

## *Curriculum Vitae*

### **David Griffiths Kimmel**

Research Oceanographer

Ecosystem & Fisheries Oceanography Coordinated Investigations Program (EcoFOCI)

Resource Assessment and Conservation Engineering Division (RACE)

Alaska Fisheries Science Center (AFSC)

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### **I. Personal**

Birth date: 12 August, 1974

Birth place: State College, Pennsylvania

Citizenship: United States of America

### **II. Education**

2001 Ph.D., Marine-Estuarine-Environmental Science, University of Maryland, Baltimore County, Maryland

1996 B.S., Biology (Ecology Option), Pennsylvania State University, University Park, Pennsylvania

### **III. Professional Experience**

2016-Present: Research Oceanographer, Ecosystems and Fisheries Oceanography Coordinated Investigations (EcoFOCI), Resource Assessment and Conservation Engineering (RACE), Alaska Fisheries Science Center (AFSC), National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), US Department of Commerce

2017-Present: Affiliate Faculty, University of Alaska, Fairbanks, College of Fisheries and Ocean Sciences

2023-Present: Adjunct Associate Professor, North Carolina State University, Marine, Earth and Atmospheric Sciences

2013-2016: Associate Professor, Department of Biology/Institute for Coastal Science and Policy, East Carolina University

2008-2013: Assistant Professor, Department of Biology/Institute for Coastal Science and Policy, East Carolina University

2006- 2008: Research Assistant Professor, University of Maryland Center for Environmental Science, Horn Point Laboratory

2005-2006: Associate Research Scientist, University of Maryland Center for Environmental Science, Horn Point Laboratory

2001-2005: Assistant Research Scientist, University of Maryland Center for Environmental Science, Horn Point Laboratory

1996-2001: Research/Teaching Assistant, Dept. Biol. Sci., University of Maryland, Baltimore County

#### IV. Research

##### A. Area of professional expertise

Biological oceanography, zooplankton ecology, coastal ecology, climate impacts on ecosystems, and quantitative ecology

##### B. Awards and Recognition

2016 University of North Carolina Board of Governors Distinguished Professor for Teaching – East Carolina University

2014 Five Year Achievement for Excellence in Research and Creative Activity – East Carolina University

2013 Outstanding reviewer for journal *Estuaries and Coasts*

##### C. Publications

*h*-index 29 (Google Scholar): <https://scholar.google.com/citations?user=lf6-ZRwAAAAJ&hl=en>

*h*-index 26 (Scopus); Scopus ID: 7004433565

*h*-index 25 (Web of Science); Researcher ID: N-1148-2019

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##### 1. Papers in refereed journals

Kuletz KJ, Gall AE, Morgan TC, Prichard AK, Eisner LB, **Kimme DG**, De Robertis A, Levine RM, Jones T, Labunski EA. 2024. Seabird responses to ecosystem changes driven by marine heatwaves in a warming Arctic. *Marine Ecology Progress Series*. (in press)

Bi H, Cheng Y, Cheng X, Benfield MC, **Kimme DG**, Zheng H, Groves S, Ying K. 2024. Taming the data deluge: A novel end-to-end deep learning system for classifying marine biological and environmental images. *Limnology and Oceanography Methods*. 22: 47-64

Wright DL, **Kimme DG**, Roberson N, Strausz D. 2023. Joint species distribution modeling reveals a changing prey landscape for North Pacific right whales on the Bering shelf. *Ecological Applications*. 33(8): e2925

**Kimme DG**, Eisner LB, Pinchuk AI. 2023. The northern Bering Sea zooplankton community response to variability in sea ice: evidence from a series of warm and cold periods. *Marine Ecology Progress Series*. 705: 21-42. <https://doi.org/10.3354/meps14237>

