T. Aran Mooney

Associate Scientist

Biology Department, Woods Hole Oceanographic Institution Marine Research Facility – MS #50 ● Woods Hole, MA 02543, USA (508) 289-3714 ● www.whoi.edu/sites/amooney ● amooney@whoi.edu

Current Position

Associate Scientist, Woods Hole Oceanographic Institution

2014-present

Biology Department (tenure track position)

Education

Ph.D., Department of Zoology, Marine Biology specialization

2004-2008

University of Hawaii at Manoa, Honolulu, Hawaii "Temporal effects of sound on the odontocete auditory system: an electrophysiological study"

Advisor: Paul Nachtigall

M.S., Department of Zoology, Marine Biology specialization

2001-2003

University of Hawaii at Manoa, Honolulu, Hawaii

"Testing the efficacy of acoustically enhanced gillnets to reduce odontocete bycatch"

Advisor: Paul Nachtigall

B.S. in Biology, magna cum laude, Spanish minor

1996-2000

University of New Hampshire, Durham, New Hampshire

Positions Held

Assistant Scientist, Woods Hole Oceanographic Institution	2010-2014
Trustee, National Marine Life Center	2012-present
Postdoctoral Scholar, Woods Hole Oceanographic Institution	2008-2010

Supervisor: Darlene Ketten

Focus on comparative hearing in whales, dolphins, fishes and cephalopods.

Grass Postdoctoral Fellow, Marine Biological Laboratory

May-Aug 2008

Supervisor: Roger Hanlon

Auditory compatibilities of the squid, Loligo pealeii.

Graduate Assistant, University of Hawaii

2001-2008

Research Advisor: Dr. Paul Nachtigall

Work included effects of noise on marine mammals and fisheries target strength studies.

Scientific Consultant, e2M

2006-2007

Science Advisor for drafting U.S. Coast Guard Environmental Impact Statement (EIS)

Scientist, Atlantic Marine Mammal Survey, NMFS / NOAA

April 2002

Acoustic survey of marine mammals (pairing acoustics with visual survey data).

Hatchery Assistant, Aquaculture, Breeding, and Genetics Center

2001

Virginia Institute of Marine Science, William and Mary College

Managed oysters field sites and stock for aquaculture.

Research Questions

I am interested in the sensory biology and physiological ecology of key marine organisms in pelagic and reef environments. I often use bioacoustics as a means to address these overarching questions:

• What are the novel physiological and morphological adaptations marine organisms utilize to detect the world around them?

- How do specific adaptations facilitate or constrain a species' ecological interactions?
- How do human activities, such as climatic changes, increasing anthropogenic noise or fisheries interactions, impact an animal's detection of biologically relevant cues and signals?

Peer-Reviewed Publications

- **1.** Kaplan, MB, **Mooney, TA**, Partan, J, and Solow, A. Coral reef species assemblages are associated with ambient soundscapes. *Provisionally accepted with minor revisions to* Marine Ecology Progress Series.
- **2. Mooney, TA**, Yan, J, Yu, U, Ketten, DR, and Jen, IF. Hearing abilities and sound reception of broadband sounds in an adult Risso's dolphin (*Grampus griseus*). *Accepted with minor revisions In Revision* Journal of Comparative Physiology A.
- **3.** Samson**, J, **Mooney, TA**, Hanlon, R, and Guskerloo, S. 2014. Behavioral responses and potential habituation to sound stimuli in cuttlefish, *Sepia officinalis*. Journal of Experimental Biology. 217 (24) 4347-4355.
- **4.** Pfister, CA, Esbaugh, A, Frieder, C, Baumann, H, Bockmon, E, White, M, Carter, B, Benway, H, Blanchette, C, Carrington, E, McClintock, J, McCorkle, D, McGillis, J, **Mooney, TA** and Ziveri, P. Detecting the Unexpected: A Research Framework for Ocean Acidification. Environmental Science and Technology, Special Issue on "Ocean Acidification: its Causes, Consequences, and Cures" 48 (17): 9982–9994. doi: 10.1021/es501936p.
- **5.** Kaplan**, MB, **Mooney, TA**, Sayigh, L, Baird, R. 2014. Repeated call types in Hawaiian melon-headed whales (*Peponocephala electra*). Journal of the Acoustical Society of America. 36(3): 1394–1401. *denotes undergraduate student; **graduate student, **postdoctoral advisee
- **6.** Scharr, AL*, **Mooney, TA**, Schweizer, FE, and Ketten DK. 2014. Aminoglycoside induced damage in the statocyst of squid, *Loligo pealeii*. Biological Bulletin. 227(1): 51-60.
- **7.** Castellote, M^{@#}, **Mooney, TA**[®], Hobbs, R, Quackenbush, L, Goetz, C, Gaglione, E. 2014. Baseline hearing abilities and variability in wild beluga whales (*Delphinapterus leucas*). Journal of Experimental Biology. 217: 1682-1691.

 Contribution: Denotes equal contribution by the authors and sharing first authorship.
- **8. Mooney, TA,** Li, SH, Ketten, DK, Wang, K, and Wang D. 2014. Hearing pathways in the finless porpoise, *Neophocaena asiaorientalis asiaorientalis*. Journal of Experimental Biology. 217: 444-452. doi: 10.1242/jeb.093773.
- **9.** Kaplan, M*, **Mooney, TA,** McCorkle, D, Cohen, A. 2013. Adverse effects of ocean acidification on early development of squid (*Doryteuthis pealeii*). PLoS ONE 8(5): e63714. doi:10.1371/journal.pone.0063714.
- **10. Mooney, TA**, Yamato, M**, and Branstetter, BK. 2012. Hearing in cetaceans: From natural history to experimental biology. Advances in Marine Biology. 63: 197-246. (*invited review*) **Cover Article.**
- **11.** Strobel, SM* and **Mooney, TA.** 2012. Detection of low frequency tones and whale predator sounds by American sand lance *Ammodytes americanus*. Journal of Fish Biology. 81(5):1646-1664. doi: 10.1111/j.1095-8649.2012.03423.x.
- **12. Mooney, TA,** Li, SH, Ketten, DK, Wang, K, and Wang D. 2011. Auditory temporal resolution and evoked responses to pulsed sounds for the Yangtze finless porpoises (*Neophocaena phocaenoides asiaeorientalis*). Journal of Comparative Physiology A. 197: 1149–1158.
- **13. Mooney, TA**, Hanlon, RT, Christensen-Dalsgaard, J, Madsen, PT, Nachtigall, PE Ketten, DR. 2010. Sound detection by the longfin squid (*Loligo pealeii*) studied with auditory evoked potentials:

