Chicago Press. pp. 414-419.

- Schotten, M., Au, W. W. L., Lammers M. O., and Aubauer R. (2004). "Echolocation recordings and localizations of wild spinner dolphins (*Stenella longirostris*) and pantropical spotted dolphins (*Stenella attenuata*) using a four hydrophone array." In: *Echolocation in Bats and Dolphins*. Eds. Thomas, J., Moss, C. & Vater, M. University of Chicago Press. pp. 393-400.
- Lammers, M.O., Au, W.W.L and Herzing, D.L. (2003). "The broadband social acoustic signaling behavior of spinner and spotted dolphins." *J. Acoust. Soc. Am.* 114:1629-1639.
- Lammers M.O. and Au W.W.L. (2003). "Directionality in the whistles of Hawaiian spinner dolphins (*Stenella longirostris*): A signal feature to cue direction of movement?" *Mar. Mamm. Sci.* 19:249-264.
- Benoit-Bird, K.J., Au, W.W.L., Brainard, R.E. and Lammers, M.O. (2001). "Diel horizontal migration of the Hawaiian mesopelagic boundary community observed acoustically." *Mar. Ecol. Prog. Ser.* 217:1-14.
- Au, W. W. L., Mobley, J., Burgess, W. C., Lammers, M. O., Nachtigall, P. E. (2000). "Seasonal and diurnal trends of chorusing humpback whales wintering in waters off west Maui." *Mar. Mamm. Sci.* 16:530-544.
- Aubauer, R., Lammers, M. O. and Au, W. W. L. (2000). "One-hydrophone method of estimating distance and depth of phonating dolphins in shallow water." *J. Acoust. Soc. Am.* 107:2744-2749.
- Au, W. W. L., Lammers, M. O. and Aubauer, R. (1999). "A Portable Broadband Data Acquisition System for field studies in bioacoustics," *Mar. Mamm. Sci.* 15:526-531.

Technical Reports:

- Munger, L.M., M.O. Lammers, J.N. Oswald, T.M. Yack, and W.W.L. Au. 2015. Passive Acoustic Monitoring of Cetaceans within the Mariana Islands Range Complex (MIRC) Using Ecological Acoustic Recorders (EARs). Final Report. Prepared for Commander, U.S. Pacific Fleet, Environmental Readiness Division, Pearl Harbor, HI. Submitted to Naval Facilities Engineering Command Pacific, EV2 Environmental Planning, Pearl Harbor, HI under Contract No. N62470-10-D-3011 Task Orders KB14 and KB17 issued to HDR Inc., Honolulu, HI. September.
- Lammers, M.O., L.M. Munger, J.N. Oswald, and T.N. Yack. 2015. Passive acoustic monitoring of cetaceans in the Hawaii Range Complex using Ecological Acoustic Recorders (EARs). Prepared for U.S. Fleet Forces Command. Submitted to Naval Facilities Engineering Command (NAVFAC) Pacific, Honolulu, Hawaii, under Contract No. N62470-10-D-3011, Task Orders KB14 and KB22, issued to HDR Inc., Norfolk, Virginia. Prepared by Oceanwide Science Institute, Honolulu, Hawaii. January 2015.
- Würsig, B., Kim, K., Lammers, M Munger, L and Hung, S. (2013) Tuen Mun – Chek Lap Kok Link (Southern Connection Viaduct Section) Baseline Monitoring Report for Underwater Noise and Dolphin Acoustic Behavioural Monitoring. CONTRACT NO. HY/2012/07 Hong Kong-Zhuhai-Macao Bridge.
- Würsig, B., Lammers, M Munger, L and Hung, S. (2013) Hong Kong Link Road – Section between HKSAR Boundary and Scenic Hill on Dolphin Acoustic Behaviour Monitoring Construction Phase Report. CONTRACT HY/2011/09 Hong Kong-Zhuhai-Macao Bridge.
- Barkley, Y., Oswald, J.N., Carretta, J.V., Rankin, S., Rudd, A. and Lammers, M.O. (2011) Comparison of real-time and post-cruise acoustic species identification of dolphin whistles using ROCCA (Real-time Odontocete Call Classification Algorithm). NOAA-TM-NMFS-SWFSC-473
- Lammers M, Au W (2011) "Spatial and temporal patterns of a deep-water acoustic chorus observed off Oahu, Hawaii." Final report for Western Pacific Regional Fishery Management Council award 09-WPC-028.
- Fisher-Pool P, Lammers M, Wong K (2011) American Samoa passive acoustic monitoring site ROSE, Rose Atoll, American Samoa, ecological acoustic recorder (EAR), 14-March-2008 to 16-

July-2009. Level 1 analysis of passive acoustic observations. Pacific Islands Fisheries Science Center, PIFSC Internal Report IR-11-001

