

JENNIFER L. MIKSIS-OLDS

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EDUCATION

A.B., *cum laude* in Biology, Harvard University, 1996
M.S., Biology, University of Massachusetts Dartmouth, 2000
Guest Student, Biology, Woods Hole Oceanographic Institution, 1996-2004
Ph.D., Graduate School of Oceanography, University of Rhode Island, 2006

PROFESSIONAL HISTORY

2016-present	Associate Director for Research, Research Professor, School of Marine Science & Ocean Engineering University of New Hampshire
2014-2016	Founding Director, Center for Marine Science and Technology (C-MAST) The Pennsylvania State University, State College, PA
2012-2016	Senior Research Associate, Applied Research Laboratory The Pennsylvania State University, State College, PA
2012-2016	Associate Professor, Graduate Program in Acoustics, College of Engineering Graduate Faculty, Wildlife and Fisheries Science, College of Agriculture Graduate Faculty, Intercollegiate Program in Ecology The Pennsylvania State University, State College, PA
2007-2012	Research Associate, Applied Research Laboratory The Pennsylvania State University, State College, PA
2007-2012	Assistant Professor, Graduate Program in Acoustics, College of Engineering Graduate Faculty, Wildlife and Fisheries Science, College of Agriculture The Pennsylvania State University, State College, PA
2006-2007	Postdoctoral Research Associate, Department of Fisheries Oceanography, School for Marine Science and Technology, University of Massachusetts Dartmouth, New Bedford, MA
2005-2006	Postdoctoral Fellow, Department of Estuarine and Oceanic Sciences, School for Marine Science and Technology, University of Massachusetts Dartmouth, New Bedford, MA
2005	Visiting Lecturer, Biology Department, University of Massachusetts Dartmouth, North Dartmouth, MA
2004-2005	Research Scientist, Marine Acoustics, Incorporated, Middletown, RI
2000-2003	Graduate Research Assistant, Supervisor Percy Donaghay, Graduate School of Oceanography, University of Rhode Island, Narragansett, RI
1997-2000	Teaching Assistant, Biology Department, University of Massachusetts Dartmouth, North Dartmouth, MA
1997	Laboratory Technician, Woods Hole Analytical Laboratories, Raynham, MA
1995-1996	Research Assistant, Primate Cognition Laboratory, Harvard University, Cambridge, MA

PUBLICATIONS

- Haver, S, Klinck, H, Nieuwirk, S, Matsumoto, H, Dziak, R, Miksis-Olds, J (in review). The not-so-silent world: Measuring Arctic, Equatorial, and Antarctic soundscapes in the Atlantic Ocean. Deep-Sea Research Part 1.
- Harris, D, Miksis-Olds, JL, Thomas, L, Vernon, J (in review). Fin whale density and distribution estimation using acoustic bearings derived from sparse arrays. Journal of the Acoustical Society of America.
- Miksis-Olds, JL, Nichols, SM (2016). Is low frequency ocean sound increasing globally? Journal of the Acoustical Society of America 139: 501-511.
- Miksis-Olds, JL, Van Opzeeland, IC, Van Parijs, SM, Jones, J (2016). Pinniped sounds in the polar oceans. In Listening in the Ocean: New Discoveries and Insights on Marine Life from Autonomous Passive Acoustic Monitors (PAM). In: Listening in the Ocean. W.L. Au and M.O. Lammers, eds. Springer-Verlag. Pp 257-308.
- Miksis-Olds, JL (2016). Global trends in ocean noise. In: Effects of Noise on Aquatic Life II. A.N. Popper and A. Hawkins eds., Springer Science + Business Media, LLC., New York. Pp 713-718.
- Miksis-Olds, JL, Vernon, JA, Heaney, KD (2015). The impact of ocean sound dynamics on estimates of signal detection range. Aquatic Mammals (Special ESOMM Edition) 41: 444-454.
DOI 10.1578/AM.41.4.2015.444
- Stauffer, BA, Miksis-Olds, JL, Goes, JI (2015). Cold regime interannual variability of community composition of primary and secondary producers in the southeastern Bering Sea. PLoS ONE 10(6): e0131246. doi:10.1371/journal.pone.0131246
- Miksis-Olds, JL, Madden LE (2014). Environmental predictors of ice seal presence in the Bering Sea. PLoS ONE 9(9): e106998. doi:10.1371/journal.pone.0106998
- Denes, SL, Miksis-Olds, JL, Mellinger, DK, Nystuen, JA (2014). Assessing the cross platform performance of marine mammal indicators between two collocated acoustic recorders. Ecological Informatics 21: 74-80.
- Parks, SE, Miksis-Olds, JL, Denes, SL (2014). Assessing marine ecosystem acoustic diversity across ocean basins. Ecological Informatics 21: 81-88.
- Hawkins, RS, Miksis-Olds, JL, Smith, CM (2014). Variation in low-frequency estimates of sound levels based on different units of analysis. Journal of the Acoustical Society of America 135: 705-711.
- Miksis-Olds, JL, Bradley, DL, Niu, XM (2013). Decadal trends in Indian Ocean ambient sound. Journal of the Acoustical Society of America 134: 3464-3475.
- Wang, JH, Hu, H, Goes, JI, Miksis-Olds, J, Mouw, CB, D'Sa, EJ, Gomes, HDR, Wand, D, Mizobata, K, Luo, L (2013). A modeling study of seasonal variations of sea ice and plankton in the Bering and Chukchi Seas during 2007-2008. Journal of Geophysical Research. doi:10.1029/2012JC008322.
- Miksis-Olds, JL, Stabeno, PJ, Napp, JM, Pinchuk, AI, Nystuen, JA, Warren, JD, Denes, SL (2013) Ecosystem response to a temporary sea ice retreat in the Bering Sea. Progress in Oceanography 111: 38-51. doi: 10.1016/j.pocean.2012.10.010.
- Van Opzeeland, IC, Miksis-Olds, JL (2012). Acoustic ecology of pinnipeds in polar habitats. In Aquatic Animals: Biology, Habitats, and Threats. D.L. Eder, ed. Nova Science Publishers. Pp 1-52.
- Miksis-Olds, JL, Nystuen, JA, Parks, SE (2012). What does ecosystem acoustics reveal about marine mammals in the Bering Sea? In: Effects of Noise on Aquatic Life. A.N. Popper and A. Hawkins eds., Springer Science + Business Media, LLC., New York. Pp 595-598.
- Hastings, MC, Miksis-Olds, JL (2012). Shipboard assessment of hearing sensitivity of tropical fishes immediately following exposure to seismic airgun emissions at Scott Reef. In: Effects of Noise on Aquatic Life. A.N. Popper and A. Hawkins eds., Springer Science + Business Media, LLC. Pp 237-242.
- Miksis-Olds, JL, Parks, SE (2011). Seasonal trends in acoustic detection of ribbon seals (*Histriophoca fasciata*) in the Bering Sea. Aquatic Mammals 37: 464-471.
- Grebner, DM, Parks, SE, Bradley, DL, Miksis-Olds, JL, Capone, DE, Ford, JKB (2011). Divergence of a stereotyped call in northern resident killer whales. Journal of the Acoustical Society of America 129: 1067-1072.