- sensitivity to low-frequency particle motion and not pressure. Journal of Experimental Biology. 213: 3748-3759.
- **14. Mooney, TA**, Lee, WJ, and Hanlon, RT. 2010. Long-duration anesthetization of squid (*Doryteuthis pealeii*). Marine and Freshwater Behavior and Physiology. 43(4): 297–303
- **15.** Apprill, A, **Mooney, TA**, Lyman, E, Stimpert, A, and Rappé, M. 2010. Bacterial communities associated with the skin of free-ranging and health-compromised humpback whales. Environmental Microbiology and Environmental Microbiology Reports. 3:223-232.
- **16. Mooney, TA**, Pacini, AP, and Nachtigall, PE. 2009. False killer whale (*Pseudorca crassidens*) echolocation and acoustic disruption: Implications for long-line bycatch and depredation. Canadian Journal of Zoology. 87: 726-733.
- **17. Mooney, TA**, Nachtigall, PE, Vlachos, S. 2009. Sonar-induced temporary hearing loss in dolphins. Biology Letters. 5: 565-567.
- **18. Mooney, TA**, Nachtigall, PE, Breese, M, Vlachos, S, and Au, WWL. 2009. Predicting temporary threshold shifts in a bottlenose dolphin (*Tursiops truncatus*): the effects of noise level and duration. Journal of the Acoustical Society of America. 125(3): 1816-1826.
- **19. Mooney, TA**, Nachtigall, PE, Taylor, KA, Rasmussen, MH, and Miller, LA. 2009. Auditory temporal resolution of a wild white-beaked dolphin (*Lagenorhynchus albirostris*). Journal of Comparative Physiology A. 195:375-384.
- **20. Mooney, TA**, Nachtigall, PE, Castellote, M, Taylor, KA, Pacini, AP, and Esteban, JA. 2008. The hearing pathways and directional sensitivity of the beluga whale, *Delphinapterus leucas*. Journal of Experimental Marine Biology and Ecology. 362(2): 108-116.
- **21.** Nachtigall, PE, **Mooney, TA**, Taylor, KA, Miller, LA, Rasmussen, MH, Akamatsu, T, Teilmann, J, Linnenschmidt, M, and Vikingsson, G. 2008. Shipboard measurements of the hearing of the white-beaked dolphin, *Lagenorhynchus albirostris*. Journal of Experimental Biology. 211(4): 642-647 *Cover Article.*
- **22.** Lammers, MO, Brainard, RE, Au, WWL, **Mooney, TA,** Wong, K. 2008. An ecological acoustic recorder (EAR) for long-term monitoring of biological and anthropogenic sounds on coral reefs and other marine habitats. Journal of the Acoustical Society of America. 123(3): 1720-1228.
- **23. Mooney TA**, Au, WWL, Nachtigall PE, and Trippel, EA. 2007. Acoustic and stiffness properties of gill nets as they relate to small cetacean bycatch. ICES Journal of Marine Science. 64(7): 1324-1332.
- **24.** Taylor, KA, Nachtigall, PE, **Mooney, TA**, Supin, AYa, and Yuen, MML. 2007. A portable system for the evaluation of the auditory capabilities of marine mammals. Aquatic Mammals. 33(1): 6-13.
- **25.** Nachtigall, PE, **Mooney, TA**, Taylor, KA, Yuen, MMY. 2007. Hearing and auditory evoked potential methods as applied to Odontocete cetaceans. Aquatic Mammals. 33(1): 93-99. *Cover Article.*
- **26.** Nachtigall, PE, Supin A Ya, Amundin, M, Röken, B, Møller, T, **Mooney, TA,** Taylor, KA, and Yuen, MMY. 2007. Polar bear, (*Ursus maritimus*), hearing measured with auditory evoked potentials. Journal of Experimental Biology. 210(7): 1116-1122. *Cover Article.*
- **27. Mooney TA**, Nachtigall PE, Yuen MMY. 2006. Temporal resolution of the Risso's dolphin, *Grampus griseus*, auditory system. Journal of Comparative Physiology A. 192: 373-380.
- **28.** Nachtigall, PE, Yuen, MMY, **Mooney TA**, Taylor KA. 2005. Hearing measurements from a stranded infant Risso's dolphin, *Grampus griseus*. Journal of Experimental Biology. 208: 4181-4188.
- **29. Mooney, TA**, Nachtigall, PE, and Au, WWL. 2004. Target strengths of a nylon monofilament and an acoustically enhanced gillnet: Predictions of biosonar detection ranges. Aquatic Mammals. 30(2): 220-226.

Book Chapters

1. Mooney, TA. Castellote[#], M, Hobbs, R, Quackenbush, L, Goetz, C, Gaglione, E. 2014. Measuring hearing in wild beluga whales. *In Press*. The Effects of Noise on Aquatic Life. Popper, A, Hawkins A (eds). Springer Science+Business Media, LLC, New York.

- **2.** Samson, J, **Mooney, TA**, Hanlon, R, and Guskerloo, S. 2014. <u>In Press.</u> Reviewing cephalopod behavioral to sound. The Effects of Noise on Aquatic Life. Popper, A, Hawkins A (eds). Springer Science+Business Media, LLC, New York.
- **3. Mooney, TA,** Hanlon, RT, Christensen-Dalsgaard, J, Madsen, PT, Ketten, DR, Nachtigall, PE. 2012. "The potential for sound sensitivity in cephalopods." in: The Effects of Noise on Aquatic Life. Popper, A, Hawkins A (eds). Springer Science+Business Media, LLC, New York. pg 125-128.