- Fisher-Pool P, Lammers M, Wong K (2010) Northwestern Hawaiian Islands, French Frigate Shoals site FFS2, ecological acoustic recorder (EAR) 6-September-2006 to 1-October-2007, Level 1 analysis of passive acoustic observations, Pacific Islands Fisheries Science Center, PIFSC Internal Report IR-10-031.
- Donovan M, Fisher-Pool P, Lammers M, Wong K (2010) Northwestern Hawaiian Islands, passive acoustic monitoring site FFS1, French Frigate Shoals, Ecological Acoustic Recorder (EAR), 06-September-2006 to 24-September-2007, Level 1 analysis of passive acoustic observations, Pacific Islands Fisheries Science Center. PIFSC Internal Report IR-10-029.
- Lammers, M.O. (2009). "Acoustic monitoring for the presence of beluga whales (*Delphinapterus leucas*) in Kotzebue Sound, Alaska." OSI Technical Report 2009-1. Prepared for the Native Village of Kotzebue.
- Lammers, M.O., Pack, A.A. and Davis, L. (2003). "Historical evidence of whale/vessel collisions in Hawaiian waters (1975 – Present)." OSI Technical Report 2003-01. Prepared for NOAA's Hawaiian Islands Humpback Whale National Marine Sanctuary.
- Lammers, M.O., Albinsson, L., Benoit-Bird, K. and Davis, L. (2001). "The occurrence and behavior of whales and dolphins near Kalaeloa Barbers Point Harbor: A study to assess the potential interactions with proposed harbor modification activities." OSI Technical Report 2001-1. Prepared for the Hawaii State Department of Transportation – Harbors Division.
- Lammers, M.O., W.W.L. Au, and D. Feinholz (2000). "The occurrence and distribution of marine mammals along Oahu's Ewa/Honolulu coast: a study to assess the potential interactions between high-speed ferry traffic and local populations." MMRP/HIMB Technical Report 20001. Prepared for Pacific Marine & Supply Co., Ltd.

First-authored presentations:

- Lammers, M.O. (2016) "Natural Sounds and Healthy Parks: Global research and initiatives – Impacts on marine animals." Invited presentation at the IUCN World Conservation Congress Hawaii 2016, Honolulu, Hawaii (September 2016).
- Lammers, M.O., Howe, M., Engelhaupt, A., Zang, E., Munger, L. Nosal, E. and Bell, J. (2016) "The response by coastal dolphins to naval mine exercise (MINEX) training activities off Virginia Beach, USA." 4th International Conference on the Effects of Noise on Aquatic Life, Dublin, Ireland (July 2016).
- Lammers, M.O., Kaplan, M., Mooney, T.A., Zang, E., Fisher-Pool P., and Brainard, R. (2016) "Macro and micro-scale spatial variation in the acoustic activity of snapping shrimp on coral reefs in the Pacific." 13th International Coral Reef Symposium, Honolulu, Hawaii (June 2016).
- Lammers, M.O., Oswald, J.O., Kuegler, A. and Nosal, E. (2015) "Does depth matter? Investigating the effect of recording depth on delphinid signal characteristics." Abstracts of the 21st Biennial Conference on the Biology of Marine Mammals in San Francisco, CA (December 2015).
- Lammers, M.O. (2015) "EARs in the Sea: Past, Present and Future" Invited Seminar at the Pacific Islands Fisheries Science Center in Honolulu, HI (June 24, 2015).
- Lammers, M.O., Howe, M., Engelhaupt, A., Nosal, E. and Bell, J. (2015) "Investigating the response of coastal dolphins to mine exercise (MINEX) training activities." Abstract of the Oceanoise2015 conference in Villanova, Spain (May 2015)
- Lammers, M.O., Howe, M., Engelhaupt, A and Bell, J. (2015) "Investigating the response of coastal dolphins to mine exercise (MINEX) training activities." Abstracts of the Watkins Memorial Symposium in New Bedford, MA (March 2015)

- Lammers, M.O. (2014) "Listening in the sea: investigating cetaceans and their habitats using acoustics." Invited seminar at the University of Hawaii Marine Biology Graduate Program (January 24, 2014)
- Lammers, M.O., Kraus, M., Engelhaupt, A., Kumar, A. and Bell, J. (2013) "The acoustic response of coastal dolphins to mine exercise (MINEX) training activities." Abstracts of the 20th Biennial Conference on the Biology of Marine Mammals in Dunedin, New Zealand (December 2013).
- Lammers, M.O., Ou, H., Au, W.W.L., Krauss, M. and Meigs, H. "Automated vs. manual detection of delphinid signals in long-term passive acoustic data from the Northwestern Hawaiian Islands." 6th International Workshop on Detection, Classification, Localization and Density Estimation of Marine Mammals using Passive Acoustics, St. Andrews, Scotland (June 2013).
- Lammers, M.O., Richlen, M., Goodwin, B., Au, W.W.L. and Rosinski, A.E. (2012) "Spatial and temporal patterns of a deep-water acoustic chorus observed in Hawaiian waters" 5th Annual Hawaiian Islands Symposium, Honolulu, HI (May 2012).
- Lammers, M.O., Andujar, G.P., Richlen, M., Oswald, J.N., Au, W.W.L. and Rosinski, A.E. (2011) "Spatial and temporal patterns of odontocete occurrence off Oahu, Hawaii" Abstracts of the 19th Biennial Conference on the Biology of Marine Mammals in Tampa, Florida (November 2011).
- Lammers, M.O., Munger, L., Fisher-Pool, P., Meyer, C., Wong, K., Au, W.W.L. and Brainard, R. (2011), "Long-term passive acoustic monitoring of nearshore ecosystems in the Northwestern Hawaiian Islands" J. Acoust. Soc. Am. 130, 2536 (162st meeting of the ASA, San Diego, California).
- Lammers, M.O., Richlen, M., Au, W.W.L., Rosinski, A.E. and Andujar, G.P. (2011) "Seasonal and spatial patterns of cetacean occurrence off Oahu, HI observed acoustically." J. Acoust. Soc. Am. 129, 2372 (161st meeting of the ASA, Seattle, Washington).
- Lammers, M.O., Richlen, M., Rosinski, A.E. and Au, W.W.L. (2011) "Seasonal chorusing in deep-water coastal habitats recorded off Oahu, HI." J. Acoust. Soc. Am. 129, 2434 (161st meeting of the ASA, Seattle, Washington).
- Lammers, M.O., Small, R.J., Atkinson, S., Castellote, M., Jenniges, J.J., Rosinski, A.E., Moore, S.E., Garner, C. and Au, W.W.L. (2010) "Acoustic monitoring of beluga whales in Cook Inlet, Alaska." Proceedings of the 2nd International Conference on the Effects of Noise on Aquatic Life, Cork, Ireland. (August 2010).
- Lammers, M.O., Au, W.W.L., Fisher-Pool, P., Wong, K., Meyer, C. and Brainard, R., (2009). "Humpback whale (*Megaptera novaeangliae*) wintering behavior in the Northwestern Hawaiian Islands observed acoustically." Abstracts of the 18th Biennial Conference on the Biology of Marine Mammals in Quebec City, Canada (November 2009).
- Lammers, M.O., Castellote, M., Richlen, M., Au, W.W.L. and J.A. Esteban (2009). "Production of double pulses during echolocation by two odontocete species." Invited presentation at the 5th Animal Biosonar Conference in Kyoto, Japan (September, 2009).
- Lammers, M.O., Wong, K., Brainard, R., Fisher-Pool, P., Au, W.W.L. (2009). "Passive acoustic monitoring of marine ecosystems in the Pacific Islands Region" J. Acoust. Soc. Am. 125, 2547 (Invited presentation at the 157th meeting of the ASA, Portland, Oregon).
- Lammers, M.O., Fisher-Pool, P., Bernasconi, S., Au, W.W.L., Wong, K. and Brainard, R. (2009). "Patterns of coastal use by Hawaiian spinner dolphins (*Stenella longirostris*) observed using passive acoustic monitoring." Abstracts of 23rd Annual Conference of the European Cetacean Society, Istanbul, Turkey (March 2009).
- Lammers, M.O., Bernasconi, S., Au, W.W.L., Wong, K. and Brainard, R. (2008). "Patterns of coastal use by Hawaiian spinner dolphins (*Stenella longirostris*) observed using passive acoustic monitoring." J. Acoust. Soc. Am. 124, 2483 (156th meeting of the ASA, Miami, Florida)