- Miksis-Olds JL, Wagner, T (2011). Behavioral response of manatees to variations in environmental sound levels. *Marine Mammal Science* 27: 130-148. DOI: 10.1111/j.1748-7692.2010.00381.x.
- Miksis-Olds, JL, Nystuen, JA, Parks, SE (2010). Detecting Marine Mammals with an Adaptive Sub-Sampling Recorder in the Bering Sea. *Journal of Applied Acoustics* 71: 1087-1092. DOI:10.1016/j.apacoust.2010.05.010.
- Miksis-Olds, JL, Tyack, PL (2009). Manatee (*Trichechus manatus*) vocalization usage in relation to environmental noise levels. *Journal of the Acoustical Society of America* 125: 1806-1815.
- Miksis-Olds, JL, Buck, JR, Noad, MJ, Cato, DH, Stokes, MD (2008). Information theory analysis of Australian humpback whale song. *Journal of the Acoustical Society of America* 124: 2385-2393.
- Miksis-Olds, JL (2008) Effect of environmental noise on the Florida manatee *Trichechus manatus latirostris*. *Bioacoustics* 17: 176-178.
- Miksis-Olds, JL, Stokesbury, KDE (2007). Measuring fish abundance in a weir trap using an Acoustical Optical Platform. *Journal of the Acoustical Society of America* 122: 2431-2438.
- Miksis-Olds, JL, Donaghay, PL, Miller, JH, Tyack, PL, Reynolds, JE (2007). Simulated vessel approaches elicit differential responses from manatees. *Marine Mammal Science* 23: 629-649.
- Miksis-Olds, JL, Donaghay, PL, Miller, JH, Tyack, PL, Nystuen, J (2007). Noise level correlates with manatee use of foraging habitats. *Journal of the Acoustical Society of America* 121: 3011-3020.
- Miksis-Olds, JL, Miller, JH (2006). Transmission loss in manatee habitats. *Journal of the Acoustical Society of America* 120: 2320-2327.
- Holliday, DV, Donahay, PL, Greenlaw, CF, McGehee, DE, McManus, MM, Sullivan, JM, Miksis, JL (2003). Advances in defining fine- and micro-scale pattern in marine plankton. *Aquatic Living Resources* 16: 131-136.
- Miksis, JL, Tyack, PL, Buck, JR (2002). Captive dolphins, *Tursiops truncatus*, develop signature whistles that match acoustic features of human-made model sounds. *Journal of the Acoustical Society of America* 112 (2): 728-739.
- Miksis, JL, Grund, MD, Nowacek, DL, Solow, AR, Connor, RC, Tyack, PL (2001). Cardiac responses to acoustic playback experiments in the captive bottlenose dolphin, *Tursiops truncatus*. *Journal of Comparative Psychology* 155(3): 227-232.
- Connor, RC, Heithaus, MR, Berggren, P, Miksis, JL (2000). "Kerplunking": Surface fluke-splashes during shallow-water bottom foraging by bottlenose dolphins. *Marine Mammal Science* 16(3): 646-653.

