

# Nadine Stewart J Lysiak

[nlysiak@neaq.org](mailto:nlysiak@neaq.org)

## EDUCATION

- 2009      **Ph.D. in Biology-Marine Science**  
Boston University, Boston, MA
- 2007      **M.A. in Biology-Marine Science**  
Boston University, Boston, MA
- 2003      **B.A. in Biology and History**  
Gustavus Adolphus College, St. Peter, MN

## PROFESSIONAL APPOINTMENTS

- 2023 –      **Research Scientist**, Wildlife and Ocean Health Laboratory, Anderson Cabot Center for Ocean Life at New England Aquarium, Boston, MA
- 2014 –      **Guest Investigator**, Biology Department, Woods Hole Oceanographic Institution, Woods Hole, MA
- 2014 –      **Faculty**, Shoals Marine Laboratory (University of New Hampshire), Isles of Shoals  
Courses: Marine Mammal Biology (undergraduate, 18 students)  
             Shoals Ecology: Seabirds, Seals & Seaweed (adult continuing education)  
Undergraduate Research Mentor: Seal Population Monitoring Study (2-3 students)
- 2019 – 2023      **Assistant Professor**, Biology Department, Suffolk University, Boston, MA  
Courses: Ecology with Laboratory (undergraduate, 20-40 students)  
             Introduction to Marine Mammals (undergraduate, 20 students)  
             Biology of Whales (undergraduate, 20 students)  
             Organismal Biology Laboratory (undergraduate, 20 students)  
             Biology Senior Seminar (professional development, 50 students)
- 2015 – 2019      **Lecturer**, Biology Department, University of Massachusetts Boston, Boston, MA  
Courses: General Biology II w Laboratory (ecology & evolution; 144-450 students)
- 2015      **Visiting Faculty**, Department of Biology, Baylor University, Waco, TX  
Course: Modern Concepts of Bioscience (evolution & ecology; 110 students)
- 2014 – 2015      **Postdoctoral Fellow**, Departments of Biology and Environmental Science, Baylor University, Waco, TX
- 2014 – 2019      **Research Associate**, John H. Prescott Marine Laboratory, New England Aquarium, Boston, MA

- 2011 – 2020 **Faculty**, The Marine Studies Consortium, Boston, MA  
 Courses: Introduction to Marine Mammals (30 students)  
 Biology of Whales (35 students)
- 2011 – 2014 **Lecturer**, College of Advancing and Professional Studies, University of Massachusetts Boston, Boston, MA  
 Courses: General Biology II (ecology & evolution; 30 students)  
 Biology 101 – The Basis of Life (non-majors; 24 students)
- 2009 – 2014 **Visiting Assistant Professor**, Department of Biological Sciences, Bridgewater State University, Bridgewater, MA  
 Courses: General Principles of Biology & Laboratory (non-majors; 25 students)  
 Introduction to Zoology (non-majors; 25 students)  
 General Biology II (evolution & zoology; 75 students)  
 Comparative Chordate Anatomy Laboratory (20 students)
- 2009 – 2014 **Research Associate II**, Biology Department, Woods Hole Oceanographic Institution, Woods Hole, MA
- 2008 – 2009 **Postdoctoral Scholar**, Biology Department, Woods Hole Oceanographic Institution, Woods Hole, MA
- 2004 – 2007 **Marine Mammal Specialist**, Protected Species Branch, NOAA Northeast Fisheries Science Center, Woods Hole, MA

## PUBLICATIONS

- 2023 **Lysiak, N.S.**, S. Ferguson, M.P. Heide-Jørgensen, C. Hornby, and C.J. Matthews. Prolonged baleen hormone cycles suggest atypical reproductive endocrinology of female bowhead whales. *Proceedings of the Royal Society B: Biological Sciences*, 10(7), doi: 10.1098/rsos.230365.
- 2023 Forbes, R. B. Nakamoto, **N. S. Lysiak**, T. Wimmer, and B. Hayden. Stable isotope analysis of baleen from North Atlantic right whale *Eubalaena glacialis* reflects distribution shift to the Gulf of St. Lawrence. *Marine Ecology Progress Series*, doi: 10.3354/meps14428.
- 2020 Werth, A.J., T.L. Sformo, **N.S. Lysiak**, D. Rita, and J.C. George. Baleen turnover and gut transit in mysticete whales and its environmental implications. *Polar Biology*, doi:10.1007/s00300-020-02673-8.
- 2018 **Lysiak, N.S.**, S.J. Trumble, A.R. Knowlton, and M.J. Moore. Characterizing the duration and severity of fishing gear entanglement on a North Atlantic right whale (*Eubalaena glacialis*) using stable isotopes, steroid and thyroid hormones in baleen. *Frontiers in Marine Science* 5:168, doi:10.3389/fmars.2018.00168.