- Lammers, M.O. and Castellote, M. (2008). "One plus one equal one: the beluga whale (*Delphinapterus leucas*) produces two pulses to form its sonar click." J. Acoust. Soc. Am. 123, 3772 (155th meeting of the ASA, Paris, France)
- Lammers, M.O., Mooney, T.A. and Au, W.W.L. (2007). "The occurrence and use of coastal and offshore habitats by Hawaiian delphinids measured using passive acoustic monitoring" Abstracts of the 17th Biennial Conference on the Biology of Marine Mammals in Cape Town, South Africa (December 2007).
- Lammers, M.O., Stimpert, A.K., Au, W.W.L. and Mooney, T.A. (2007). "Diel and spatial patterns of singing behavior of humpback whales off Oahu, Hawaii." Abstracts of the 21st Annual Conference of the European Cetacean Society, San Sebastian, Spain (April 2007).
- Lammers, M.O. (2007). "Passive acoustic monitoring of biological and anthropogenic activities in nearshore habitats." Invited seminar at the Scripps Institute of Oceanography on Jan. 10, 2007.
- Lammers, M.O., Stieb, S., Au, W.W.L., Mooney, T.A., Brainard, R.E. and Wong, K. (2006). "Temporal, geographic, and density variations in the acoustic activity of snapping shrimp." J. Acoust. Soc. Am. 120, 3013 (4rd Joint Meeting of the ASA and ASJ, Honolulu, HI).
- Lammers, M.O., Mooney, T.A., Brainard, R.E. and Au, W.W.L. (2006). "Passive acoustic monitoring of biological activity on coral reefs and in nearby waters." 2006 Ocean Sciences Meeting, Honolulu, Hawaii (February 2006).
- Lammers, M.O., Stimpert, A.K., Au, W.W.L. and Mooney, T.A. (2005). "Diel and spatial patterns in the singing behavior of humpback whales off Oahu, Hawaii". Abstracts of the 16th Biennial Conference on the Biology of Marine Mammals in San Diego, California (December 2005).
- Lammers, M.O., Mooney, T.A., Brainard, R.E. and Au, W.W.L. (2005). "Passive acoustic monitoring of biological activity on coral reefs and in nearby waters." J. Acoust. Soc. Am. 118, 1908. (150th meeting of the ASA, Minneapolis, MN.)
- Lammers, M.O., Stimpert, A.K., Au, W. W. L. and Mooney, T.A. (2005). "Diel and spatial patterns in the singing behavior of humpback whales off Oahu, Hawaii." J. Acoust. Soc. Am. 118, 1940. (150th meeting of the ASA, Minneapolis, MN.)
- Lammers, M.O., Brainard, R.E. and Au, W.W.L. (2005). "Diel trends observed acoustically in the mid-water biomass occurring near Pacific islands and atolls". Abstracts of the 1st Annual Underwater Acoustic Measurements Conference, Heraklion, Crete (June 2005).
- Lammers, M.O., Schotten, M. and Au, W.W.L. (2004). "The spatial context of free-ranging Hawaiian spinner dolphins producing acoustic signals". J. Acoust. Soc. Am. 115, 2615. (148th meeting of the ASA, San Diego, CA.)
- Lammers, M.O., Brainard, R.E. and Au, W.W.L. (2004). "Diurnal trends in the mid-water biomass community of the Northwestern Hawaiian Islands observed acoustically". J. Acoust. Soc. Am. 115, 2488. (148th meeting of the ASA, San Diego, CA.)
- Lammers, M.O., Au, W.W.L. and Schotten, M. (2003). "The spatial context of whistles and burst pulses produced by Hawaiian spinner dolphins (*Stenella longirostris*)." Abstracts of the 15th Biennial Conference on the Biology of Marine Mammals, Greensboro, North Carolina (December 2003).
- Lammers, M.O., Au, W.W.L. and Aubauer, R. (2002). "Narrowband *Phocoena*-like clicks produced by a delphinid species." J. Acoust. Soc. Am. 112, 2334. (144th meeting of the ASA, Cancun, Mexico.)
- Lammers, M.O. and Au, W.W.L. (2001). "Directionality and the occurrence of social acoustic signals in traveling pods of Hawaiian spinner dolphins." Abstracts of the 14th Biennial Conference on the Biology of Marine Mammals, Vancouver, Canada (December 2001).
- Lammers, M.O. (2001). "Localizing dolphin acoustic signals using a three-hydrophone towed array: preliminary findings." 26th Annual Tester Memorial Symposium. Honolulu, HI.