PUBLISHED CONFERENCE ABSTRACTS/PROCEEDINGS

- Miksis-Olds, JL (2016). Source level of fin whale calls from the Equatorial Pacific Ocean. *Journal of the Acoustical Society of America* 140: 3019.
- Miksis-Olds, JL, Nieukirk, S (2016). Relating the decreasing frequency of Sri Lankan pygmy blue whale calls to the local soundscape. *Journal of the Acoustical Society of America* 139: 2090.
- Vernon, JA, Miksis-Olds, JL (2016). Seasonal variability in distribution of fin whales around Wake Island. 171st Meeting of the Acoustical Society of America, Salt Lake City, UT. May 23 -27, 2016. *Journal of the Acoustical Society of America* 139.4: 2061.
- Denes, S, Miksis-Olds, JL, Hager, CA (2015). Transmission characteristics of Arctic pinniped vocalizations through ice. *Proceedings of Meeting on Acoustics* 20: 010001.
- Miksis-Olds, JL, Nichols, SM (2015). Linking changes in soundscape levels to sources through frequency correlation matrices. *Proceedings of the 2015 Underwater Acoustics International Conference and Exhibition, Plataniis Crete, Greece, June 21-26, 2015.*
- Miksis-Olds, JL, Vernon, JA, Heaney, K (2014). Applying the dynamic soundscape to estimates of signal detection. *Proceedings of the 2014 Underwater Acoustics International Conference and Exhibition, Rhodes, Greece, June 22-27, 2014.*
- Denes, SL, Miksis-Olds, JL (2013). Transmission characteristics of Arctic pinniped vocalizations. *Journal of the Acoustical Society of America* 134: 3972.
- Miksis-Olds, JL (2013). What is an underwater soundscape? *Proceedings of the 2013 Underwater Acoustics International Conference and Exhibition, Corfu, Greece, June 23-38 2013.*

- Miksis-Olds, JL, Madden, LE (2012). The power of acoustics in ocean observing systems: A case study in the Bering Sea. *Journal of the Acoustical Society of America* 132: 1915.
- Miksis-Olds, JL, Smith, CM, Hawkins, RS, Bradley DL (2012). Seasonal soundscapes from three ocean basins: what is driving the differences? *Conference Proceedings of the 11th European Conference on Underwater Acoustics* 34: 1583- 1587. ISBN 978-1-906913-13-7.
- Hawkins, RS, Miksis-Olds, JL, Bradley, DL, Smith, CM (2012). Periodicity in ambient noise and variation based on different temporal units of analysis. *Conference Proceedings of the 11th European Conference on Underwater Acoustics* 34: 1417- 1423. ISBN 978-1-906913-13-7.
- Nichols, SM, Bradley, DL, Miksis-Olds, JL, Smith, CM (2012). Are the world's oceans really that different? *Conference Proceedings of the 11th European Conference on Underwater Acoustics* 34: 338- 345. ISBN 978-1-906913-13-7.
- Miksis-Olds, JL, Denes, SL, Warren, JD (2012). A comparison of community structure from the southeastern and central Bering Sea shelf: insights gained from acoustic backscatter. *Journal of the Acoustical Society of America* 131: 3286.
- Bollinger, M, Miksis-Olds, JL, Madden, LE (2011). Using acoustics to study the effectiveness of fish habitat restoration: A comparison of methods. *Journal of the Acoustical Society of America* 130: 2430.
- Miksis-Olds, JL, Warren, JD (2011). Characterizing biological scatter before, during, and after a temporary ice retreat in the Bering Sea. *Journal of the Acoustical Society of America* 129: 2401.
- Miksis-Olds, JL, Nystuen, JA (2010). Factors influencing biodiversity and marine mammal habitat use in the Bering Sea. *Journal of the Acoustical Society of America* 127: 1758.
- Miksis-Olds, JL, Parks, SE, Nystuen, JA (2009). Understanding the relationship between marine mammals and their environment in the Bering Sea. *Journal of the Acoustical Society of America* 126: 2271.
- Nystuen, JA, Hanson, MB, Emmons, C, Wade, P, Miksis-Olds, JL (2009). Detection of killer whale presence using low duty cycle recorders. *Journal of the Acoustical Society of America* 125: 2616-2617.
- Grebner, DM, Bradley, DL, Capone, DE, Parks, SE, Miksis-Olds, JL, Ford, JKB (2009). Killer whale discrete pulsed call variation. *Journal of the Acoustical Society of America* 126: 2272.
- Miksis-Olds, JL, Stokesbury, KDE, Rothschild, J (2008). Tracking seasonal community shifts in the acoustic dead zone of a closed area with an Acoustical Optical Platform. *ICES International Symposium on Ecosystem Approach with Fisheries Acoustics and Complementary Technologies (SEAFACETS)*.
- Miksis-Olds, JL (2007). Evaluation of an acoustical-optical platform for measuring species specific abundance in a weir trap. *Journal of the Acoustical Society of America* 121: 3105.
- Sarangapani, S, Miksis-Olds, JL, Reeder, DB (2007). Numerical modeling of groundfish target strength compared to in situ data. *Journal of the Acoustical Society of America* 121: 3040.
- Miksis-Olds, JL., Bernard, E, Jakubiak, CJ, Holliday, DV (2006). Combining acoustics and video to image fish in the acoustic dead zone. *Journal of the Acoustical Society of America* 120: 3059.
- Hamano, A, Miksis-Olds, JL, Bernard, E, Jakubiak, CJ (2006). An overview of the theoretical framework for measuring fish swimming speed by a sector-scanning sonar. *Journal of the Acoustical Society of America* 120: 3059.
- Miksis-Olds, JL., Stokesbury, KD (2006). An Autonomous System for Evaluating Groundfish Populations: the Ocean Groundfish Observatory. *ICES Annual Science Conference. ICES CM O:08*.
- Miksis-Olds, JL (2006). Are manatees modifying their vocalizations to compensate for noise? *Journal of the Acoustical Society of America* 119: 3404.
- Miksis-Olds, JL, Donaghay, PL, Miller, JH, Tyack, PL (2005). Environmental noise levels affect the activity budget of the Florida manatee. *Journal of the Acoustical Society of America* 118: 1910.
- Miksis-Olds, JL, Miller, JH, Tyack, PL, Reynolds, JE, Donaghay, PL (2004). Differential response by manatees to playbacks of sounds simulating approaching vessels. *Journal of the Acoustical Society of America* 116: 2556.