- 2018 Hunt, K.E, **N.S. Lysiak**, C.J.D. Matthews, C. Lowe, F. Ajo, D. Dillon, C. Willing, M. Heide-Jørgensen, S. Ferguson, M.J. Moore, and C.L. Buck. Multi-year patterns in testosterone, cortisol, and corticosterone in baleen from adult males of three whale species. *Conservation Physiology* 6(1), doi:10.1093/conphys/coy049.
- 2017 Hunt, K.E, **N.S. Lysiak**, J. Robbins, M.J. Moore, R.E. Seton, L. Torres, and C.L. Buck. Multiple steroid and thyroid hormones detected in baleen from eight whale species. *Conservation Physiology* 5(1), doi:10.1093/conphys/cox061.
- 2017 Baumgartner, M.F., F.W. Wenzel, **N.S. Lysiak**, and M.R. Patrician. North Atlantic right whale foraging ecology and its role in human-caused mortality. *Marine Ecology Progress Series* 581:165-181, doi:10.3354/meps12315.
- 2017 Hunt, K.E, **N.S. Lysiak**, M.J. Moore, and R.M. Rolland. Multi-year longitudinal profiles of cortisol and corticosterone recovered from baleen of North Atlantic right whales (*Eubalaena glacialis*). *General and Comparative Endocrinology* 254:50-59, doi:10.1016/j.ygcen.2017.09.009.
- 2017 Norman, S.A., Z.C. Winfield, B.H. Rickman, S. Usenko, M. Klope, S. Berta, S. Dubpernell, H. Garrett, M.J. Adams, D. Lambourn, J. Huggins, **N.S. Lysiak**, R. Sanders, and S.J. Trumble. Persistent organic pollutant and hormone levels in a harbor porpoise with B-cell lymphoma. *Archives of Environmental Contamination and Toxicology* 72:596-605, doi:10.1007/s00244-017-0404-y.
- 2016 Tarrant, A.M, M.F. Baumgartner, **N.S. Lysiak**, D. Altin, and B.H. Hansen. Transcriptional profiling of metabolic transitions during development and diapause preparation in the copepod *Calanus finmarchicus*. *Integrative and Comparative Biology* 56(6):1157-1169, doi:10.1093/icb/icw060.
- 2016 Hunt, K.E, **N.S. Lysiak**, M.J. Moore, and R.M. Rolland. Longitudinal progesterone profiles in baleen from female North Atlantic right whales (*Eubalaena glacialis*) match known calving history. *Conservation Physiology* 4(1), doi:10.1093/conphys/cow014.
- 2013 Baumgartner, M.F., **N.S. Lysiak**, H.C. Esch, A.N. Zerbini, C.L. Berchok, and P.J. Clapham. Associations between North Pacific right whales and their zooplanktonic prey in the southeastern Bering Sea. *Marine Ecology Progress Series* 490:267-284, doi: 10.3354/meps10457.
- 2011 Baumgartner, M.F., **N.S. Lysiak**, C. Shuman, J. Urban-Rich, and F. Wenzel. Diel vertical migration behavior of *Calanus finmarchicus* in the southwestern Gulf of Maine and its influence on right and sei whale occurrence. *Marine Ecology Progress Series* 423: 167-184, doi: 10.3354/meps08931.

- 2006 Gerlach, G. and **N.S. Lysiak**. Kin recognition and inbreeding avoidance in zebrafish, *Danio rerio*, is based on phenotype matching. *Animal Behaviour* 71:1371-1377, doi:10.1016/j.anbehav.2005.10.010.

## HONORS & AWARDS

- 2022 Summer Research Stipend, Center for Teaching & Scholarly Development, College of Arts & Sciences, Suffolk University
- 2021 Course Development Stipend, Center for Teaching & Scholarly Development, College of Arts & Sciences, Suffolk University
- 2020 Summer Research Stipend, Center for Teaching & Scholarly Development, College of Arts & Sciences, Suffolk University
- 2007 American [Dissertation] Fellowship, American Association of University Women
- 2006 Graduate Research Abroad Fellowship, Boston University
- 2006 SEASPACE Scholarship, Houston Underwater Club
- 2005 Rainer Voight Memorial Award, First Place, Boston University Marine Program
- 2005 Humes Research Award, Boston University Marine Program
- 2003 Tri-Beta Biological Honors Society, Gustavus Adolphus College
- 2002 Barry M. Goldwater Scholarship, Barry M. Goldwater Foundation