- Lammers, M.O., Au, W.W.L., Herzing, D., Oswald, J. (1999). "Bandwidth Characteristics of the Social Acoustic Signals of Three Species of Free-Ranging Delphinids." Abstracts of the 13th Biennial Conference on the Biology of Marine Mammals, Wailea, Maui (December 1999).
- Lammers, M.O. (2000). "The occurrence and behavior of Hawaiian spinner dolphins (*Stenella longirostris*) along leeward and south Oahu: Implications for conservation and management" Pac. Sci. 54:95-96 (24th Annual Tester Memorial Symposium. Honolulu, HI).
- Lammers, M.O., Au, W.W.L. and Aubauer, R. (1998). "A comparative analysis of echolocation and burst-pulse click trains in *Stenella longirostris*." Invited presentation at the Biological Sonar Conference in Carvoeiro, Portugal (May 1998).
- Lammers, M.O., Au, W.W.L. and Aubauer, R. (1998). "The broadband nature of spinner dolphin (*Stenella longirostris*) social signals: evidence from field studies." Abstracts of the 12th Biennial Conference on the Biology of Marine Mammals in Monaco (January 1998).
- Lammers, M.O., Au, W.W.L. and Aubauer, R. (1997). "Broadband characteristics of spinner dolphin (*Stenella longirostris*) social acoustic signals." J. Acoust. Soc. Am. 102, 3122. (134th meeting of the ASA, San Diego, CA.)
- Lammers, M.O. and Au, W.W.L. (1997). "Broadband recording of Hawaiian spinner and spotted dolphin social acoustic signals." 22nd Annual Tester Memorial Symposium. Honolulu, HI.
- Lammers, M.O. and Au, W.W.L. (1997). "Broadband recording of free-ranging delphinid social acoustic signals". The 1997 Symposium on Information Processing by Aquatic Mammals. Vallejo, CA.
- Lammers, M.O. and Au, W.W.L. (1996). "Broadband recording of social acoustic signals of the Hawaiian spinner and spotted dolphins." J. Acoust. Soc. Am. 100, 2609 (3rd Joint Meeting of the ASA and ASJ, Honolulu, HI).

Co-authored presentations:

- Kaplan, M., Mooney, T.A., Lammers, M.O. and Zang, E. (2016) "Temporal and Spatial Variability in Biological Sound Production on Tropical Coral Reefs Is Linked to Biota." 4th International Conference on the Effects of Noise on Aquatic Life, Dublin, Ireland (July 2016).
- Fisher-Pool, P.I., Lammers, M.O. and Brainard, R. (2016) "Does Chlorophyll-a turn up the volume? Exploring the relationship between oceanographic factors and coral reef soundscapes." Abstracts of the 13th International Coral Reef Symposium, Honolulu, Hawaii (July 2016)
- Howe, M., Lammers, M.O. and Zang, E. (2015) "Odontocete occurrence in the Maui Nui region investigated using passive acoustic monitoring and visual survey techniques." Abstracts of the 21st Biennial Conference on the Biology of Marine Mammals in San Francisco, CA (December 2015).
- Kaplan, M.B., Mooney, T.A. and Lammers, M.O. (2015) "Characterization of the acoustic particle motion and pressure components of humpback whale song." Abstracts of the 21st Biennial Conference on the Biology of Marine Mammals in San Francisco, CA (December 2015).
- Lim, R., Magnúsdóttir, E.E., Rasmussen, M.H., Lammers, M.O. (2015) "Humpback whale (*Megaptera novaeangliae*) winter mating season song from a subarctic feeding ground." Abstracts of the 21st Biennial Conference on the Biology of Marine Mammals in San Francisco, CA (December 2015).
- Munger, L.M., Lammers, M.O., Oswald, J.N. et al (2015) "Cetacean occurrence from passive acoustic monitoring in Guam and the Marianna Islands, 2011-2012." Abstracts of the 21st Biennial Conference on the Biology of Marine Mammals in San Francisco, CA (December 2015).
- Chen, J., Lammers, M.O. and Au, W.W.L. (2013) "Variations in the songs of humpback whales (*Megaptera novaeangliae*) during a winter season in the Northwestern and Main Hawaiian Islands." Abstracts of the 20th Biennial Conference on the Biology of Marine Mammals in Dunedin, New Zealand (December 2013).