- Miksis-Olds, JL, Miller, JH, Tyack, PL (2004). The acoustics environment of the Florida manatee: correlation of noise and level of habitat use. *Journal of the Acoustical Society of America* 115: 2558.
- Miksis, JL, Miller, JH (2003). Using parabolic equations to model sound propagation in manatee habitats. *Proceedings of the European Cetacean Society 2003*. Las Palmas de Gran Canaria, Spain.

INVITED PRESENTATIONS

- Harris, D, Miksis-Olds, JL, Thomas, L, Vernon, J (2016). Large Scale Density estimation of blue and fin whales: combined whale distribution and density estimates using bearing data. *International Statistical Ecology Conference*. Seattle, WA, June 28-July 1.
- Miksis-Olds, JL (2015). Monitoring ocean dynamics through sounds. *Earth and Planetary Space Science Institute Seminar*. Michigan Technological University. September 28.
- Miksis-Olds, JL (2015). Keynote: Unraveling soundscapes – Learning to be good ocean listeners. *Underwater Acoustics Conference & Exhibition 2015*. Crete, Greece. June 21-26.
- Miksis-Olds, JL, Nichols, S (2015). Linking changes in soundscape levels to sources through frequency correlation matrices. *Underwater Acoustics Conference & Exhibition 2015*. Crete, Greece. June 21-26.
- Miksis-Olds, JL, Nichols, S (2015). Linking changes in soundscape levels to sources through frequency correlation matrices. *OCEANOISE 2015*. Vilanova, Spain. May 11-15.
- Miksis-Olds, JL, Vernon, JA, Heaney, K (2014). Global ocean sound behavior and its impact on translating soundscapes into acoustic communication range for signal detection. 5th *Intergovernmental conference: The Effects of Sounds in the Ocean on Marine Mammals*. Amsterdam, The Netherlands. September 8-12.
- Miksis-Olds, JL (2014). Studying the Bering Sea: Understanding ecosystem dynamics in (sub)arctic waters. *International Workshop on Arctic Ocean Tomography*, Arlington, VA, January 14-16.
- Miksis-Olds, JL (2013). Comparison of soundscapes across the Bering Sea shelf, a biological perspective. *Journal of the Acoustical Society of America* 134: 4147 (A). 166th Meeting of the Acoustical Society of America, San Francisco, CA, December 2-6.
- Ainslie, MA, Miksis-Olds, JL (2013). Periodic changes in deep ocean shipping noise: Possible causes and their implications. *Bioacoustics Day*, Leiden, Netherlands, September 18.
- Miksis-Olds, JL, Madden, LE (2012). The power of acoustics in ocean observing systems: A case study in the Bering Sea. *Acoustical Society of America* 132: 1915(A). 164th Meeting of the Acoustical Society of America, Kansas City, MO, October 22-26.
- Denes, SL, Miksis-Olds, JL, Mellinger, DK, Nystuen, JA (2012). Comparison of daily detections from two passive acoustic systems. *International Test and Evaluation Association (ITEA) Workshop*. State College, PA, April 26.
- Miksis-Olds, JL, Nystuen, JA (2012). The Passive Aquatic Listener (PAL): an adaptive sampling passive acoustic recorder. *International Test and Evaluation Association (ITEA) Workshop*. State College, PA, April 26.
- Miksis-Olds, JL, Denes, SL, Nystuen, JA (2011). Ecosystem monitoring: providing the proper context for interpreting behavioral responses of marine mammals. 4th *Intergovernmental conference: The Effects of Sounds in the Ocean on Marine Mammals*. Amsterdam, The Netherlands. September 5-9.
- Miksis-Olds, JL, Warren, JD (2011). Characterizing biological scatter before, during, and after a temporary ice retreat in the Bering Sea. *Acoustical Society of America* 129: 2401(A). 161st Meeting of the Acoustical Society of America, Seattle, WA, May 23-27.
- Nystuen, JA, Miksis-Olds, JL (2010). Soundscapes under sea ice: Can we listen for open water? 159th Meeting of the Acoustical Society of America, Baltimore, MD. April 19-23.
- Miksis-Olds, JL (2009). Passive acoustic monitoring of marine mammals using an adaptive, sub-sampling strategy. 3rd *Intergovernmental Conference: The Effects of Sounds in the Ocean on Marine Mammals*. Lercici, Italy. September 7-9.

- Miksis-Olds, JL (2009). Using acoustics to monitor fish response to lake habitat improvements. Cooperative Large Scale Lake Habitat Projects Meeting. PA Fish and Boat Commission. Bellefonte, PA.
- Miksis-Olds, JL, Nystuen, JA (2008). Spatial variation in marine mammal habitat soundscapes within one coastal region. Meeting of the Acoustical Society of America, Miami, FL.
- Miksis-Olds, JL (2007). Using acoustics to address biological questions in the marine environment. The Pennsylvania State University, School of Forestry, Wildlife and Fisheries Departmental Seminar, State College, PA.
- Miksis-Olds, JL (2007). Marine mammal bioacoustics. American Association for University Women, Middletown, RI.
- Miksis-Olds, JL (2006). Environmental noise levels affect the behavior of the Florida manatee. Naval Underwater Warfare Center, Newport, RI.
- Miksis-Olds, JL (2006). Quantifying the response of the Florida manatee to environmental noise. Woods Hole Oceanographic Institution, Applied Ocean Physics & Engineering Seminar, Woods Hole, MA.
- Miksis-Olds, JL, Donaghay, PL, Miller, JH, Tyack, PL (2005). Environmental noise levels affect the activity budget of the Florida manatee. International Sirenian Workshop, Minneapolis, MN.
- Miksis-Olds, JL (2005). The underwater world of the manatee. Rhode Island Tropical Fish Association, Warwick, RI.
- Miksis-Olds, JL, Miller, JH (2004). The acoustic environment of the Florida manatee: correlation of noise and habitat use. Workshop on Ocean Ambient Noise Budgets and Long Term Monitoring: Implications for Marine Mammals. NOAA/NMFS Series 2004. Warwick, RI.