Submitted / In Prep

- **1.** Long, M, **Mooney, TA**, and Zarkroff, CA. Extreme low oxygen and decreased pH conditions naturally occur within developing squid egg capsules. <u>Submitted</u> to Scientific Reports.
- **2. Mooney, TA**, Katija, K, Shorter, KA, Hurst, T, Fontes, J, and Afonso, P. ITAG: An eco-sensor for fine-scale behavioral measurements of soft-bodied marine invertebrates. <u>Provisionally accepted</u> (with revisions) to Animal Biotelemetry.
- **3.** Kaplan, MK and Mooney, TA. Ambient noise and temporal patterns of boat activity in the US Virgin Islands National Park. *Submitted to Marine Pollution Bulletin*.
- **4.** Silva, T, **Mooney, TA**, Sayigh, and Baird, RW. Whistle characteristics, repeated whistle types and daytime dive behavior in Hawaiian pantropical spotted dolphins (*Stenella attenuata*). *In prep. Target journal: Journal of the Acoustical Society of America*.
- **5. Mooney, TA**, Hanlon, RT, Christensen-Dalsgaard, J, Madsen, PT, Nachtigall, PE Ketten, DR. Acoustic camouflage and squid detection of marine mammal predators. *In prep. To co-authors*.
- **6. Mooney, TA**, Kaplan, MK, Izzi, A, Conti, L, Sayigh, L. Temporal patterns of cusk eel sounds on Horseshoe Shoals, Ma. *In prep*. *Target journal: Journal of Experimental Marine Biology and Ecology*.
- **7. Mooney, TA**, Kaplan, MK, Tyack, PT, DeRuiter, S, Baird, R. Variability in individual false killer whale acoustic behavior and responses to anthropogenic sounds. *In prep. Invited submission to ICES J. Marine Science special issue on longline bycatch.*

Technical Reports / Theses

- **1. Mooney, TA**, Baird, RW, Tyack, PT, Nachtigall, PE, Millete, A, Webster, DL, & Schorr, GS. Bioacoustic behavior of Hawaiian insular false killer whales and melon-headed whales: A preliminary field report. ONR Marine Mammal & Biology Program Review. 16-19 April 2012. pg 87.
- **2. Mooney, TA** and Ketten, DK. 2010. Summary of harbor seal AEP hearing tests. Report to the Marine Animal Rehabilitation Center (MARC), University of New England. Sept 27, 2010. 8 pgs.
- **3. Mooney, TA** and Ketten, DK. 2010. Initial AEP hearing measures on UNE- MARC 09--078 Pv "Beverly" Report to the Marine Animal Rehabilitation Center (MARC), University of New England. Mar 27, 2010. 2 pgs.
- **4. Mooney, TA.** Li, S, Ketten, DK, Wang, D and Wang, K. Locations of auditory sensitivity and auditory temporal resolution of the finless porpoise. Report to the Chinese Institute of Hydrobiology. August, 2010. 7 pgs.
- **5. Mooney, TA.** 2008. Temporal effects of sound on the odontocete auditory system: an electrophysiological study. Ph.D. Dissertation. Department of Zoology, University of Hawaii. 188 pages. Advisor: Paul E. Nachtigall, Ph.D.
- **6. Mooney, TA**, Nachtigall, PE, Pacini, AF. 2007. Acoustic deterrents reduce false killer whale (*Pseudorca crassidens*) echolocation abilities but only so much. Report to Western Pacific

Fisheries Management Council and IFF4.

7. Mooney, TA. 2003. How do acoustically enhanced gillnets reduce bycatch: Measures of target strengths and flexural stiffness, and predictions of biosonar detection ranges. M.S. Report. Department of Zoology, University of Hawaii. 62 pgs.

Advisor: Paul E. Nachtigall, Ph.D.

8. Mooney, TA. 2001. Tag retention and mortality rates for *Homarus americanus*. Bigelow Laboratories and University of New England. 24 pgs.

Advisor: Richard Wahle, Ph.D.

- **9. Mooney, TA.** 2000. Cytotoxic assay with two anti-neoplastic drugs using the soft-shell clam *Mya arenaria* as a model for studying acute myelocytic leukemia. Senior Thesis. 43 pgs. Advisor: Charles W. Walker, Ph.D.
- **10. Mooney, TA.** 1998. Ganhaarr: Traditional knowledge of *Crocodylus perosis* and *Crocodylus johnstoni*. School for International Studies Independent Study.

Mentoring and Advising

2009-present Faculty in the WHOI-MIT Joint Program in Oceanography / Applied Ocean Science and Engineering

Mentoring WHOI-MIT Joint Program Ph.D. Students

2012-present Max Kaplan (primary advisor)2013-present Casey Zakroff (primary advisor)

2012-present Julie van der Hoop (Proposal and Oral Exam Chair, Committee member)

Mentoring Outside Graduate Students

2013-present Tammy Silva (Ph.D. UMass Dartmouth School of Marine Science and Technology, co-

mentoring with Laela Sayigh)

2011-2013 Julia Samson (M.S. Wageningen University)

Mentoring Undergraduate other Guest Students and Guest Investigators

- Dorianne Wheeler (UC Berkley; WHOI Summer Student Fellow), Annamaria Izzi^{*} (Cornell), Jessie Doyle (James Madison U), Greg Niguidula (RPI)
- 2013 Mary Ann Lee (Ohio Wesleyan University; WHOI Summer Student Fellow), Aimee Boucher ^{*}
 (Duke Coastal Environmental Management M.S. Applicant WHOI Duke Fellow), Sam Zacarias (CSU Northridge), Casey Zakroff (King Abdulla University of Science and Technology), Andrea Schlunk (New England Aquarium/ Universität Bremen)
- Jordan Carduner^{*} (Duke Coastal Environmental Management M.S. Applicant WHOI Duke Fellow), Luca Lamoni^{*} (U St. Andrews)
- 2011 Max Kaplan (U St. Andrews; WHOI Summer Student Fellow), Amy Streets (U Maryland), Margot Wilsterman (Connecticut College)
- 2010 Alex Scharr (Pomona College)
- 2009 Sarah Strobel [‡] (Princeton U), Alex Scharr [‡] (Pomona College) [‡]Co-supervised

2002-2008 Research Mentor for Undergraduates, Dept. of Zoology, University of Hawaii Mentoring of six undergraduate students in the design of short research experiments, collecting and analyzing data, interpreting results and preparation of a short paper/presentation.