- Meigs, H., Lammers, M.O., Kraus, M., Munger, L., Ou, H., Au, W.W.L and Perez Andujar, G. (2013) "Cetacean occurrence and activity in the Papahānaumokuākea Marine National Monument." Abstracts of the 20th Biennial Conference on the Biology of Marine Mammals in Dunedin, New Zealand (December 2013).
- Munger, L., Lammers, M.O., Meigs, H. Howe, M., Hung, S. and Würsig, B. (2013) "Indo-Pacific Humpback dolphin (*Sousa chinensis*) acoustic monitoring near a construction area off West Lantau Island, Hong Kong. Abstracts of the 20th Biennial Conference on the Biology of Marine Mammals in Dunedin, New Zealand (December 2013).
- Magnúsdóttir, E.E., Michl, S.C., Rasmussen, M.H., Lammers, M.O. and Svavarsson, J. (2013) "Using long-term passive acoustics to monitor the Atlantic cod (*Gadus morhua*) in Icelandic waters." ICES Annual Science Conference, Reykjavík, Iceland (September 2013).
- Schotten, M., Würsig, B., Orbach, D., Sexton, K., Piewitz, S. and Lammers, M.O. (2013) "Who is vocalizing? Acoustic localization of broadband clicks plotted onto video recordings of individual dusky dolphins (*Lagenorhynchus obscurus*) in New Zealand." 6th International Workshop on Detection, Classification, Localization and Density Estimation of Marine Mammals using Passive Acoustics, St. Andrews, Scotland (June 2013).
- Berchok, C.L., Crance, J.L., Thompson, J.L., Grassia, S.L., Claphan, P.J., Wright, D.L. and Lammers, M.O. (2012) "Right whale versus bowhead whale gunshot calls in the Bering Sea." J. Acoust. Soc. Am. 132, 1950 (164th meeting of the ASA, Kansas City, Missouri).
- Thompson, J.L., Berchok, C.L., Claphan, P.J., Lammers, M.O. and Moore, S.E. (2012) "Spatio-temporal distribution of fin whales in the Bering Sea (2007-2011)." J. Acoust. Soc. Am. 132, 1951 (164th meeting of the ASA, Kansas City, Missouri).
- Magnúsdóttir E.E., Rasmussen, M. and Lammers, M.O. (2012) "Humpback whale (*Megaptera novaeangliae*) sound production during winter in Iceland." Abstracts of 26th Annual Conference of the European Cetacean Society, Galway, Ireland (March 2012).
- Oswald, M., Oswald, J.N., Lammers, M.O., Rankin, S. and Au, W.W.L. (2011) "Integration of real-time odontocetes classification algorithm into PAMGUARD signal processing software." J. Acoust. Soc. Am. 129, 2639 (161st meeting of the ASA, Seattle, Washington).
- Chen, J., Lammers, M.O. and Au, W.W.L. (2011) "A comparison of the song of humpback whales (*Megaptera novaengliae*) wintering in the Northwestern and Main Hawaiian Islands." J. Acoust. Soc. Am. 129, 2638 (161st meeting of the ASA, Seattle, Washington).
- Copeland, A., Au, W.W.L., Lammers, M.O., Pack, A.A. and Oswald, J.N. (2011) "Characterizing and classifying humpback whale (*Megaptera novaengliae*) song units." J. Acoust. Soc. Am. 129, 2639 (161st meeting of the ASA, Seattle, Washington).
- Emmons, C.K., Hanson, B.M., Holt, M.M., Noren, D.P. and Lammers, M.O. (2011) "Monitoring southern resident killer whale behavior on the outer coast of Washington using passive acoustics." J. Acoust. Soc. Am. 129, 2608 (161st meeting of the ASA, Seattle, Washington).
- Castellote, M., Clark C.W., Lammers, M.O. (2010). "Acoustic compensation to shipping and airgun noise by Mediterranean fin whales." Proceedings of the 2nd International Conference on the Effects of Noise on Aquatic Life, Cork, Ireland (August 2010).
- Fisher-Pool, P., Lammers, M.O. and Munger, L.M. (2010). "The effect of vessel engine noise on the acoustic signaling behavior of the Hawaiian dascyllus." Proceedings of the 2nd International Conference on the Effects of Noise on Aquatic Life, Cork, Ireland (August 2010).
- Au, W.W.L., Richlen, M., Lammers, M.O. (2010). "The soundscape of a nearshore coral reef near an urban center." Proceedings of the 2nd International Conference on the Effects of Noise on Aquatic Life, Cork, Ireland (August 2010).
- Castellote, M., Clark C.W., Lammers, M.O. (2010) "Acoustic compensation to shipping and airgun noise by Mediterranean fin whales (*Balaenoptera physalus*)." J. Acoust. Soc. Am. 127, 1726. (159th meeting of the ASA, Baltimore, MD).