CONFERENCE PRESENTATIONS

- Miksis-Olds, JL, Nieuirk, S (2016). Relating frequency shifts of Sri Lankan blue whale calls to the local soundscape. The Effects of Sound on Aquatic Animals, Dublin, Ireland, July 10-16.
- Haver, SM, Klinck, H, Miksis-Olds, JL, Nieuirk, SL, Matsumoto, H, Dziak, RP (2015). The not-so silent world: Measuring Arctic, Equatorial, and Antarctic soundscapes in the Atlantic Ocean. Society of Marine Mammalogy Society Meeting. San Francisco, CA. December 13-18.
- Stauffer, BA, Miksis-Olds, JL (2015). Decoupling of environmental conditions, primary, and secondary producers within cold regimes in the southeastern Bering Sea: Insights from a mooring time series and ship-based studies. AUG Fall Meeting. San Francisco, California. December 14-18.
- Harris, D, Thomas, L, Miksis-Olds, JL, Vernon, JA (2015). Large scale density estimation of blue and fin whales: combined distribution and density estimates using bearing data. 7th International Workshop on Detection, Classification and Localization of Marine Mammals Using Passive Acoustics. La Jolla, California. July 13-26.
- Miksis-Olds, JL, Urban E (2015). Characterizing the global soundscape over time. International Hydroacoustics Workshop. Vienna, Austria. June 29-30.
- Miksis-Olds, JL (2015). Assessing ocean sound trends and whale density from CTBTO data. International Hydroacoustics Workshop. Vienna, Austria. June 29-30.
- Miksis-Olds, JL, Stauffer BA (2014). Understanding the relationship between ice, primary producers, and consumers in the Bering Sea. Journal of the Acoustical Society of America 136: 2186. 168th Meeting of the Acoustical Society of America. Indianapolis, IN, October 27-31.
- Miksis-Olds, JL (2014). Is low frequency sound level uniformly increasing on a global scale? 167th Meeting of the Acoustical Society of America. Providence, RI, May 5-9.
- Miksis-Olds, JL (2013). Global trends in ocean noise. The Effects of Sound on Aquatic Animals, Budapest, Hungary, August 12-16.
- Miksis-Olds, JL, Denes, SL, Warren, JD (2012). A comparison of community structure from the southeastern and central Bering Sea shelf: insights gained from acoustic backscatter. ACOUSTICS 2012 HONG KONG, May 13-18.

- Miksis-Olds, JL, Denes, SL, Nystuen, JA, Warren, JD (2011). Ecosystem monitoring: providing the proper context for interpreting behavioral responses of marine mammals. 19th Biennial Conference on the Biology of Marine Mammals, Tampa, FL, November 28-December 2.
- Denes, SL, Miksis-Olds, JL, Nystuen, JA, Mellinger, DK (2011). A comparison of marine mammal detections from co-located sub-sampling passive acoustic monitors. Fifth International Workshop on Detection, Classification, Localization, and Density Estimation of Marine Mammals using Passive Acoustics, Mt. Hood, OR, August 21-25.
- Miksis-Olds, JL, Parks, SE (2011). Ribbon seal (*Phoca Histriophoca fasciata*) vocalizations in the Bering Sea. Acoustic Communication by Animals, Third International Symposium, Ithaca, NY, August 1-5.
- Madden, LE, Miksis-Olds, JL (2011). Evaluating freshwater habitat restoration with active acoustics. 161st Meeting of the Acoustical Society of America Meeting, Seattle, WA, May 23-27.
- Miksis-Olds, JL, Nystuen, JA, Parks, SE (2010). What does ecosystem acoustics reveal about marine mammals in the Bering Sea? The Second International Conference: The Effects of Noise on Aquatic Life. Cork, Ireland. August 16-20.
- Nystuen, JA, Miksis-Olds, JL (2010). Soundscapes under sea ice: Can we listen for open water? European Conference on Underwater Acoustics. Istanbul, Turkey. July 5-9.
- Miksis-Olds, JL, Nystuen, JA (2010). Acoustic tracking of upper trophic level dynamics in the Bering Sea. 2010 Ocean Sciences Meeting. Portland, OR. February 22-26.
- Miksis-Olds, JL, Nystuen, JA, Parks, SE (2009). Extracting incidental signals from targeted soundbites. 4th International Workshop on Detection, Classification and Localization of Marine Mammals Using Passive Acoustics. Pavia, Italy. September 10-13.
- Nystuen, JA, Miksis-Olds, JL, Parks, SE (2009). Probability of the detection of calling bouts by a low duty cycle passive acoustic recorder. 4th International Workshop on Detection, Classification and Localization of Marine Mammals Using Passive Acoustics. Pavia, Italy. September 10-13.
- Miksis-Olds, JL, Buck, JR, Noad, MJ, Cato, DH, Stokes, MD (2008). Sing it again Sam! Redundancy and repetition in Hawaiian and Australian humpback whale songs. Acoustic Communication by Animals Conference. August 12-15, 2008. Corvallis, OR.
- Miksis-Olds, JL (2007). The effect of environmental noise on the Florida manatee (*Trichechus manatus latirostris*). The Effects of Noise on Aquatic Life. August 13-17, 2007. Nyborg, Denmark.
- Miksis-Olds, JL (2007). Evaluation of an acoustical-optical platform for measuring species specific abundance in a weir trap. Journal of the Acoustical Society of America 121: 3105.
- Sarangapani, S, Miksis-Olds, JL, Reeder, DB (2007). Numerical modeling of groundfish target strength compared to in situ data. Journal of the Acoustical Society of America 121: 3040.
- Miksis-Olds, JL., Stokesbury, KD (2006). An Autonomous System for Evaluating Groundfish Populations: the Ocean Groundfish Observatory. ICES Annual Science Conference. September 19-23, 2006. Maastricht, Netherlands.
- Bernard, E, Jakubiak, CJ, Miksis-Olds, JL, Penvenne, J, Holliday, DV (2006). Calibration of a steered phased-array sonar for use in fish detection. OCEANS '06 MTS-IEEE Conference. September 18-22, 2006. Boston, M.A.
- Miksis-Olds, JL (2006). The development of an Ocean Groundfish Observatory. Southern New England Chapter, American Fisheries Society Summer Meeting. June 14, 2006. Fall River, MA.
- Miksis-Olds, JL (2006). Are manatees modifying their vocalizations to compensate for noise? 151st Meeting of the Acoustical Society of America. June 5-9, 2006. Providence, RI.
- Miksis-Olds, JL, Donaghay, PL, Miller, JH, Tyack, PL (2005). Environmental noise levels affect the activity budget of the Florida manatee. 150th Meeting of the Acoustical Society of America. October 15-19, 2005. Minneapolis, MN.
- Miksis-Olds, JL, Miller, JH, Tyack, PL, Reynolds, JE, Donaghay, PL (2005). Playbacks of simulated vessel approaches elicit differential responses from manatees. 16th International Biennial Conference on the Biology of Marine Mammals. Dec 12-16, 2005. San Diego, CA.