- Spear A, Andrews AG, Duffy-Anderson J, Jarvis T, **Kimmel D**, McKelvey D. 2022. Changes in the vertical distribution of age-0 walleye pollock (*Gadus chalcogrammus*) during warm and cold years in the southeastern Bering Sea. *Fisheries Oceanography*.  
<https://doi.org/10.1111/fog.12618>
- Copeman LA, Salant CD, Stowell MA, Spencer ML, **Kimmel DG**, Pinchuk AI, Laurel BJ. 2022. Annual and spatial variation in the condition and lipid storage of juvenile Chukchi Sea gadids during a recent period of environmental warming (2012-2019). *Deep-Sea Research Part II: Topical Studies in Oceanography*. 205: 105180.  
<https://doi.org/10.1016/j.dsr2.2022.105180>
- Lindeberg, MR, Baker M, Dickson DMS, **Kimmel DG**, Ormseth OA, Strom SL, Suryan RM. 2022. Long-term monitoring and integrated research – Understanding ecosystem processes in the Gulf of Alaska. *Deep-Sea Research Part II: Topical Studies in Oceanography*. 206: 105208. <https://doi.org/10.1016/j.dsr2.2022.105208>
- Lefebvre, KA, Fachon E, Bowers EK, **Kimmel DG**, Snyder JA, Stimmelmayer R, Grebmeier JM, Kibler S, Hardison DR, Anderson DM, Kulis D, Murphy J, Gann JC, Cooper D, Eisner LB, Duffy-Anderson JT, Sheffield G, Pickart RS, Mounsey A, Willis ML, Stabeno P, Siddon E. 2022. Paralytic shellfish toxins in Alaskan Arctic food webs during the anomalously warm ocean conditions of 2019 and estimated toxin doses to Pacific walruses and bowhead whales. *Harmful Algae*. 114: 102205. <https://doi.org/10.1016/j.hal.2022.102205>
- Wilson MT, **Kimmel DG**. 2022. Predator-prey mass ratios of mid-trophic level fishes in a coastal marine ecosystem vary with taxonomy and body size. *Marine Biology*. 169: 13.  
<https://doi.org/10.1007/s00227-021-04000-z>
- Tarrant AM, Eisner LB, **Kimmel DG**. 2021. Lipid-related gene expression in *Calanus glacialis* in the southeastern Bering Sea and sensitivity to starvation. *Marine Ecology Progress Series*. 674: 73-88. <https://doi.org/10.3354/meps13820>
- Lamb JF, **Kimmel DG**. 2021. The contribution of diet to the dramatic reduction of the 2013 year class of Gulf of Alaska walleye pollock (*Gadus chalcogrammus*). *Fisheries Oceanography*. 30(6): 757-771. <https://doi.org/10.1111/fog.12557>
- Mordy CW, Eisner L, Kearney K, **Kimmel D**, Lomas MW, Mier K, Proctor P, Ressler PH, Stabeno P, Wisegarver E. 2021. Spatiotemporal variability of the nitrogen deficit on the eastern Bering Sea shelf. *Continental Shelf Research*. 224: 104423.
- Suryan RM, Arimitsu M, Coletti H, Hopcroft RR, Lindeberg MR, Barbeaux S, Batten S, Burt W, Bishop MA, Bodkin J, Brenner R, Campbell R, Cushing D, Danielson S, Dorn M, Drummond B, Esler D, Gelatt T, Danselman D, Hatch S, Haught S, Holderied K, Iken K, Irons D, Kettle A, **Kimmel D**, Konar B, Kuletz KJ, Laurel B, Maiscalco JM, Matkin C, McKinstry C, Monson D, Moran J, Olsen D, Palsson W, Pegau S, Piatt J, Rogers L, Rojek N, Schaefer A, Spies I, Straley J, Strom S, Sweeney K, Szymkowiak M, Weitzman B, Yasumiishi E, Zador S. 2020. Ecosystem response to a prolonged marine heatwave in the Gulf of Alaska. *Nature Scientific Reports*. 11(1): 1-17.
- Thorson JT, Arimitsu ML, Barnett L, Cheng W, Eisner LB, Haynie AC, Hermann AJ, Holsman K, **Kimmel DG**, Lomas MW, Richar J, Siddon E. 2020. Forecasting community reassembly using climate-linked spatio-temporal ecosystem models. *Ecography* 44: 612–625.
- Ladd C, Bell SW, **Kimmel DG**, Mordy CW, Stabeno PJ, Stalin S. 2020. Eddy-like features near St. Matthew Island, Eastern Bering Sea shelf: observations from the Oculus Coastal Glider.