	Teaching: Full Courses/Labs			
2012-13	Sensory Biology topics course, WHOI-MIT Joint Program. Co-taught with Laela Sayigh.			
2003	Graduate Teaching Assistant, Department of Zoology, University of Hawaii			
	Taught senior/graduate level Developmental Biology Lab.			
2002	Graduate Teaching Assistant, Biology Program, University of Hawaii			
	Taught upper level <i>Ecology and Evolution</i> lab. *Rating above course and dept. average*			
1999	Undergraduate Teaching Assistant, Department of Biology, UNH			
	Assisted graduate TA in teaching second semester "Introductory Biology"			
1998	Undergraduate Teaching Assistant, Department of Physics, UNH			
	Aided graduate TA in teaching second semester "Introductory Physics"			
Teaching: Invited Lectures				
2013	Howard University's visiting Marine Biology course, lecture on: Sound science in squid			
2013	WHOI Summer REU students. Sound Science: Hearing in marine mammals and squid			
2012	BP Short Course on Biological Oceanography: Bioacoustics			
2011	BP Short Course on Biological Oceanography: Bioacoustics			
2011	WHOI Summer Fellow Lecture Series: Hearing in marine mammals			
2011	WHOI Animal Behavior course: "Reef Bioacoustics"			
2010	SUNY, College of Environmental Science & Forestry: "Squid hearing"			
2010	Tufts Veterinary School: lecture on "Cephalopod auditory anatomy"			
2009	Harvard University's: "Marine Biology the Deep Ocean" course			
2009	WHOI Marine Mammal Science course: "Hearing and Sensory Ecology"			
2008-2010	Woods Hole Summer Science School (for 10-12 yr olds) "Marine Mammal Biology"			
2007	Univ. of Hawaii - Zoology Dept. Marine Bioacoustics Course (5 lectures)			
	(Included beginner MatLab and Intro to Marine Acoustics)			
2007	Univ. of Hawaii - Marine Options Program Marine Biology Summer Course (3 lectures)			
2007	Univ. of Hawaii - Marine Mammal Biology Class (2 lectures)			
2004-2006	Univ. of Hawaii - Zoology Dept: "Marine Mammal Hearing and Effects of Sonar"			
2003	Eckerd College: "BioSonar Capabilities of Marine Mammals"			

Invited Conference Presentations

- **1. Mooney, TA**, Kaplan, M**, Baird, R, and Partan, J. DTAGs, DAWGs, and Towfish: Using multiple recording platforms to characterize odontocete acoustic space. 166th Meeting of the Acoustical Society of America, San Francisco, CA, 2-6 December 2013.
- **2. Mooney, TA**. False Killer Whale Bioacoustics, Deterrents and Adaptations: Implications for longline bycatch. International Marine Mammal Longline Bycatch Mitigation Workshop. Woods Hole, MA. 22-25 October, 2013.
- **3. Mooney, TA**, Li, S, Ketten, DK, Wang, K, and Wang, D. Hearing pathways in the finless porpoise, *Neophocaena phocaenoides*, and implications for noise impacts. 161st Meeting of the Acoustical Society of America. Special Memorial Session in Honor of Ron Schusterman and Dave Kastak. Seattle, Washington, 23-27 May 2011.
- **4.** Ketten DK, Williams, CR, **Mooney, TA**, Matassa, K, and Patchett, K. *In vivo* measures of hearing in seals via Auditory Evoked Potentials (AEP), Otoacoustic Emissions (OAE), and Computerized Tomography (CT). 161st Meeting of the Acoustical Society of America. Special Memorial Session in Honor of Ron Schusterman and Dave Kastak. Seattle, Washington, 23-27 May 2011.

Mooney, TA, Hanlon, RT, Christensen-Dalsgaard, J, Madsen, PT, Ketten, DR, and Nachtigall, PE. The hearing of the longfin squid (*Loligo pealeii*) and sensitivity to low frequency noise. 2nd International Meeting on "The Effects of Noise on Aquatic Life." Cork, Ireland, Aug 15-20, 2010.

- **6. Mooney, TA**, Hanlon, RT, Christensen-Dalsgaard, J, Madsen, PT, Ketten, DR and Nachtigall, PE. Do squid hear echolocating predators? Acoustic sensitivity of the longfin squid, *Loligo pealeii*. 5th Animal Sonar Symposium. Kyoto, Japan. September 14-18, 2009.
- **7. Mooney, TA**, Nachtigall, PE, Pacini, A. 2007. Acoustic masking to reduce false killer whale long-line bycatch. 4th International Fishers Forum. Puntarenas, Costa Rica. November 12-15, 2007.
- 8. Mooney, TA, Nachtigall, PE, Supin, YA, Yuen, MML, Taylor, KT. 2006. The need for speed: The utility of rapid hearing tests. 20th Conference of the European Cetacean Society. Gdynia, Poland. April 2-7, 2006.

Invited Lectures & Public Presentations

- **1. Mooney, TA.** Do you hear what I hear? Population variation and 'unrepresentative' species. Biology Department Seminar. Woods Hole Oceanographic Institution. October 2, 2014.
- 2. Mooney, TA. Coral Reef Soundscapes in the Virgin Islands National Park, St John, USVI. Webinar to the National Park Service. February 26, 2014.
- 3. Mooney, TA. Acoustic ecology of belugas. Mystic Aquarium, Mystic CT. September 26, 2013.
- **4. Mooney, TA.** Marine mammal hearing and auditory evoked potentials. Department of Veterinary Medicine. National Chiayi University. Taiwan. December 16, 2011.
- **5. Mooney, TA.** Eco-Physiology, bioacoustics and sensory ecology of marine animals. Department of Biology. National Cheng Kung University. Taiwan. December 15, 2011.
- **6. Mooney, TA.** Sound sensitivity in cephalopods: Hearing, predator detection and ocean noise. University of North Carolina, Wilmington. September 30, 2011.
- 7. Mooney, TA. Detection of sound by the longfin squid. Duke University Marine Lab. March, 2011.
- **8. Mooney, TA.** Hearing in marine animals: from dolphins to squid. Knight Fellows Lecture. Woods Hole Oceanographic Institution. September 13, 2010.
- **9. Mooney, TA.** The hearing of odontocetes and their prey: Sensory ecology and anthropogenic impacts. University of North Florida, Biology Department. February 4, 2010.
- **10. Mooney, TA**, Ketten, DR, Hanlon, RT, Christensen-Dalsgaard, J, Madsen, PT, and Nachtigall, PE. Squid hearing and their ability to detect echolocating predators. Office of Naval Research, Marine Mammals and Oceanography Program Review, December 7-10, 2009.
- **11. Mooney, TA**. The hearing and travels of Icelandic white-beaked dolphins. WHOI Science Made Public Series. Woods Hole, MA. July 21, 2009.
- **12. Mooney, TA**. How much sound is too much? Noise, naval sonar and the dolphin auditory system. Biology Department Seminar. Woods Hole Oceanographic Institution. April 9, 2009.
- **13. Mooney, TA**. Predicting the effects of noise on odontocete cetaceans. Zoology Department Seminar. University of Hawaii. April 11, 2008.
- **14. Mooney, TA**. A bit of the ecology of the white-beaked dolphin. 2007. Hanauma Bay Nature Preserve Community Education Lecture. Honolulu, HI. April 6, 2007.
- **15. Mooney, TA**, Santos, PA, Nachtigall, PE, and Santos, R. 2005. Fish, dolphins and whales: Fish sounds and dolphin bycatch. University of the Azores, Horta, Faial, Pt. August 18, 2005.