- Miksis-Olds, JL, Miller, JH, Tyack, PL, Reynolds, JE, Donaghay, PL (2004). Differential response by manatees to playbacks of sounds simulating approaching vessels. 148th Meeting of the Acoustical Society of America. November 15-19, 2004. San Diego, CA.
- Miksis-Olds, JL, Miller, JH, Tyack, PL (2004). The acoustics environment of the Florida manatee: correlation of noise and level of habitat use. 147th Meeting of the Acoustical Society of America. May 24-28, 2004. New York, NY.
- Miksis, JL, Miller, JH (2003). The acoustic environment of the manatee. 15th International Biennial Conference on the Biology of Marine Mammals. Dec 14-19, 2003. Greensboro, NC.
- Miksis, JL, Miller, JH (2003). Using Parabolic Equations to Model Sound Propagation in Manatee Habitats. 17th Annual Conference of the European Cetacean Society: Marine Mammals and Sound. March 9-13, 2003. Las Palmas de Gran Canaria, Spain.
- Donaghay, PL, Holliday, DV, Rines, JE, Sullivan, JM, Greenlaw, CF, McGehee, DE, Miksis, JL, Dekscheniks, MM (2002). Challenges in sampling plankton structure and composition at critical scales in the coastal ocean. 2002 Ocean Sciences Meeting. Feb 11-15, 2002. Honolulu, Hawaii.
- Miksis, JL, Tyack, PL, Buck, JR (2001). Human-made model sound incorporation in captive dolphin whistles. 14th International Biennial Conference on the Biology of Marine Mammals. Nov 28 - Dec 3, 2001. Vancouver, B.C., Canada.
- Miksis, JL, Grund, MD, Connor, RC, Tyack, PL (1999). Acoustic detection and measurement of heart rate changes from captive bottlenose dolphins, *Tursiops truncatus*. 13th International Biennial Conference on the Biology of Marine Mammals. Nov 28 - Dec 3, 1999. Maui, Hawaii.
- Fripp, D, Tyack, PL, Miksis, JL (1997). A comparison of methods for categorizing dolphin whistles. Northeast Regional Animal Behavior Meeting. Oct 3-5, 1997. Woods Hole, Massachusetts.

POPULAR PUBLICATIONS

- “Pygmy blue whales deepen their moans,” by Meghan Rosen. *Science News*, June 3, 2016.
<https://www.sciencenews.org/article/pygmy-blue-whales-deepen-their-moans?tgt=nr>
- “A monitor for the World’s Sounds,” by Gautam Naik. *The Wall Street Journal*, July 10, 2015.
<http://www.wsj.com/articles/a-monitor-for-the-worlds-sounds-1436554433>
- “Whale song resembles human language”, by Jennifer Viegas. *Discovery News*, March 24, 2006.
http://dsc.discovery.com/news/briefs/20060320/whalesong_ani_print.html
- “Dolphin hear, dolphin do”, by Kendall Powell. *Nature News*, August 21, 2002.
[doi:10.1038/news020819-2](https://doi.org/10.1038/news020819-2)