- Geophysical Research Letters. 47(23): e2020GL089873.  
<https://doi.org/10.1029/2020GL089873>.
- Rogers LA, Wilson MT, Duffy-Anderson JT, **Kimmel DG**, Lamb JF. 2020. Pollock and 'the Blob': impacts of a marine heatwave on walleye pollock early life stages. *Fisheries Oceanography*. 30(2): 142-158
- Spear A, Napp J, Ferm N, **Kimmel D**. 2020. Advection and *in situ* processes as drivers of change for the abundance of large zooplankton taxa in the Chukchi Sea. *Deep-Sea Research Part II*. 177: 104814
- Kimmel DG**, Duffy-Anderson JT. 2020. Zooplankton abundance trends and patterns in Shelikof Strait, western Gulf of Alaska USA, 1990-2017. *J. Plank. Res.* 42 (3): 334-354
- Thorson JT, Adams CF, Brooks EN, Eisner LB, **Kimmel DG**, Legault CM, Rogers L, Yasumiishi E. 2020. Seasonal and interannual variation in spatio-temporal models for index standardization and phenology studies. *ICES J. Mar. Sci.* 77(5): 1879-1892
- Huntington H, Danielson S, Wiese F, Baker M, Boveng P, Citta J, De Robertis A, Dickson D, Farley E, George J, Hamilton R, **Kimmel D**, Kuletz K, Ladd C, Levine R, Quakenbush L, Stabeno P, Stafford K, Stockwell D, Wilson C. 2020. Evidence suggests potential transformation of the Pacific Arctic Ecosystem is underway. *Nature Climate Change*. 10 (4): 342-348
- \*Nielsen, JM, Rogers LA, **Kimmel DG**, Deary AL, Duffy-Anderson JT. 2019. Contribution of walleye pollock eggs to the Gulf of Alaska food web in spring. *Mar. Ecol. Prog. Ser.* 632: 1-12.  
 \*Feature Article
- Duffy-Anderson JT, Stabeno P, Andrews AG, Cieciel K, Deary A, Farley E, Fugate C, Harpold C, Heintz R, **Kimmel D**, Kuletz K, Lamb J, Paquin M, Porter S, Rogers L, Spear A, Yasumiishi E. 2019. Responses of the northern Bering Sea and southeastern Bering Sea pelagic ecosystems following record-breaking low winter sea-ice. *Geophys. Res. Lett.* 46, 9833-9842. <https://doi.org/10.1029/2019GL083396>
- Lamb MA, **Kimmel DG**, Field EK. 2019. The effects of temperature on *Bosmina longirostris* susceptibility to microcystin-LR acute toxicity. *PLoS ONE* 14(7): e0219342.  
<https://doi.org/10.1271/journal.pone.0219342>
- Spear A, Duffy-Anderson J, **Kimmel D**, Napp J, Randall J, Stabeno P. 2019. Physical and biological drivers of zooplankton communities in the Chukchi Sea. *Polar Biology*. 42: 1107-1124.
- Stabeno PJ, Bell SW, Bond NA, **Kimmel DG**, Mordy CW, Sullivan ME. 2018. Distributed Biological Observatory Region 1: Physics, chemistry and plankton in the northern Bering Sea. *Deep Sea Research II*. <https://doi.org/10.106/j.dsr2.208.11.006>.
- Mazow L, Mitra S, **Kimmel DG**, Grieve S. 2018. Extraction and analysis of total lipids in late iron age bath-shaped basins from the Levant as a means of assessing vessel function. *Journal of Archaeological Science: Reports*. 22:183-201.
- Kimmel DG**, Eisner LB, Wilson MT, Duffy-Anderson JT. 2018. Copepod dynamics across warm and cold periods in the eastern Bering Sea: implication for walleye pollock (*Gadus chalcogrammus*) and the Oscillating Control Hypothesis. *Fisheries Oceanography*. 27(2): 143-158.
- Eisner LB, Pinchuk AI, **Kimmel DG**, Mier KL, Harpold C, Siddon EC. 2018. Seasonal, interannual, and spatial patterns of community composition over the eastern Bering Sea shelf in cold years. Part I: zooplankton. *ICES J. Mar. Sci.* 75(1): 72-86