- Crance, J., Berchok, C., Clapham, P., Lammers, M.O., Mellinger, D.K. and Nieukirk, S. (2010) "Right whale distribution in the Bering Sea revisited: A fresh look." J. Acoust. Soc. Am. 127, 1758 (159th meeting of the ASA, Baltimore, MD).
- Magnusdottir, E.E., Rasmussen, M.H. and Lammers, M.O. (2010) "Combining visual and fixed passive acoustic methods to measure annual variability of cetacean occurrence at the NE-coast of Iceland." J. Acoust. Soc. Am. 127, 1825 (159th meeting of the ASA, Baltimore, MD).
- Fossa, F., Lammers, M.O. and Gnone, G. (2010) "Preliminary study of bottlenose dolphin (*Tursiops truncatus*) coastal pattern using an Ecological Acoustic Recorder (EAR). Abstracts of 24th Annual Conference of the European Cetacean Society, Straslund, Germany (March 2010).
- Castellote, M., Clark, C.W., Lammers, M.O. (2010) "Fin whale (*Balaenoptera physalus*) population identity, migration movements and noise impact in the Western Mediterranean Sea." Abstracts of 24th Annual Conference of the European Cetacean Society, Straslund, Germany (March 2010)
- Atkinson, S., Lammers, M., Jenniges, J., Moore, S. and Ewald, J. (2009) "Validation of passive acoustic monitoring techniques for the detection of Cook Inlet belugas." Abstracts of the 18th Biennial Conference on the Biology of Marine Mammals in Quebec City, Canada (November 2009).
- Small, R.J., Moore, S.E., Atkinson, S., Lammers, M.O., Jenniges, J., Castellote, M., Garner, C. and Ewald, J. (2009) "Sound conservation: Acoustic monitoring of beluga whales in Cook Inlet, Alaska." Abstracts of the 18th Biennial Conference on the Biology of Marine Mammals in Quebec City, Canada (November 2009).
- Würsig, B., Au, W.W.L. Lammers, M.O. and Vaughn, R.L. (2009) "Dusky dolphin, *Lagenorhynchus obscurus*, echolocation and vocal and non-vocal communication." Abstracts of the 5th Animal Biosonar Conference in Kyoto, Japan (September, 2009).
- Vaughn, R.L., Würsig, B. and Lammers, M.O. (2009) "Dusky dolphin (*Lagenorhynchus obscurus*) vocalizations during fish herding and feeding." Abstracts of the 5th Animal Biosonar Conference in Kyoto, Japan (September, 2009).
- Au, W.W.L., Lammers, M.O. and Richlen, M.F. (2009) "A survey of remote underwater autonomous acoustic recorders." J. Acoust. Soc. Am. 125, 2546. (157th meeting of the ASA, Portland, OR).
- Fisher-Pool, P., Lammers, M.O., Wong, K., Brainard, R.E. and Au, W.W.L. (2009) "Passive acoustic monitoring of fish activity in the Hawaiian Archipelago." J. Acoust. Soc. Am. 125, 2589. (157th meeting of the ASA, Portland, OR).
- Cascao, I., Lammers, M.O., Silva, M.A., Afonso, P., Prieto, R. and Santos, R.S. (2009) "Monitoring cetaceans on seamounts in the Azores using passive acoustic techniques.: J. Acoust. Soc. Am. 125, 2547. (157th meeting of the ASA, Portland, OR).
- Magnusdottir, E.E., Rasmussen, M.H. and Lammers, M.O. (2009) "Annual variability of cetacean occurrence along the northeast coast of Iceland measured ecological acoustic recorders." J. Acoust. Soc. Am. 125, 2617. (157th meeting of the ASA, Portland, OR).
- Hanson, M.B., Emmons, C.K., Nystuen, J.A. and Lammers, M.O. (2009) "Using moored passive acoustic recorders to assess seasonal occurrence and movements of southern resident killer whales in the coastal waters of Washington State." J. Acoust. Soc. Am. 125, 2589. (157th meeting of the ASA, Portland, OR).
- Oliveira, C. Goncalves, J., Cruz, M.J., Silva, M.A., Prieto, R., Lammers, M.O. and Santos, R.S. (2009) "Acoustic characterization of whale watching boats in the Azores." J. Acoust. Soc. Am. 125, 2519. (157th meeting of the ASA, Portland, OR).
- Lace, N., Kuczaj, S.A. and Lammers, M.O. (2008) "Burst pulses produced by free-ranging bottlenose dolphins in Tampa Bay, Florida and Mississippi Sound, Mississippi." J. Acoust. Soc. Am. 123, 3779 (156th meeting of the ASA, Miami, FL)

- Apprill, A.M., Mooney, T.A., Stimpert, A.K., Lammers, M.O. and Rappe, M.S. (2007) "A novel approach to examine environmental and health-related characteristics of humpback whales using the bacterial composition of epithelial skin" Abstracts of the 17th Biennial Conference on the Biology of Marine Mammals in Cape Town, South Africa (December 2007).
- Schotten, M., Lammers, M.O., Herzing, D.L., Sexton, K.D. and Au, W.W.L. (2007) "Application of a new diver-operated 4-channel acoustic/video device to record and localize high frequency dolphin sounds." Abstracts of the 21st Annual Conference of the European Cetacean Society, San Sebastian, Spain (April 2007).
- Oswald, J.N., Rankin, S., Barlow, J. and Lammers, M.O. (2005). "A new tool for real-time acoustic identification of dolphin whistles using two different statistical methods" Abstracts of the 16th Biennial Conference on the Biology of Marine Mammals in San Diego, California (December 2005).
- Pack, A.A., Herman, L.M., Deakos, M.H., Hakala, S., Craig, A., Olson, J., Spitz, S., Herman, E., Goetschius, K. and Lammers, M.O. (2005) "First report of sounds recorded from individual humpback whale calves on the Hawaiian wintering grounds." Abstracts of the 16th Biennial Conference on the Biology of Marine Mammals in San Diego, California (December 2005).
- Schotten, M., Lammers, M.O., Sexton, K.D. and Au, W.W.L. (2005) "A new underwater portable 4-channel acoustic/video recording unit to study echolocation and communication of individual wild dolphins." Abstracts of the 16th Biennial Conference on the Biology of Marine Mammals in San Diego, California (December 2005).
- Stimpert, A.K., Wiley, D.A., Shorter, K.A., Barton, K.L., Johnson, M., Ware, C., Arsenault, R., Lammers, M.O. and Au, W.W.L (2005). "A novel sound recorded in association with bottom feeding in humpback whales." Abstracts of the 16th Biennial Conference on the Biology of Marine Mammals in San Diego, California (December 2005).
- Oswald, J.N., Rankin, S., Barlow, J. and Lammers, M.O. (2005). "A new tool for real-time acoustic species identification of delphinid whistles" J. Acoust. Soc. Am. 118, 1909. (150th meeting of the ASA, Minneapolis, MN)
- Stimpert, A.K., Wiley, D.A., Barton, K.L., Johnson, M., Lammers, M.O. and Au, W.W.L (2005) "Sound production patterns from humpback whales in a high latitude foraging area" J. Acoust. Soc. Am. 118, 1940. (150th meeting of the ASA, Minneapolis, MN)
- Au, W. W. L., Lammers, M.O., Stimpert, A.K. and Schotten, M. (2005) "The temporal characteristics of humpback whale songs." J. Acoust. Soc. Am. 118, 1940. (150th meeting of the ASA, Minneapolis, MN)
- Au, W. W. L., Stimpert, A.K., Lammers, M.O., and Johnson, N. (2005). "Autonomous remote humpback whale acoustic monitoring devices." J. Acoust. Soc. Am. 117, 2551. (149th meeting of the ASA, Vancouver, Canada.)
- Au, W. W. L., Lammers, M.O., Pack, A.A. and Herman, L.M. (2004). "Vertical array measurements of humpback whale songs." J. Acoust. Soc. Am. 115, 2520. (147th meeting of the ASA, New York, NY)
- Au, W. W. L., Pack, A.A., Lammers, M.O., Herman, L.M., Andrews, K. and Deakos, M. (2003). "The acoustic field of singing humpback whales in the vertical plane." J. Acoust. Soc. Am. 115, 2277. (145th meeting of the ASA, Nashville, TN)
- Pack, A.A., Au, W. W. L., Lammers, M.O., Herman, L.M., and Deakos, M. (2003). "Determining the acoustic field and transmission characteristics of singing humpback whales on the Hawaiian winter grounds." Abstracts of the 15th Biennial Conference on the Biology of Marine Mammals, Greensboro, North Carolina (December 2003).
- Au, W. W. L., Lammers, M.O., Nachtigall, P. E., Mobley, J. and Burgess, W.C. (2000). "Characteristics of chorusing sounds of humpback whales wintering in waters off western Maui." J. Acoust. Soc. Am. 115, 2612. (140th meeting of the ASA, Newport Beach, CA)