## [FUNDED] RESEARCH GRANTS

### **Project: North Atlantic right whale reproductive & stress physiology**

- 2023 – 2025 Marine Mammal Commission, \$60,000  
**N. Lysiak:** Co-PI
- 2023 – 2024 NOAA National Marine Fisheries Service, \$85,000  
**N. Lysiak:** Co-PI
- 2022 Department of Fisheries & Oceans (Canada), \$12,000  
**N. Lysiak:** PI
- 2021-2022 Department of Fisheries & Oceans (Canada), \$32,000  
PI: Dr. E. Burgess, New England Aquarium  
**N. Lysiak:** Co-Investigator
- 2014 – 2016 WHOI Marine Mammal Center Research Award, \$50,000  
**N. Lysiak:** Co-PI and Lead Author
- 2014 – 2015 Eppley Foundation, \$25,000  
PI: Dr. K. Hunt – then New England Aquarium  
**N. Lysiak:** Co-Investigator

### **Project: Bowhead whale reproductive & stress physiology**

- 2021 – 2025 National Science Foundation - Integrative Organismal Systems, \$599,634  
PI: Dr. K. Hunt – George Mason University  
**N. Lysiak:** Co-Investigator

2017-2018 Department of Fisheries & Oceans (Canada), \$15,000  
**N. Lysiak:** PI

2015 – 2018 North Slope Borough/Shell Oil Baseline Studies Program, \$286,000  
 PI: Dr. R. Rolland – New England Aquarium  
**N. Lysiak:** Co-Investigator

**Project: Impacts of climate change on bowhead whale habitat use**

2013 – 2014 National Fish & Wildlife Foundations/Alaska Fish & Wildlife Fund, \$80,000  
**N. Lysiak:** PI

2011 – 2013 National Fish & Wildlife Foundations/Alaska Fish & Wildlife Fund, \$80,000  
**N. Lysiak:** PI

2010 – 2012 North Pacific Research Board, \$90,000  
**N. Lysiak:** PI

**Project: North Atlantic right whale foraging ecology**

2007 – 2010 WHOI Ocean Life Institute Research Award, \$150,000  
**N. Lysiak:** Co-PI and Lead Author

2006 – 2008 A.V. Stout Fund, Norcross Wildlife Foundation, \$1,000  
**N. Lysiak:** PI

2005 – 2007 Lerner Gray Fund, American Museum of Natural History, \$2,000  
**N. Lysiak:** PI

2004 – 2008 Sound Conservancy Grants, Quebec Labrador Foundation, \$4,500  
**N. Lysiak:** PI

2004 – 2006 NOAA/NMFS Right Whale Grants Program, \$48,000  
 PI: Dr. P. Tyack – then Woods Hole Oceanographic Institution  
**N. Lysiak:** Co-Investigator and Lead Author

**SELECTED CONFERENCE PRESENTATIONS** (# indicates undergraduate student papers)

2022 **Lysiak, N.S.**, C.A. Hornby, S.H. Ferguson, M.P. Heidi- Jørgensen, and C.J.D. Matthews. Reproductive parameters of bowhead whales (*Balaena mysticetus*) inferred from baleen steroid hormones. Society for Marine Mammalogy Biennial Conference, West Palm Beach, FL (poster).

2022 #Veo, J., **N.S. Lysiak**, L. Sette, and A. Bogomolni. Long term population assessment of harbor (*Phoca vitulina*) and gray seals (*Halichoerus grypus*) at the Isles of Shoals, ME, USA. Society for Marine Mammalogy Biennial Conference, West Palm Beach, FL (poster).

2021 **Lysiak, N.S.**, K. Graham, T. Wimmer, M.J. Moore, A.R. Knowlton, and E. Burgess. Biogeochemical analysis of baleen as a wildlife forensic tool: reconstructing the