- Lichti, D, Richard JA, **Kimmel DG**. 2017. Changes in zooplankton community, and seston and zooplankton fatty acid profiles at the freshwater/saltwater interface of the Chowan River, NC. *PeerJ* 5:e3667. <https://doi.org/10.7717/peerj.3667>
- Duffy-Anderson JT, Stabeno PJ, Siddon EC, Andrews AG, Cooper DW, Eisner LB, Farley EV, Harpold CE, Heintz RA, **Kimmel DG**, Sewall FF, Spear AH, Yasumishii EC. 2017. Return of warm conditions in the southeastern Bering Sea: phytoplankton-fish. *PLOS One*. 12(6):e0178955. <https://doi.org/10.1371/journal.pone.0178955>
- Pierson JJ, **Kimmel DG**, Roman MR. 2016. Temperature impacts on *Eurytemora carolleeae* size and vital rates in the upper Chesapeake Bay in winter. *Estuaries and Coasts*. 39(4): 1122-1132.
- Kaneshiro-Pineiro MY, **Kimmel DG**. 2015. Local wind dynamics influence the distribution and abundance of the sea nettle *Chrysaora quinquecirrha* at six estuarine recreation sites in North Carolina, USA. *Estuaries and Coasts*. 38(6): 1965-1975.
- Kimmel DG**, McGlaughon BD, Leonard J, Paerl HW, Taylor JC, Cira EK, Wetz MS. 2015. Mesozooplankton abundance in relation to the chlorophyll maximum in the Neuse River Estuary, North Carolina, USA: implications for trophic dynamics. *Estuarine, Coastal, and Shelf Science* 157:59-69.
- Primo AL, **Kimmel DG**, Marques SC, Martinho F, Azeiteiro UM, Pardal MA. 2015. Zooplankton community responses to regional-scale weather variability: a synoptic climatology approach. *Climate Research*. 62:189-198
- Dell'Apa A, Cudney JE, **Kimmel DG**, Rulifson RA. 2014. Sexual segregation of spiny dogfish (*Squalus acanthias*) in fishery-dependent surveys in Cape Cod, Massachusetts: potential management benefits. *Trans. Am. Fish. Soc.* 143(4): 833-844.
- Zhang H, Ludsins SA, Mason DM, Brandt SB, Stow CA, Adamack AT, Zhang X, **Kimmel DG**, Roman MR, Boicourt WC. 2014. Hypoxia, habitat quality, and the spatial distribution of pelagic fishes in the northern Gulf of Mexico. *Mar. Ecol. Prog. Ser.* 505: 209-226.
- \*Cathey AM, Miller NR, **Kimmel DG**. 2014. Spatiotemporal stability of trace and minor elemental signals within the early larval shell of the hard clam *Mercenaria*. *J. Shellfish Res.* 33(1): 247-255.
- \*Sandra E. Shumway Award for best student paper of the year, *Journal of Shellfish Research*
- Kimmel DG**, Tarnowski M, Newell RIE. 2014. The relationship between interannual climate variability and juvenile Eastern Oyster (*Crassostrea virginica*) abundance at a regional scale in Chesapeake Bay, USA. *N. Amer. J. Fish. Management*. 34: 1-15.
- Dell'Apa A, Johnson JC, **Kimmel DG**, Rulifson RA. 2013. The international trade and fishery management of spiny dogfish: a social network approach. *Ocean & Coastal Management*. 80: 65-72.
- Grant MN, Meritt DW, **Kimmel DG**. 2013. Chemical induction of settlement behavior in larvae of the eastern oyster *Crassostrea virginica* (Gmelin). *Aquaculture*. 402-403: 84-91.
- Kimmel DG**, Tarnowski M, Newell RIE. 2012. Long-term (1939-2008) spatial patterns in juvenile oyster (*Crassostrea virginica*, Gmelin 1791) abundance in the Maryland portion of Chesapeake Bay. *J. Shellfish Res.* 31(4): 1023-1031.