Conference Presentations

1. Mooney, TA and Castellote, M. Baseline hearing measurements in Alaskan belugas. Office of Naval Research, Marine Mammal Biology Program Review. Alexandria. Oct 20-22, 2014.

2. Mooney, TA, Tyack, PT, Baird, RW, and Nactigall, PE. Acoustic behavior, baseline ecology and habitat use of pelagic odontocete species of concern. Office of Naval Research, Marine Mammal Biology Program Review. Alexandria. Oct 20-22, 2014.

- **3. Mooney, TA**, Katija, K, Shorter, A, Hurst, T, Fontes, J and Afonso, P. Concurrent measures of fine-scale behaviors and basic oceanographic parameters in the veined squid, *Loligo forbesi*. 5th Biologging Science Symposium (BLS5). Strasbourg, France. Sep 22-27, 2014.
- **4. Mooney, TA**, Castellote, M, Quakenbush, L, Hobbs, R, Goertz, C, and Gaglione, E. Can you hear me now? Sensitive hearing and limited variation in wild beluga whales (*Delphinapterus leucas*). 167th Meeting of the Acoustical Society of America. Providence, RI. May 5-9, 2014.
- **5. Mooney, TA**, Kaplan, M**, Izzi, A, and Sayigh, L. Trends and variations in the baseline soundscape of America's first offshore wind farm. 167th Meeting of the Acoustical Society of America. Providence, RI. May 5-9, 2014.
- **6.** Castellote M, **Mooney, TA,** Hobbs R, Quakenbush LT, Goertz CEC, Gaglione E. First description of beluga whale hearing in the wild. Cook Inlet Beluga Whale Conference, Anchorage, AK. April 5, 2014.
- **7. Mooney, TA**, Castellote, M, Quakenbush, L, Hobbs, R, Goertz, C, and Gaglione, E. Say what? The auditory abilities and variations of wild beluga whales (*Delphinapterus leucas*). 20th Biennial Conference on the Biology of Marine Mammals Dunedin, New Zealand. December 9-13, 2013
- **8. Mooney, TA**, Kaplan, M**, Lamoni,L** Boucher**, and Sayigh, L. Passive acoustic monitoring of biological and anthropogenic sounds at America's first offshore wind farm. 166th Meeting of the Acoustical Society of America, San Francisco, CA. December 2-6, 2013.
- **9. Mooney, TA.** Castellote[#], M, Hobbs, R, Quackenbush, L, Goetz, C, Gaglione, E. Hearing in wild belugas relative to levels of background noise. 3rd International Conference on the Effects of Noise on Aquatic Life. August 11-16, 2013. Budapest, Hungary.
- **10. Mooney, TA**, Kaplan, M**, Baird, RW, and Millete, A. 6th International Workshop on Detection, Classification, Localization, and Density Estimation (DCLDE) of Marine Mammals using Passive Acoustics, University of St Andrews, Scotland, June 12–15, 2013.
- **11. Mooney, TA**, Li, S, Ketten, D, Wang, K, and Wang, D. Auditory temporal resolution and sound reception by the finless porpoise: comparative hearing in an 'unrepresentative' species. Society for Integrative and Comparative Biology, San Francisco, CA, January 3-7, 2013.
- 12. Ketten, DR, Mooney, TA, Cramer, S, Arruda, J. Evidence of hearing loss in marine mammals via Auditory Evoked Potentials (AEP), Otoacoustic Emissions (OAE), and Computerized Tomography (CT). Hearing Physiology Special Session 11th European Conference on Underwater Acoustics (ECUA 2012), Edinburgh, UK
- **13. Mooney, TA**, Hanlon, RT and Streets, A*. Physiological and behavioral responses to sound in the longfin squid (*Loligo pealeii*). Ocean Sciences Meeting. Salt Lake City, UT, February 20-14, 2012.
- **14. Mooney, TA**, Li, S, Ketten, D, Wang, K, and Wang, D. Hearing pathways of the finless porpoise: Form and function in an 'unrepresentative' species. 19th Biennial Conference on the Biology of Marine Mammals. Tampa, FL. November 27-December 2, 2011.
- **15. Mooney, TA.** Baird, RW, Tyack, PT, Nachtigall, PE, Millete, A, Webster, DL, & Schorr, GS. DTAGging Hawaiian insular false killer whales and melon-headed whales: A preliminary field report. Workshop: Science and Conservation of Hawaiian Odontocetes. 19th Biennial Conference on the Biology of Marine Mammals. Tampa, FL. November 26, 2011
- **16. Mooney, TA,** Ketten, DR, Nachtigall, PE, Williams, CR, and Matassa, K. Using auditory evoked potentials to examine hearing loss in aquatic animals: From marine mammals to squid. 34th Meeting of the Association for Research in Otolaryngology. Baltimore, MD, February 19-23, 2011.

17. Apprill, AM, **Mooney, TA**, Stimpert AK, Lyman E and Rappé, MS. Specific bacterial communities associate with the skin of free-ranging humpback whales. 110th General Meeting of the American Society for Microbiology. May 27-27, 2010. **Best Poster Presentation**