- Burgess, W.C., Au, W.W.L., Mobley, J., Lammers, M.O. and Nachtigall, P.E. (1999). "Seasonal and diurnal trends of chorusing humpback whales wintering in waters off west Maui." Abstracts of the 13th Biennial Conference on the Biology of Marine Mammals, Wailea, Maui (December 1999).

ACADEMIC COMMITTEES

- PhD candidates supervised: 2 (Irma Cascão, University of the Azores, 2009-present; Anke Kügler, University of Hawaii, 2015-present).
- Master's candidates supervised: 3 (Pollyanna Fisher-Pool, University of Hawaii, 2011-2015; Marian Howe, University of Hawaii, 2014-present; Megan McElligott, University of Hawaii, 2015-present).
- PhD candidates advised: 10 (Andrew Titmus, University of Hawaii, 2013-present; Jessica Chen, University of Hawaii, 2010-present; Alexis Rudd, University of Hawaii, 2012-2015; Lee Shannon, University of Hawaii, 2012-present; Adam Smith, University of Hawaii, 2015-present; Brendan Rideout, University of Hawaii, 2015-present; Edda Magnúsdóttir, University of Iceland, 2009-2015; Rachael Blevins, University of Alaska Fairbanks, 2010-2015; Elena Papale, University of Torino, Italy, 2008-present; Marta Azzolin, University of Torino, Italy, 2008).
- Master's candidates advised: 5 (Sanami Nakayama, University of Hawaii, 2014-2015; Simona Bernasconi, University of Pavia, 2008-2009), Natalija Lace, University of Mississippi, 2007-2009; Sara Stieb, University of Wuerzburg; 2005-2006; Dennis Tanay, University of Hawaii, 2003-2004.
- Hawaii Institute of Marine Biology Director Search Committee (Feb-Aug 2015).
- Marine Biology Graduate Program Admissions Committee (2015-2016).

INVITATIONS

- Session Co-organizer and Co-Chair "Session in Honor of Whitlow Au" 5th Joint Meeting of the ASA and ASJ, Honolulu, Hawaii (November 2016).
- Invited presentation at the IUCN World Conservation Congress Hawaii 2016, on Sep. 2, 2016.
- Session Co-organizer "Acoustic, optical, and chemical seascapes and their application to restoration and management." 13th International Coral Reef Symposium, Honolulu, Hawaii (July 2016).
- Invited seminar at the Pacific Islands Fisheries Science Center in Honolulu on June 24 2015.
- Invited presentation at the OceanNoise2015 conference in Vilanova, Spain (May 2015).
- Invited presentation at Whale Tales in Lahania, Maui (February 2015).
- Invited seminar at the University of Hawaii Marine Biology Graduate Program (January 2014).
- Invited presentation at the 162nd meeting of the ASA, San Diego, California (November 2011).
- Invited presentation at workshop on "Acoustic Monitoring for the Marine Protected Area of *Sousa chinensis* in Taiwan" (October, 2011).
- Invited seminar at the University of Hawaii Biology Department (February 2011).
- Invited seminar at Hawaii Pacific University on Sep. 30, 2010.
- Invited presentation at the 5th Animal Biosonar Conference in Kyoto, Japan (September 2009).
- Invited presentation at the 157th meeting of the ASA, Portland, Oregon (May 2009).
- Session organizer and Chair "Animal Bioacoustics and Acoustical Oceanography: Autonomous Remote Monitoring Systems for Marine Animals" 157th meeting of the ASA, Portland, Oregon (May 2009).
- Invited seminar at the University of the Azores (Portugal) on August 3, 2007.
- Invited seminar at the University of Pavia (Italy) on May 8, 2007.
- Invited seminar at the University of Torino (Italy) on May 3, 2007.

- Invited seminar at the Scripps Institute of Oceanography on January 10, 2007.
- Session Chair “Animal Bioacoustics and Underwater Acoustics: Remote Monitoring of Biological Sounds” 4th Joint Meeting of the ASA and ASJ, Honolulu, Hawaii November 2006).
- Invited presentation at the 4th Animal Biosonar Conference in Carvoeiro, Portugal (May 1998).