- lives (and deaths) of North Atlantic right whales. North Atlantic Right Whale Consortium Annual Meeting, virtual.
- 2020 Baumgartner, M., F. Wenzel, **N.S. Lysiak**, and M. Patrician. North Atlantic right whale foraging ecology and its role in mediating human-caused mortality. American Society of Limnology & Oceanography Ocean Sciences Meeting, San Diego, CA.
- 2019 **Lysiak, N.S.**, M.J. Moore, A.R. Knowlton, S.J. Trumble. Untangling fishing gear entanglements with biomarkers in right whale baleen. Society for Integrative & Comparative Biology Northeast Regional Meeting, Boston, MA.
- 2019 #Sirison, N., A. Bogomolni, L. Sette, and **N. Lysiak**. Haul out behavior of harbor and gray seals in response to wind and haul-out abundance on Duck Island, Maine. Gulf of Maine 2050 Meeting, Portland, ME. (poster)
- 2019 #Hoag, H., A. Bogomolni, L. Sette, and **N. Lysiak**. Lunar cycle and haul-out abundance of harbor seals and gray seals at Duck Island, Maine and surrounding ledges. Gulf of Maine 2050 Meeting, Portland, ME. (poster)
- 2019 Matthews C.J.D., **N. S. Lysiak**, C.A. Hornby, M.P. Heide-Jørgensen, and S.H. Ferguson. Baleen hormone cycles inform reproductive histories of female bowhead whales. International Society of Wildlife Endocrinology Conference, Kruger National Park, South Africa.
- 2019 #Veo, J., #J. Berube, A. Bogomolni, **N.S. Lysiak**, and L. Sette. Characterizing the diet of stranded harbor seals (*Phoca vitulina vitulina*) and comparing to local fisheries in the Gulf of Maine. Greater Atlantic Regional Stranding Conference, Freeport, ME.
- 2018 #Berube, J., #J. Veo, K. Pugliares, **N.S. Lysiak**, L. Sette, and A. Bogomolni. Dietary trends of stranded harbor seals (*Phoca vitulina*) and local fisheries in the Gulf of Maine. Regional Association for Research on the Gulf of Maine, Portland, ME. (poster)
- 2018 #Veo, J., #J. Berube, A. Bogomolni, **N.S. Lysiak**, and L. Sette. Characterizing the diet of stranded harbor seals (*Phoca vitulina concolor*) in the Gulf of Maine. Regional Association for Research on the Gulf of Maine, Portland, ME. (poster)
- 2018 #Tommasi, K., A. Bogomolni, **N.S. Lysiak**, and L. Sette. The interspecific interactions and habitat preferences of harbor seals (*Phoca vitulina concolor*) and gray seals (*Halichoerus grypus*) on Duck Island and Ledges, ME. Northwest Atlantic Seal Research Consortium, New Bedford, MA.

- 2018 R.M. Rolland, **N.S. Lysiak**, K.M. Graham, K.E. Hunt, R. Stimmelmayer, R.E. Suydam, R. Hannigan, and J.C. George. Longitudinal calving history of bowhead whales (*Balaena mysticetus*) is recorded in baleen progesterone. International Association of Aquatic Animal Medicine Meeting, Long Beach, CA.
- 2017 **Lysiak, N.S.**, S.J. Trumble, A.R. Knowlton, and M.J. Moore. Chemical profiles of right whale (*Eubalaena glacialis*) baleen show a new understanding of fishing gear entanglement severity and duration. 22<sup>nd</sup> Biennial Conference on the Biology of Marine Mammals, Halifax, Canada.
- 2017 Rolland, R.M., **N.S. Lysiak**, K.M. Graham, K.E. Hunt, R. Stimmelmayer, R.E. Suydam, R. Hannigan, R. Fuller, and J.C. George. Baleen progesterone documents over a decade of past calving events in bowhead whales (*Balaena mysticetus*). 22<sup>nd</sup> Biennial Conference on the Biology of Marine Mammals, Halifax, Canada.
- 2017 Hunt, K.E, **N. S. Lysiak**, J. Robbins, M.J. Moore, R.E. Seton, L. Torres, and C.L. Buck. Multiple steroid and thyroid hormones detected in baleen from eight whale species. 22<sup>nd</sup> Biennial Conference on the Biology of Marine Mammals, Halifax, Canada.
- 2017 Baumgartner, M.F., F. Wenzel, **N.S. Lysiak**, and M.R. Patrician. North Atlantic right whale foraging ecology and its role in mediating human-caused mortality. 22<sup>nd</sup> Biennial Conference on the Biology of Marine Mammals, Halifax, Canada. (poster)
- 2017 #Tommasi, K., A. Bogomolni, L. Sette, and **N.S. Lysiak**. The interspecific interactions and habitat preferences of harbor (*Phoca vitulina*) and gray seals (*Halichoerus grypus*) on Duck Island and ledges, ME. Regional Association for Research on the Gulf of Maine, Portland, ME. (poster)
- 2016 #Calandrino, M., A. Bogomolni, and **N.S. Lysiak**. Variation in gray seal (*Halichoerus grypus*) and harbor seal (*Phoca vitulina*) seal minimum abundance counts on Duck Island, ME due to meteorological variables. Regional Association for Research on the Gulf of Maine, Portsmouth, NH. (poster)
- 2016 #Carr, M., **N.S. Lysiak**, and A. Bogomolni. Entanglement of gray (*Halichoerus grypus*) and harbor seals (*Phoca vitulina*) at Duck Island ledges, ME. Regional Association for Research on the Gulf of Maine, Portsmouth, NH. (poster)
- 2016 #Tsourounakis, G., A. Bogomolni, and **N.S. Lysiak**. Fine-scale haul-out preferences of harbor seals (*Phoca vitulina*) and gray seals (*Halichoerus grypus*) at Duck Island, ME. Regional Association for Research on the Gulf of Maine, Portsmouth, NH. (poster)
- 2016 Tarrant, A.M., M.F. Baumgartner, **N.S. Lysiak**, D. Altin, T. Nordtug, and A.J. Olsen. Transcriptomics of diapause and lipid accumulation in the marine copepod