- **18. Mooney, TA**, Hanlon, RT, Christensen-Dalsgaard, J, Madsen, PT, Ketten, DR and Nachtigall, PE. What squid hear: An evoked potential study of the longfin squid (*Loligo pealeii*). 33rd Mid-Winter Meeting of the Association for Research in Otolaryngology. February 6-10, 2010.
- **19. Mooney, TA**, Hanlon, RT, Christensen-Dalsgaard, J, Madsen, PT, Ketten, DR and Nachtigall, PE. Detecting echolocating odontocetes: Can squid hear toothed whale predators? 18th Biennial Conference on the Biology of Marine Mammals. Quebec, Canada. October 12-16, 2009.
- **20.** Yamato, M**, **Mooney TA**, Ketten, DK, Cramer, S, and Arruda, S. Auditory Anatomy and Sound Reception in the beluga whale (*Delphinapterus leucas*) compared to the bottlenose dolphin (*Tursiops truncatus*). 18th Biennial Conference on the Biology of Marine Mammals. Quebec, Canada. October 12-16, 2009.
- **21. Mooney, TA**, and Ketten, DR. The why and how of testing hearing in stranded animals. Northeast Regional Stranding Network Conference. Salem, MA. March 26-29, 2009.
- **22. Mooney, TA**, Nachtigall, PE, Vlachos, S. Intense sonar pings induce temporary threshold shift in a bottlenose dolphin, *Tursiops truncatus*. Acoustics '08 Conference. Paris, France. June 29-July 5, 2008.
- **23.** Pacini, A, Nachtigall, PE, **Mooney, TA**, Castellote, M, Taylor, K, and Esteban, JA. Directional sensitivity and hearing pathways in the beluga whale, *Delphinapterus leucas*. Acoustics '08 Conference. Paris, France. June 29-July 5, 2008.
- **24. Mooney, TA**, Taylor, KA., Nachtigall, PE, Pacini, A, Castellote, M, Esteban, JA. Odontocetes don't all hear the same: directional sensitivity and hearing pathways in the beluga whale, *Delphinapterus leucas*. 17th Biennial Conference on the Biology of Marine Mammals. Cape Town, South Africa. Nov 28-Dec 3, 2007.
- **25.** Apprill, AM, **Mooney, TA**, Stimpert AK, Lammers MO, Rappé, MS. A novel approach to examine environmental and health-related characteristics of humpback whales using the bacterial composition of epithelial skin. 17th Biennial Conference on the Biology of Marine Mammals. Cape Town, South Africa. Nov 28-Dec 3, 2007. **Best Poster Presentation**
- **26.** Taylor, KA, **Mooney, TA**, Nachtigall, PE, Rasmussen, M, Miller, LA., The high frequency hearing and temporal processing of caught-and-released white-beaked dolphins, *Lagenorhynchus albirostris*. 17th Biennial Conference on the Biology of Marine Mammals. Cape Town, South Africa. Nov 28-Dec 3, 2007.
- **27.** Pacini, A, **Mooney, TA**, Nachtigall, PE. False killer whale echolocation experiment to reduce long line bycatch: preliminary results. 17th Biennial Conference on the Biology of Marine Mammals. Cape Town, South Africa. Nov 28-Dec 3, 2007.
- **28. Mooney, TA**, Nachtigall, PE, Taylor, KA, Miller, LA, Rasmussen, M. Temporal resolution and broadband click thresholds in a caught-and-released white-beaked dolphin (*Lagenorhynchus albirostris*). 21st Conference of the European Cetacean Society. San Sebastian, Spain. April 22-25, 2007.
- **29.** Breese, M, **Mooney, TA**, Nachtigall, PE, Au, WWL, Vlachos, S. Temporary threshold shifts in the bottlenose dolphin (*Tursiops truncatus*), varying noise duration and intensity. 21st Conference of the European Cetacean Society. San Sebastian, Spain. April 22-25, 2007.
- **30. Mooney, TA**, Nachtigall, PE, Au, WWL, Breese, M, Vlachos, S. Temporary threshold shifts in the bottlenose dolphin (*Tursiops truncatus*), varying noise duration and intensity. 4th Joint Meeting of the Acoustical Society of America and the Acoustical Society of Japan. Nov 28-Dec 2 2006.
 - ** Best Student Paper Presentation**

31. Mooney, TA, Nachtigall, PE, Au, WWL, Breese, M, Vlachos, S. The effects of noise intensity and exposure duration and potential protective mechanisms in the bottlenose dolphin (*Tursiops truncatus*). Ocean Sciences Meeting. Honolulu, HI. February 20-24, 2006.

- **32.** Lammers, MO, **Mooney, TA**, Brainard, RE, Au, WWL. Passive acoustic monitoring of biological activity on coral reefs and in nearby waters. Ocean Sciences Meeting. Honolulu, HI. February 20-24, 2006.
- **33. Mooney, TA**, Nachtigall, PE, Au, WWL, Breese, M, Vlachos, S. Predicting noise induced threshold shifts in a bottlenose dolphin: Effects of noise duration, intensity, and frequency. 16th Biennial Conference on the Biology of Marine Mammals. San Diego, CA. December 12-16, 2005.
- **34.** Taylor, KA, Nachtigall, PE, Yuen, MMY, **Mooney, TA**. A portable system to evaluate the auditory system of stranded marine mammals. 16th Biennial Conference on the Biology of Marine Mammals. San Diego, CA. December 12-16, 2005.
- **35.** Lammers, MO, Stimpert, AK, Au, WWL, and **Mooney, TA**. Diel and spatial patterns in the singing behavior of humpback whales off Oahu, Hawaii. 16th Biennial Conference on the Biology of Marine Mammals. San Diego, CA. December 12-16, 2005.
- **36.** Lammers, MO, Stimpert, AK, Au, WWL, and **Mooney, TA**. Diel and spatial patterns in the singing behavior of humpback whales off Oahu, Hawaii. 150th Meeting of the Acoustical Society of America. Minneapolis, MN. October 17-21, 2005.
- **37. Mooney, TA,** Lammers, MO, and Nachtigall, PE. Monitoring for fish sounds: Characterization and diurnal trends of three species of Pomacentrids. Underwater Acoustic Measurements, Heraklion, Crete, Greece, June 28-July 1, 2005.
- **38. Mooney, TA**, Lammers, MO, Santos, PA, and Nachtigall, PE. An underwater system to monitor ecologically important fish sounds: Characterization and diel trends of three species of Pomacentrids. 149th Meeting of the Acoustical Society of America. Vancouver, B.C., Canada. May 16-20, 2005.
- **39. Mooney, TA**, Nachtigall, PE, Yuen, MM, and Taylor, KT. Can you hear me now? Hearing thresholds of a stranded Risso's dolphin. University of Hawaii Testers Symposium. Honolulu, HI. March 17-18, 2005.
- **40.** Taylor, KT, Nachtigall, PE, Yuen, MM, and **Mooney, TA**. A portable system to assess the auditory status of stranded marine mammals. University of Hawaii Testers Symposium. Honolulu, HI. March 17-18, 2005.
- **41.** Nachtigall, PE, Yuen, MM, **Mooney, TA**, and Taylor, KT. Measuring hearing in a neonatal stranded Risso's dolphin (*Grampus griseus*). 148th Meeting of the Acoustical Society of America. San Diego, CA. November 15-19, 2004.
- **42. Mooney, TA**, Nachtigall, PE, and Yuen, MM. The modulation rate transfer function of a Risso's dolphin, *Grampus griseus*, using the envelope following response. 148th Meeting of the Acoustical Society of America. San Diego, CA. November 15-19, 2004.
- **43. Mooney, TA**, Au, WWL, and Nachtigall, PE. Will acoustically enhanced nets reduce odontocete gillnet bycatch because they are better sound reflectors? 148th Meeting of the Acoustical Society of America. San Diego, CA. November 15-19, 2004.
- **44. Mooney, TA,** Au, WWL, and Nachtigall, PE. A method to reduce marine mammal bycatch: Predicted harbor porpoise detection ranges of three experimental gillnets. University of Hawaii Testers Symposium. Honolulu, HI. March 11-12, 2004.
- **45. Mooney, TA**, Au, WWL, and Nachtigall, PE. Target strength and predicted biosonar detection ranges of three experimental gillnets: A method to reduce marine mammal bycatch. ASLO/TOS Ocean Research Conference. Honolulu, HI. February 15-20, 2004.