WORKSHOPS, PANELS, AND COMMITTEES

- Board of Trustees, Consortium for Ocean Leadership. 2016-2018.
- Science Committee, International Quiet Ocean Experiment. 2016-2018.
- Technical Program Chair, 199th Meeting of the Acoustical Society of America. May 18-22, 2015. Pittsburgh, PA.
- Co-Organizer of SeaBASS, a Marine Bioacoustics Summer School program offered biennially
- Panel Member, Ocean Studies Board of the U.S. National Research Council (NRC), Evaluation of the Drakes Bay Oyster Company Special Use Permit Draft Environmental Impacts Statement and Peer Review. 2012.
- Science Committee Member, Underwater Acoustics Conference & Exhibition. 2015.
- Advisor, International Conference on the Effects of Noise on Aquatic Life. August 16-20, 2010. Cork, Ireland; August 12-16, 2013. Budapest, Hungary; Summer 2016. Dublin, Ireland.
- Advisor, Technical Management Committee of the JIP sponsored by the International Oil and Gas Producers. 2007 to present.
- Committee Member, Publication Policy, Women in Acoustics, Acoustical Oceanography Technical Committee, Animals Bioacoustics Technical Committee, Acoustical Society of America.
- Committee Member, IEEE Oceanic Engineering Society (OES) Technical Committee on Underwater Acoustics. 2008-2012
- Organizer and Session Chair, Acoustics in Polar Environments, 159th Meeting of the Acoustical Society of America. April 19-23, 2010. Baltimore, MD.

Conference Session Chair, Manatees and Alligator Acoustics. 156th Meeting of the Acoustical Society of America. November 10-14, 2008. Miami, FL.; Acoustic Sensing of Animals. 151st Meeting of the Acoustical Society of America. June 5-9, 2006. Providence, RI.
Advisory Panel, Workshop on Ocean Ambient Noise Budgets and Long Term Monitoring: Implications for Marine Mammals. NOAA/NMFS Series 2004. Warwick, RI.

ACADEMIC AND PROFESSIONAL ORGANIZATIONS

Member, Sigma Xi Scientific Research Society
Member, American Geophysical Union
Member, Society for Marine Mammalogy
Member, Acoustical Society of America
Member, P.E.O. Pennsylvania Chapter AD
Member, American Association for University Women (AAUW)
Reviewer, Journal of the Acoustical Society of America
Reviewer, IEEE Journal of Oceanic Engineering
Reviewer, Aquatic Mammals
Reviewer, Endangered Species Research
Reviewer, PLOS ONE
Reviewer, Journal of Mammalogy
Guest Editor, Northeastern Naturalist 2011
Guest Editor, Acoustics Today 2012

HONORS & AWARDS

Fellow, Acoustical Society of America – 2016.
Presidential Early Career Award for Scientists and Engineers (PECASE) - 2013
Office of Naval Research Young Investigator Program (YIP) Award – 2011
NSF Young Investigator Travel Award - 2008
Acoustical Society of America – Young Investigator Travel Grant - 2007
URI Outstanding Dissertation Award in Biological/Life Sciences - 2006
American Association for University Women Fellowship – 2005-2006
Acoustical Society of America Best Student Paper Award – 5/2004, 11/2004
Jane B. Smith Endowed P.E.O. Scholar Award - 2003
National Defense Science and Engineering Graduate Fellow (NDSEG) – 2002-2005
URI Graduate School of Oceanography Alumni Award – 2001, 2002, 2003, 2004
Colicci Award in Ocean Engineering – 2001, 2005
University of Massachusetts Dartmouth Academic Scholarship - 1998, 1999
Lerner Gray Research Grant for Marine Science – 1998
Ford Foundation Research Grant – 1996
Elizabeth Cary Agassiz Certificate of Merit – 1995, 1996
Harvard College Scholar – 1995, 1996
Sigma Xi Research Grant Recipient – 1995

GRANTS & CONTRACTS

Atlantic Deepwater Ecosystem Observatory Network: An Integrated System (ADEON). Amount: up to \$6,500,000. Funding Agency: National Oceanographic Partnership Program through BOEM 2016-2021.
Monitoring for shifts in odontocete range and distribution in the Arctic and Sub-Arctic Seas (PECASE Award). Amount: \$800,000. Funding Agency: ONR 2016-2020.
Large scale density estimation of blue and fin whales. Amount: \$495,000. Funding Agency: ONR 2014-2017.