*Calanus finmarchicus*. Society for Integrative and Comparative Biology, Portland, OR.

- 2015 **Lysiak, N.S.**, S.J. Trumble, M.J. Moore, A.R. Knowlton, R. Sanders, A.E. Clark, and S. Usenko. Untangling the life of an entangled North Atlantic right whale with chemical profiles of baleen. 21<sup>st</sup> Biennial Conference on the Biology of Marine Mammals, San Francisco, CA.
- 2015 Trumble, S.J., S. Usenko, J.G.M.H. Thewissen, J.C. George, **N.S. Lysiak**, R. Sanders, Z. Winfield, and A.N. Stevens. Using the earplug of a female bowhead whale to reconstruct its lifetime chemical profiles. 21<sup>st</sup> Biennial Conference on the Biology of Marine Mammals, San Francisco, CA.
- 2015 #Alexandrou, A., A. Bogomolni, **N.S. Lysiak**, #K. Sonnichsen, and J.R. Seavey. Entanglement in phocid species *Halichoerus grypus* (gray seal) and *Phoca vitulina* (harbor seal). Regional Association for Research on the Gulf of Maine, Portsmouth, NH. (poster)
- 2015 #Sonnichsen, K., #A. Alexandrou, A. Bogomolni, **N.S. Lysiak**, and J.R. Seavey. Categorizing injuries within a population of gray (*Halichoerus grypus*) and harbor (*Phoca vitulina*) seals. Regional Association for Research on the Gulf of Maine, Portsmouth, NH. (poster)
- 2015 Hunt, K.H, **N.S. Lysiak**, M.J. Moore, and R.M. Rolland. Longitudinal decade-long progesterone and cortisol profiles recovered from baleen of North Atlantic right whales (*Eubalaena glacialis*). International Society of Wildlife Endocrinology Conference, Berlin, Germany.
- 2015 Rickman, B.H., S.A. Norman, M. Klope, S. Berta, S. Dubpernell, H. Garrett, M.J. Adams, D. Lambourn, J. Huggins, S. Usenko, **N.S. Lysiak**, and S. Trumble. B-cell lymphoma in a harbor porpoise (*Phocoena phocoena*). International Association for Aquatic Animal Medicine. Chicago, IL. (poster)
- 2014 Tarrant, A.M., M.F. Baumgartner, **N.S. Lysiak**, B.H. Hansen, D. Altin, T. Nordtug, and A.J. Olsen. Distinguishing between preparation for diapause and the terminal molt in C5 copepodites of the copepod *Calanus finmarchicus* using gene expression profiling. American Society for Limnology & Oceanography Ocean Sciences Meeting, Honolulu, HI.
- 2013 **Lysiak, N.S.**, M.F. Baumgartner, and J.C. George. Bowhead whale stable isotope geochemistry and linkages to the rapidly changing Arctic. 20<sup>th</sup> Biennial Conference on the Biology of Marine Mammals, Dunedin, New Zealand.
- 2013 Baumgartner, M.F., A.M. Tarrant, **N.S. Lysiak**, B.H. Hansen, A.M. Aruda, D. Altin, T. Nordtug, and A.J. Olsen. Identifying markers of preparation for dormancy and the