46. Mooney, TA, Nachtigall, PE, Au, WWL, and Muhic, CM. Barium sulfate nets reduce bycatch: acoustic reflectivity or flexural stiffness? 15th Biennial Conference on the Biology of Marine Mammals. Greensboro, NC. December 14-19, 2003.

- **47. Mooney, TA**, Nachtigall, PE, & Au, WWL. Target strength of two gillnets and predictions of biosonar detection ranges. First Pan-American/Iberian Meeting on Acoustics. Cancun, Mex. Dec. 2-6, 2002.
- **48. Mooney, TA**, Nachtigall, PE, & Au, WWL. Can dolphins detect gillnets? Implications of reflective gillnets. Hawaii Institute of Marine Biology Colloquium. Kaneohe, HI. October 21-22, 2002
- **49. Mooney, TA** & Wahle, R. Tag retention and mortality rates of the American lobster, *Homarus americanus*. Gulf of Maine Foundation Symposium. Damariscotta, ME. August 1-2, 2000.

Student Presentations

- Kaplan, M**, Mooney, TA, and Baird, RW. Differences in melon-headed whale (*Peponocephala electra*) whistle characteristics sympatric populations in Hawaii. 20th Biennial Conference on the Biology of Marine Mammals Dunedin, New Zealand, 9-13 December 2013
- 2. Milette-Winfree, AJ**, Nachtigall, PE, Mooney, TA, Pacini, AF, Kaplan, MB**, Shedd, TG, Smith, AB, Quintos, CT, Vlachos, SA. Using a DTAG to quantify sound level and frequency shadowing of a "receiving" false killer whale. 20th Biennial Conference on the Biology of Marine Mammals Dunedin, New Zealand, 9-13 December 2013
- **3.** Milette-Winfree, AJ**, Nachtigall, PE, **Mooney, TA**, Pacini, A, Shedd, TG, Smith, AB, Quintos, CT, Vlachos, SA. It takes two: The replication of a social interaction to quantify variations in acoustic cues with animal position and head morphology. The 41st Annual Symposium of the European Association of Aquatic Mammals, Nürnberg, Germany, March, 2013. **Best Student Poster**
- **4.** Kaplan, M**, **Mooney, TA** and Partan, J. Spatiotemporal variability in coral reef soundscapes in St John, US Virgin Islands. 166th Meeting of the Acoustical Society of America, San Francisco, CA, 2-6 December 2013.
- **5.** Samson, J**, **Mooney, TA**, Hanlon, R, and Guskerloo, S. Cephalopod behavioral responses and potential for habituation to acoustic stimuli. 3rd International Conference on the Effects of Noise on Aquatic Life. August 11-16, 2013. Budapest, Hungary.
- **6.** Kaplan, M** and **Mooney, TA**. Adverse effects of elevated CO₂ concentrations on squid (*Doryteuthis pealeii*) development and early life. Society for Integrative and Comparative Biology, San Francisco, CA, January 3-7, 2013.
- **7.** Samson, JE**, **Mooney, TA**, Gussekloo, SWS, Hanlon, RT. Behavioral responses to sound stimuli in cuttlefish (*Sepia officinalis*). Society for Integrative and Comparative Biology, San Francisco, CA, January 3-7, 2013.
- **8.** Kaplan, M* and **Mooney, TA**. Effects of elevated CO₂ conditions on paralarval longfin squid (*Loligo pealeii*) development and early life. Ocean Sciences Meeting. Salt Lake City, UT, Feb 2012.
- **9.** Strobel, SM* and **Mooney, TA**. Sand lance detection of low frequency tones and humpback whale megapclicks. 19th Biennial Conference on the Biology of Marine Mammals. Tampa, FL. November 27-December 2, 2011.
- 10. Kaplan, M* and Mooney, TA. Impact of elevated CO2 conditions on paralarval longfin squid (Loligo pealeii) development and early life. WHOI Biology Department Summer Student Seminar. Woods Hole, MA. August 11, 2011.
- **11.** Sharr, A* and **Mooney, TA**. Aminoglycoside-induced hair cell damage in the statocyst of squid (*Loligo pealeii*). MBL Undergraduate Research Symposium. Woods Hole, MA. August 18, 2011.
- **12.** Streets, A* and **Mooney, TA**. Squid behavioral reactions to low frequency sound. MBL Undergraduate Research Symposium. Woods Hole, MA. August 18, 2011.