- Augmentation: Implications of changing sea-ice on phytoplankton and zooplankton biomass and community structure in the Bering Sea (Co-PI with Colleen Mouw). Amount: \$52,502 (ARL). Funding Agency: NASA. 2014-2015.
- Scientific Liaison on the Technical Committee of the Joint Industry Project – E & P Sound and Marine Life (PI). Amount: \$74,000. Funding Agency: JIP of the International Oil & Gas Producers. 2014-2016.
- Ocean basin impact of ambient noise on marine mammal detectability, distribution, and acoustic communication. Amount: \$510,000. Funding Agency: ONR Young Investigator Program. 2011-2015.
- SeaBASS 2014: A marine bioacoustics summer school (Co-PI with S. Parks). Amount: \$30,000. Funding Agency: Office of Naval Research. 2014.
- SeaBASS 2012: A marine bioacoustics summer school (Co-PI with S. Parks). Amount: \$21,000. Funding Agency: NOAA. 2014.
- SeaBASS 2012: A marine bioacoustics summer school (Co-PI with S. Parks). Amount: \$50,000. Funding Agency: Office of Naval Research. 2012.
- SeaBASS 2012: A marine bioacoustics summer school (Co-PI with S. Parks). Amount: \$21,000. Funding Agency: NOAA. 2012.
- Implications of changing sea-ice on phytoplankton and zooplankton biomass and community structure in the Bering Sea (Co-PI with Colleen Mouw). Amount: \$1,495,604. Funding Agency: NASA. 2010-2014.
- Cumulative and synergistic effects of physical, biological, and acoustic signals on marine mammal habitat use (PI). Amount: \$763,136. Funding Agency: Office of Naval Research. 2008-2010.
- Combining active and passive acoustics to study marine mammals (PI). Amount: \$269,872. Funding Agency: Office of Naval Research. DURIP Award for capital equipment. 2008-2009.
- Scientific Liaison on the Technical Committee of the Joint Industry Project – E & P Sound and Marine Life (PI). Amount: \$192,000. Funding Agency: JIP of the International Oil & Gas Producers. 2008-2014.
- SeaBASS: A marine bioacoustics summer school (Co-PI with S. Parks). Amount: \$30,000. Funding Agency: Office of Naval Research. 2009-2010.
- SeaBASS: A marine bioacoustics summer school (Co-PI with S. Parks). Amount: \$12,000. Funding Agency: NOAA. 2009-2010.
- Fine-scale focal Dtag behavioral study of diel trends in activity budgets and sound production of endangered baleen whales in the Gulf of Maine (Senior Personnel, PI: S. Parks). Amount: \$474,704, Funding Agency: Office of Naval Research. 2008-2010.
- Evaluating Lake Habitat Enhancement Structures Using Fisheries Acoustics (Co-PI with T. Wagner and P. Ferreri). Amount: \$3,000. Funding Agency: PA Fish and Boat Commission. 2009.

OCEANOGRAPHIC AND RESEARCH EXPERIENCE

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|-----------------|--|
| 4/2010 | NOAA FOCI mooring cruise. Bering Sea, AK. R/V Oscar Dyson. |
| 10/2008 | NOAA FOCI mooring cruise. Bering Sea, AK. R/V Miller Freeman. |
| 9/2007 | Impacts of seismic gun sound on fish hearing. Scott Reef, Australia. |
| 1/2006 – 6/2007 | New England groundfish stock assessment and monitoring using an acoustic-optic platform and AUV. Massachusetts Bay, MA. F/V Barbara L. Peters. |
| 4/2003 - 9/2004 | Dissertation field-work on the acoustic environment of Florida manatees. Sarasota, FL. Mote Marine Laboratory |
| 8/2002 | Operator of optic profiler on ORCAS NOPP cruise. Monterey Bay, CA. |
| 9/2001 | Operator of optic profiler on ORCAS NOPP cruise. Pensacola, FL. R/V Longhorn. |
| 2/2001 | Navy LWAD 01-1 cruise. Operator of the active sonar for marine mammal mitigation. Southeast US Coast. R/V Maurice Ewing. |
| 6/2000 | Playback experiments and acoustic heart rate recordings to study the reactions of bottlenose dolphins to vocalizations, Peter Tyack, WHOI. Sarasota, FL. |

4/2000	Digital tag trials to record heart rate of free-swimming beluga whales, Matthew Grund, WHOI, and John Buck, UMass Dartmouth. Mystic Aquarium, CT.
6/1998 - 12/1999	Playback experiments and acoustic heart rate recordings to study the reactions of bottlenose dolphins to conspecific vocalizations. Mystic Aquarium, CT.
9/1996 – 9/1997	Study of vocal learning of captive and wild dolphins. Woods Hole, MA.
5/1995 – 5/1996	Playback and interactive cognition experiments with rhesus macques, Marc Hauser, Harvard University. Cayo Santiago, Puerto Rico.
1/1995- 5/1996	Operant conditioning experiments with cotton-top tamarins, Harvard University.

ADVISING

Kerri Seger, PhD. Post-doctoral advisor, University of New Hampshire	present
Jasmin Buteau, Undergraduate research assistant, University of New Hampshire	present
Julia Vernon, PhD advisor, Penn. State University, Grad. Program in Acoustics	2016
Peyton Mowrey, Undergraduate WISER advisor, Penn State University	2016
Alex Kolessar, Undergraduate research assistant, Penn State University	2016
John Camin, PhD committee, Penn State University, Grad. Program in Acoustics	2015
Nicole Marcuso, Undergraduate research assistant, Penn State University	2015
Samuel Denes, PhD advisor, Penn. State University, Grad. Program in Acoustics	2014
Samantha Tufano, Undergraduate research assistant, Penn State University	2013
Russell Hawkins, MS advisor, Penn State University, Grad. Program in Acoustics	2013
Laura Madden, MS advisor, Penn State University, Wildlife & Fisheries Science	2012
Amanda Murphy, Undergraduate WISER advisor, Penn State University	2012
Cara Hotchkin, PhD committee, Penn State University, Ecology	2012
Michael Bollinger, Undergraduate thesis advisor, Penn State University	2012
Julia Boyd, Undergraduate WISER advisor, Penn State University	2011
Michelle Dienz, Undergraduate WISER advisor, Penn State University	2010
Diana Ioan, MEng advisor, Penn State University, Grad. Program in Acoustics	2010
Dawn Grebner, PhD committee, Penn. State University, Grad. Program in Acoustics	2009
Jeremy Joseph, MS committee, Penn State University, Grad. Program in Acoustics	2009
Deirdre Yeater, REU student, University of Rhode Island, Grad. School of Oceanography	2005
Maura Thompson, Intern, Mote Marine Laboratory	2004