- terminal molt in *Calanus finmarchicus*. Society of Integrative and Comparative Biology Annual Meeting, San Francisco, CA. (poster)
- 2012 Baumgartner, M., **N.S. Lysiak**, F. Wenzel, M. Patrician, and S. Mussoline. Right whale diving and foraging behavior in the Gulf of Maine. North Atlantic Right Whale Consortium Annual Meeting, New Bedford, MA.
- 2011 **Lysiak, N.S.**, M.F. Baumgartner, and J.C. George. Correlating shifting baselines in the Arctic to long-term bowhead whale isotope records. 19<sup>th</sup> Biennial Conference on the Biology of Marine Mammals, Tampa FL. (poster)
- 2010 Baumgartner, M., **N.S. Lysiak**, C. Schuman, J. Urban-Rich, and F. Wenzel. The influence of copepod diel vertical migration on competition between right whales and zooplanktivorous fish. North Atlantic Right Whale Consortium Annual Meeting, New Bedford, MA.
- 2009 **Lysiak, N.S.**, M.J. Moore, and A.R. Knowlton. Assessing long-term foraging in North Atlantic right whales with biogeochemical tracers. 18<sup>th</sup> Biennial Conference on the Biology of Marine Mammals, Quebec City, Canada.
- 2008 McMahan, K.W., **N.S. Lysiak**, L.D. Brin, K. Buckman, J. Kneeland, F. Gibbons, and S.R. Thorrold. Ocean ecogeochemistry applied to connectivity analyses in marine populations. Isoscapes 2008 Meeting, Santa Barbara, CA. (poster)
- 2007 **Lysiak, N.S.**, M.J. Moore, B.A. McLeod, T.R. Frasier, C.R. Hammerschmidt, A.P. McNichol, and R. Löchen. Biogeochemical analysis of baleen fragments discovered within Viking Era ships. North Atlantic Right Whale Consortium Annual Meeting, New Bedford, MA.
- 2006 Hammerschmidt, C., **N.S. Lysiak**, M. Saito, and M.J. Moore. Northern right whale foraging and metabolism inferred from stable isotope and methylmercury analysis of baleen. 8<sup>th</sup> International Conference on Mercury as a Global Pollutant, Madison, WI. (poster)
- 2005 **Lysiak, N.S.**, M.J. Moore, I. Valiela, and A.R. Knowlton. Stable isotopes analysis utilized to create multi-annual records of right whale migration patterns. 16<sup>th</sup> Biennial Conference on the Biology of Marine Mammals, San Diego, CA.
- 2005 **Lysiak, N.S.**, M.J. Moore, I. Valiela, and A.R. Knowlton. Stable isotopes of North Atlantic right whale baleen as indicators of foraging and migration patterns. American Society of Limnology & Oceanography Summer Meeting, Santiago de Compostela, Spain.
- 2002 **#Lysiak, N.S.**, #A.A. Hamp, and N.M. Butler. The phototactic behavior of marine and freshwater zooplankton as influenced by habitat and light quality. American

Society of Limnology & Oceanography Ocean Sciences Meeting, Honolulu, HI.  
(poster)

- 2002 #Hamp, A.A., #**N.S. Lysiak**, and N.M. Butler. Investigations into the phototactic behaviors of marine and freshwater mysids. American Society of Limnology & Oceanography Ocean Sciences Meeting, Honolulu, HI. (poster)
- 2001 #Ortenblad, M., #K.N. Howe, #**N.S. Lysiak**, and N.M. Butler. Field and laboratory investigations of the phototactic behaviors of *Diatomus* and *Daphnia* in response to four wavelengths of light. National Conference on Undergraduate Research, Louisville, KY.

### PRESS & MEDIA CONTRIBUTIONS

- 2023 *New York Times*, “The prize for the longest pregnancy in mammals may go to this whale,” <https://www.nytimes.com/2023/07/25/science/bowhead-whales-pregnancy.html>
- 2023 IFLScience.com, “Longest gestation in a mammal could have a new contender,” <https://www.iflscience.com/longest-gestation-in-a-mammal-could-have-a-new-contender-69997>
- 2022 *Hakai Magazine*, “Coastal job: baleen investigator,” <https://hakaimagazine.com/article-short/coastal-job-baleen-investigator/>
- 2021 *Scientific American*, “To see where a whale has been, look in its mouth,” <https://www.scientificamerican.com/article/to-see-where-a-whale-has-been-look-in-its-mouth/>
- 2020 *Learning for Life @ Gustavus Adolphus College* (podcast), S.3E.2: “Trying to do right by whales,” <https://anchor.fm/gustavus--adolphus-college/episodes/Trying-to-Do-Right-by-Whales-ei3ueg>
- 2019 Canadian Broadcasting Company, “How baleen from necropsied right whales can help the endangered species,” <https://www.cbc.ca/news/canada/nova-scotia/whale-baleen-north-atlantic-right-whales-1.5241106>
- 2018 *The Atlantic*, “Baleen holds secrets to whales’ lives – and deaths,” <https://www.theatlantic.com/science/archive/2018/06/right-whale-baleen-forensics/563897/>
- 2018 *Hakai Magazine*, “An entangled whale tell-all,” <https://hakaimagazine.com/news/an-entangled-whale-tell-all/>