* mentored undergraduate student; **graduate student

	Field Experience				
Acoust	tic ecology and foraging success of beluga whales in Bristol Bay (upcoming)	2014			
	Combining field hearing tests and bioacoustics Dtags				
Concu	rrent measures of squid fine-scale behavior and their local environment <i>Project</i>	t leader 2014			
	Beta testing of the novel ITAG (invertebrate eco-sensor tag; 8 animals tagged)				
Acoust	tic diversity of coral reefs (US Virgin Islands) Project leader	2013			
	Surveyed coral and fish species cover, deployed acoustic moorings				
Hearin	g, pilot-tagging and kinematics of the veined squid (Azores, PT) Project leader	2013			
	Measured the hearing of 10 squid, tagged six to address attachment methods				
Health	assessments of Bristol Bay belugas	2012			
	Acquired audiograms of 7 wild belugas in a capture-release setting (with other	health measures	s)		
DTAG	ging Hawaiian false killer and melon-headed whales (four cruises) Project lead				
	Acoustic behavior, baseline ecology and habitat use of odontocete species of o	concern			
Hearin	g pathways of a Risso's dolphin (Hualein, Taiwan) Project leader	2012			
	Audiogram and comparative auditory physiology				
Hearin	g of the Chinese Yangtze River porpoise Project leader	2010			
	Audiograms, auditory temporal processing and hearing pathways				
Hawai	ian humpback whale bioacoustic behavior	2004-2008			
	Localization, movement and behavior measured via towed hydrophone array a	and D-Tags			
Iceland	dic Research Cruises	2006-2007			
	Capture, study and release of wild white-beaked dolphins and minke whales.				
Polar E	Bear Hearing Expedition, Kolmården, Sweden	2005			
	Study of polar bear hearing range and sensitivity.				
	H (Structure of Population, Levels of Abundance, and Status of Humpbacks)	2004-2006			
Dept.	of Fisheries and Oceans, University of the Azores, Portugal	Summer 2004			
	Survey of soniferous fishes and efficacy of using acoustics to monitor MPAs				
Visitin	g Researcher, Friday Harbor Laboratories, Univ. of Washington	Summer 2003			
	Marine Bioacoustics Workshop – Investigated acoustic reflectivity of salmon u	sing SIMRAD			
	echosounders and EchoView.				
2010	Data Consultation				
2010	Report contributor: Marine Mammals and Sound Workshop. Report to the National Contributors and Sound Workshop.		_		
2010	Council Ocean Science and Technology Interagency Policy Committee. July 13t)		
2010	Data applied to NMFS Proposed Regulations: "Taking of Marine Mammals Inci	dental to			
2040	Specified Activities," Federal Register: June 8, 2010 (Vol. 75, No. 109)	((
2010	Data applied to Fish and Wildlife Service Proposed Regulations: "Proposed Rul				
	Nonlethal Deterrents to Polar Bears," Federal Register: April 26, 2010 (Vol. 75,	No.79)			
Awards Received					
Corpoi	ration of Marine Biological Laboratory Elected Member – Woods Hole, MA	2009			
-	Grass Foundation Fellowship – Marine Biological Lab, Woods Hole, MA 2008				
AAAS Excellence in Science Program – Nominated by UH Zoology Dept. 2007-2008					
Best Student Paper Presentation – Acoustical Society of American Conference 2006					
Outstanding Teaching Assistant – University of Hawaii, Biology Program 2001					

University Honors Program – University of New Hampshire1996-2000Dean Scholarship – University of New Hampshire1996-2000Golden Key National Honor Society2000Phi Kappa Phi National Honor Society1999-2003

Outreach – Public and Media

- Developing (or work with WHOI Communications Dept to write) a press release or "Lay Language Summary" for each scientific publication, in order to improve communication of research to the broader public.
- Aiming to make all my publications "open access" to facilitate dissemination of science to the broader public.
- Pre-school: Guest lectures at the Woods Hole Day Care Cooperative, teaching preschool children
 about marine biology (1 class in marine mammals, 1 class in cephalopods). Along with a science
 journalist, co-writing an enhanced e-book on sounds in the sea, an outgrowth of lecturing for
 the WHOI Journalism Fellows.
- **Elementary school**: Guest lectures at the Woods Hole Science School, teaching Marine Mammal Biology.
- High school: Developing a video-based squid dissection manual for high school teachers entitled
 "Squid have ears too!" Mentored two science fair students on a cuttlefish behavior project
 2013). They placed 2nd in the MA Regionals and reached the State Science Fair.
- **Beyond**: Participated in the WHOI "**Science Made Public Series**" a series of public talks designed to communicate novel, timely and exciting science to a lay audience. These Woods Hole lectures provide the opportunity to communicate to hundreds of children and adults during the course of the summer vacation season.
- Lectured in the WHOI Ocean Science Journalism Fellowship series, a one-week, residential
 experience for professional writers, producers, and editors working for print, broadcast, radio,
 and Internet media. The program allows extended and detailed face-to-face interactions with
 scientists and journalists, facilitating an ideal way to communicate to the public. These efforts
 can help relay the science and conservation to journalists, who are skilled and trained to
 outreach to the public.
- Our lab research blog has over 13,000 hits from all over the world.
 www.sensoryecology.blogspot.com/
- Squid Hearing: Featured or interviewed in squid related TV programs including: the BBC and National Geographic's 'Inside Nature's Giants', and Canada's Daily Planet; press and web articles include TIME, Yahoo!.com, BBC, The Seattle Times, Global Animal, MSNBC, Physics Today, Daily Mail, Tree Hugger.com, One India News, Macleans, Dive Photo Guide and many others.
- **Squid Ocean Acidification:** *TIME, Scientific American, Discovery, Climate Central, Current Biology, Headlines and Global News* and others.
- Sonar/Marine mammal: Nature, Science, The New York Times, The Times (London), Christian Science Monitor, The Telegraph (London), Agence France-Presse (AFP-Paris), Le Monde (Paris), New Scientist, Discover Magazine, Acoustic Ecology Institute and others.
- **Soundscapes and wind-farm noise impacts:** NPR's Living on Earth, various local NPR stations including WCAI and KDLG (Alaksa), Cape Cod Times, Oceanus.

Internal WHOI Professional Service

2012-2014	WHOI MIT Joint Program Admissions Advisory Committee
2011-2014	Biology Department Seminar Series Co-Coordinator

2013 Biology Department Technical Staff Annual Performance Review Committee

External Professional Service

Research Advisory Team / Workshops:

- Ocean Acidification Working Group: A Research Framework for Ocean Acidification (working on a review article to frame the way forward for OA research
- 2013 3rd International Conference on the Effects of Noise on Aquatic Life: Working Group On Impacts to Marine Mammals
- 2010 National Marine Mammals and Sound: Science and Application Workshop

Reviewer for journals: Animal Behavior, Biology Letters, PLoSONE, Journal of Neuroscience, ICES Journal of Marine Science, Journal of the Acoustical Society of America, Aquatic Mammals, Marine Mammal Science, Journal of Experimental Marine Biology & Ecology, Thermal Biology, Naturwissenschaften, and Journal of Experimental Biology.

Reviewer for grant proposals: NSF Biological Oceanography, Leverhume Trust (UK).

Representative: Society for Marine Mammalogy – President, Hawaii Student Chapter	2004-2007
UH Zoology Dept. Student Representative	2002-2003
WHOI Postdoctoral Association	2010

Active Member: Society for Marine Mammalogy, Acoustical Society of America