GRANTS AND CONTRACTS

- Office of Naval Research (2015-2016 – PI)
- Ove-ARUP, Ltd. Hong Kong (2013, 2015, 2016 - PI)
- Hong Kong Airport Authority (2012, 2013, 2015, 2016 - PI)
- HDR, Inc. (2012, 2013, 2014, 2015 - PI)
- NOAA/Northwest Fisheries Science Center (2007, 2008, 2009, 2010, 2011, 2012, 2014, 2015, 2016 – Contract lead)
- Smultea Environmental Sciences (2014 – PI)
- World Maritime University, Sweden (2014 – Contract lead)
- Alaska Department of Fish and Game (2009, 2010, 2011, 2012, 2013, 2014 - PI)
- State of Hawaii, Department of Land and Natural Resources (2013, 2014 - PI)
- Hong Kong Cetacean Research Project (2013 - PI)
- City and Borough of Yakutat, Alaska (2013, Contract lead)
- North Pacific Fisheries Foundation (2012, Contract lead)
- Woods Hole Oceanographic Institution (2012, 2016, Contract lead)
- Oceanic Society (2012, Contract lead)
- Office of Naval Research (2006, 2008, 2009, 2012, Co-PI)
- University of North Carolina Greensboro (2011, Contract lead)
- Asociacion Tursiops, Spain (2011, Contract lead)
- NOAA/Pacific Islands Fisheries Science Center (2008, 2009, 2010, 2011, PI)
- NOAA/Alaska Fisheries Science Center (2008, 2009, 2010, 2011, Contract lead)
- University of Aberdeen, UK (2009, 2010, 2011 - Contract lead)
- Geo-Marine, Inc. (2010, Contract lead)
- Defense University Research Instrumentation Program (2004, 2010, Co-PI)
- NOAA/National Marine Fisheries Service (2009 – Co-PI)
- Alaska Pacific University (2009 - Contract lead)
- Submon, Spain (2009, Contract lead)
- Western Pacific Fisheries Management Council (2007, 2009 - PI)
- Marineland, Antibes, France (2008 - Contract lead)
- University of Iceland, Iceland (2008 - Contract lead)
- U.S. Fish and Wildlife Service (2008 - Contract lead)
- Universitat Politècnica de Catalunya, Spain (2007, Contract lead)
- University of the Azores, Dep. de Oceanografia e Pescas, Portugal (2007, 2008, Contract lead)
- Alaska Sea Life Center (2008, PI)
- L’Oceanografic, Parques Reunidos de Valencia, Spain (2008, Contract lead)
- CRAM, Spain (2006, Contract lead)
- Marisla Foundation (2006, PI)
- EDAW, Inc. (2004, PI)
- State of Hawaii, Department of Land and Natural Resources (2004, 2005, 2006, PI)
- Tetra Tech, Inc. (2003, PI)
- NOAA/Hawaiian Islands Humpback Whale National Marine Sanctuary (2002, PI)
- State of Hawaii Department of Transportation, Harbors Division (2001, PI)

- Homeland Foundation (2000, 2002, 2003, 2004, PI)
- Pacific Marine & Supply Co. (2000, PI)
- John G. Shedd Aquarium Grant for Coastal Aquatic Sciences (1997, PI)

PROFESSIONAL AFFILIATIONS AND SOCIETIES

- Member, Society for Marine Mammalogy (SMM)
- Member, Acoustical Society of America (ASA)
- Co-Chair, IUCN WCPA Natural Sounds Advisory Group
- ASA Animal Bioacoustics Technical Committee
- Chair & Alternate Chair, Research Committee, Hawaiian Islands Humpback Whale National Marine Sanctuary (HIHWNMS) Advisory Council (2003-2010)
- President, Punahou Wilder Apartments Owner's Association (2004-2007)

TECHNICAL SKILLS

- Skilled in electronic circuitry analysis, including the use of oscilloscopes, spectrum analyzers, signal generators and multimeters to test and troubleshoot electronics.
- Skilled at designing and developing electronics for field research. Examples of electronics developed include: a Portable Broadband Data Acquisition System (PBDAS), a three-element towed hydrophone array for broadband field recording of dolphins, a diver-operated video and broadband acoustic Underwater Dolphin Data Acquisition System (UDDAS), and an Ecological Acoustic Recorder (EAR) for monitoring biological and anthropogenic activity in remote marine habitats.
- Proficient in the use of computer programming languages, such as LabView and Matlab, for developing analysis algorithms and data acquisition software.

EXPERIENCE AT SEA

- U.S. Coast Guard 100 Ton Mate's License w/towing endorsement.
- Over 2200 hours of small vessel (17'- 43') field work in Hawaiian waters between 1996 and 2016.
- Eight 10-day research cruises on a 62' vessel in offshore Bahamian waters between 1999 and 2006.
- Multi-day field operations on vessels in Alaska, California, New Zealand, Iceland, the Azores, the Canary Islands and the Spanish and Italian coasts of the Mediterranean Sea.
- Participated in NOAA RAMP cruise OES-03-06 aboard Oscar Elton Sette (12 Jul - 17 Aug, 2003).
- Participated in NOAA RAMP cruise OES-04-04 aboard Oscar Elton Sette (21 Mar - 9 Apr, 2004).
- Participated in NOAA RAMP cruise OES-05-02 aboard Oscar Elton Sette (22 Feb - 6 Mar, 2005).

OTHER SKILLS AND CERTIFICATES

- Fluent in German, French, Italian and Spanish and conversational knowledge of Finnish.
- FCC Marine radio operator's license.
- PADI Open Water Diver.