## **INVITED TALKS**

- 2022-2024 “Biogeochemical analysis of baleen as a wildlife forensic tool: reconstructing the lives (and deaths) of North Atlantic right whales” Presented at George Mason University, virtual.
- 2022 “Biogeochemical analysis of baleen as a wildlife forensic tool: reconstructing the lives (and deaths) of North Atlantic right whales” Presented at East Carolina University, virtual.
- 2016 "Marine mammals in the Gulf of Maine: conservation, management, and future directions" Presented at Harvard Institute, Cambridge, MA.
- 2013 "Discovering the secret lives of whales with chemical tracers" Presented at Wellesley College, Wellesley, MA.
- 2013 “Bowhead whales and the reality of vanishing sea ice” Presented at Stonehill College, Easton, MA.
- 2008 “Conservation biology and environmental justice issues associated with baleen whales” Presented at Gustavus Adolphus College, St. Peter, MN.
- 2007 “Tracking the migration and patterns of North Atlantic right whales with stable isotopes” Presented at NOAA Northeast Fisheries Science Center Seminar Series, Woods Hole, MA.

## **DEPARTMENTAL TALKS**

- 2019 “Unlocking the secret lives of whales through biomarkers in baleen” Presented at Suffolk University, Boston MA.
- 2015 “Untangling the life of an entangled whale: Contaminant, hormone, and isotope profiles of a North Atlantic right whale” Presented at Baylor University, Waco, TX.
- 2012 “Right whale ecology and conservation” Presented at Woods Hole Oceanographic Institution Science Made Public lecture series, Woods Hole, MA.
- 2007 “North Atlantic right whale conservation” Presented at Woods Hole Oceanographic Institution Ocean Science Journalism Workshop, Woods Hole, MA.

## **WORKSHOPS & SHORT COURSES**

- 2022 Ambassadors for Inclusion (AFI) 1.0: Creating an Inclusive Community. Office of Diversity, Equity, & Inclusion, Suffolk University, October 12-November 16.

- 2020 Online Course Design Institute. Center for Teaching and Scholarly Excellence, Suffolk University, June 1-26.
- 2018 The Active Learning (TAL) Fellowship. University of Massachusetts, Boston, September 7-November 15.
- 2009 Communicating Science to Non-Scientists short course, Woods Hole Oceanographic Institution, Woods Hole, MA, April 9-May 14.
- 2006 Noise-Related Cetacean Stranding Protocol Workshop, Woods Hole Oceanographic Institution, Woods Hole, MA, September 7-8. Protocol available: <http://www.nmfs.noaa.gov/pr/health/noise/docs/protocols.pdf>
- 2006 Large Whale Restraint Workshop, Woods Hole Oceanographic Institution, Woods Hole, MA, February 7-8. Report available: [www.whoi.edu](http://www.whoi.edu)
- 2004 Stable Isotope Ecology & Methods summer course, University of Utah, Salt Lake City, UT, June 13-24.

#### SEA DUTY

**Project: Blue whales in Patagonia:** photogrammetry, drone sampling, & tagging

2017 *F/V Centinela* (February 14 – March 2)

**Project: North Atlantic right whales in the Gulf of Maine:** foraging ecology & tagging

2013 *NOAA Ship Gordon Gunter* (April 29 – May 31)

2012 *R/V Tioga* (April 12); *R/V Endeavor* (November 28 – December 6)

2010 *NOAA Ship Delaware II* (May 3 – 21)

2009 *R/V Tioga* (May 1 – 31)

2007 *NOAA Ship Albatross IV* (May 7 – June 10); *R/V Tioga* (July 18 – 20)

2006 *R/V Tioga* (March 13, Dec 4 – 6); *NOAA Ship Albatross IV* (May 1 – 26)

2005 *NOAA Ship Albatross IV* (April 28 – May 20); *R/V Tioga* (July 15); *NOAA Ship Delaware II* (July 27 – August 19)

2004 *NOAA Ship Albatross IV* (April 26 – May 21)

**Project: Calanus finmarchicus in the Norwegian Sea:** field & lab studies of diapause

2012 *R/V Calanus* (May 1 – June 15)

**Project: Bowhead whales in the Beaufort Sea:** foraging ecology & tagging

2011 *MMS Launch 1273* (August 26 – September 6)

2010 *MMS Launch 1273* (August 18 – September 21)

2009 *MMS Launch 1273* (September 8 – 23)

2008 *MMS Launch 1273* (September 6 – 23)

**Project: North Pacific right whales in the Bering Sea:** foraging ecology & tagging

- 2009 *F/V Aquila* (July 16 – August 7)
- 2008 *F/V Ocean Olympic* (August 2 – 15)

**COMMUNITY OUTREACH**

- 2023 – Member, Maine Coalition for North Atlantic Right Whales
- 2020 Guest Lecturer for Blue Ocean Society (Naturalist Workshop and Intern Training)
- 2019 Panelist at Piscataqua Science Café, “Seals on the Shoals: Population Monitoring and Human Interactions on Harbor and Gray Seal”
- 2018 Presenter at Winsor School STEMinar (high school STEM course)
- 2017 Presenter at Harvard Medical School MEDscience (high school STEM program)
- 2017 Presenter at Winsor School Global Forum, “Plastics and Marine Mammals”
- 2015 Exhibit Contributor at Smithsonian Institution *Q?rius* “Whale Earplug Exhibit”
- 2012 Exhibit Contributor at North Carolina Museum of Natural Sciences
- 2007 – 2013 Presenter at UMass Dartmouth High School Marine Science Symposium
- 2007 – 2009 Science Fair Judge at Falmouth (MA) Public Schools
- 2005 – 2009 Marine Mammal Necropsy Participant at IFAW Marine Mammal Rescue Team
- 2003 – 2007 Volunteer Aquarist at NOAA Woods Hole Aquarium

**CERTIFICATIONS**

- |   |                                    |
|---|------------------------------------|
| Advanced First Aid                          | EVERFI Managing Bias               |
| Adult CPR/AED                               | NOAA Small Boat Component Training |
| CITI Conflicts of Interest                  | PADI Advanced Open Water Diver     |
| EVERFI Diversity & Inclusion                | STCW Fast Rescue Boating           |
| EVERFI Harassment & Discrimination/Title IX | USCG Boating Skills & Seamanship   |

**PROFESSIONAL SERVICE ACTIVITIES**

Board of Directors

Blue Ocean Society (Portsmouth, NH)

Committee Membership

Shoals Marine Laboratory Academic Advisory Committee

Peer Review

- |  |                                       |
|--|---------------------------------------|
| <i>Arctic Science</i>                          | <i>Marine Ecology Progress Series</i> |
| <i>Aquatic Mammals</i>                         | Marine Mammal Commission              |
| <i>Conservation Physiology</i>                 | <i>Marine Mammal Science</i>          |
| <i>General &amp; Comparative Endocrinology</i> | North Pacific Research Board          |
| Graduate Women in Science                      | <i>Polar Biology</i>                  |
| <i>Endangered Species Research</i>             | <i>Regional Environmental Change</i>  |
| <i>Estuarine and Coastal Shelf Science</i>     |                                       |

Society Membership

American Society of Limnology and Oceanography  
Society for Marine Mammalogy

Undergraduate Research Mentorship

Anna Alexandrou (University of NH '17)  
Betsy Barber (University of Maine '08)  
Juliana Berube (UMass Amherst '19)  
Gabrielle Calandrino (UMass Amherst '17)  
Meg Carr (University of NH '17)  
Emily Conklin (Wheaton College '13)  
Leah Danny (Wheaton College '13)  
Jenn Haskell (Northeastern University '14)  
Sara Heitman (Suffolk University '21)  
Holly Hoag (University of NH '20)  
Kira Kasper (Wheaton College '15)

Phi Lang (Suffolk University '21)  
Mia Novak (Suffolk University '24)  
Jordan Randall (Suffolk University '25)  
Morgan Rubanow (Stonehill College '12)  
Olivia Sears (Suffolk University '23)  
Nannaphat Sirinson (UC Berkeley '20)  
Whitney Sitzer (Wheaton College '15)  
Karen Sonnichsen (University of NH '17)  
Kadianne Tommasi (University of NH '18)  
George Tsourounakis (Cornell Univ '18)  
Jessica Veo (UMass Amherst '19)