- Cathey AM, Miller NR, **Kimmel DG**. 2012. Shell microchemistry of juvenile *Mercenaria*: spatiotemporal patterns and implications for modeling larval dispersal. *Mar. Ecol. Prog. Ser.* 465:155-168.
- Roman MR, Pierson JJ, **Kimmel DG**, Boicourt WC, Zhang X. 2012. Spatial patterns in hypoxia and zooplankton in the northern Gulf of Mexico. *Estuaries and Coasts.* 35: 1261-1269.
- Dell'Apa A, **Kimmel DG**, Clo S. 2012. Trends of fish and elasmobranch landings in Italy within the frame of the law 41/82: overview of elasmobranchs management aspects. *ICES J. Mar. Sci.* 69(6): 1045-1052.
- Kimmel DG**, Boynton WR, Roman MR. 2012. Long-term decline in the calanoid copepod *Acartia tonsa* in central Chesapeake Bay, USA: an indirect effect of eutrophication? *Estuarine, Coastal and Shelf Sci.* 101: 76-85.
- Devreker D, Pierson J, Souissi S, **Kimmel DG**, Roman MR. 2012. An experimental approach to estimate egg production and development rate of the calanoid copepod *Eurytemora affinis* in Chesapeake Bay, USA. *J. Exp. Mar. Biol. Ecol.* 416-417: 72-83.
- Mitra S, **Kimmel DG**, Snyder J, Scalise K, McGlaughon BD, Roman MR, Jahn GL, Pierson JJ, Brandt SB, Montoya JP, Rosenbauer RJ, Lorenson TD, Wong FL, Campbell PL. 2012. Macondo-1 well oil-derived polycyclic aromatic hydrocarbons in mesozooplankton from the northern Gulf of Mexico. *Geophys. Res. Lett.* 39, L01605, doi:10.1029/2011GL049505.
- Kimmel DG**, Boicourt WC, Pierson JJ, Roman MR, Zhang X. 2010. The vertical distribution and diel variability of mesozooplankton biomass, abundance and size in response to hypoxia in the northern Gulf of Mexico. *J. Plank. Res.* 32: 1185-1202
- Kimmel DG**, Boicourt WC, Pierson JJ, Roman MR, Zhang X. 2009. A comparison of the mesozooplankton response to hypoxia in Chesapeake Bay and the northern Gulf of Mexico. *J. Exp. Mar. Biol. Ecol.* 381: S65-S73
- Zhang H, Ludsin SA, Mason DM, Adamack ST, Brandt SB, Zhang X, **Kimmel DG**, Roman MR and Boicourt WC. 2009. Hypoxia-driven changes in the behavior and spatial distribution of pelagic fish and mesozooplankton in the northern Gulf of Mexico. *J. Exp. Mar. Biol. Ecol.* 381: S80-S91.
- Pierson JJ, Roman MR, **Kimmel DG**, Boicourt WC and Zhang X. 2009. Quantifying changes in vertical distribution of mesozooplankton in response to hypoxic bottom waters. *J. Exp. Mar. Biol. Ecol.* 381: S74-S79.
- Newell RIE, Tettlebach ST, Gobler CJ and **Kimmel DG**. 2009. Relationships between reproduction in suspension feeding hard clams *Mercenaria* and phytoplankton community structure. *Mar. Ecol. Prog. Ser.* 387: 179-196.
- \***Kimmel DG**, Miller WD, Harding LW, Houde ED and Roman MR. 2009 Estuarine ecosystem response captured using a synoptic climatology. *Estuaries and Coasts.* 32(3): 403-409.  
\**Editor's choice for open access*
- Kimmel DG** and Hameed S. 2008. An update on the relationship between the North Atlantic Oscillation and *Calanus finmarchicus*. *Mar. Ecol. Prog. Ser.* 366: 111-117.
- Kimmel DG** and Newell RIE. 2007. The influence of climate variation on eastern oyster (*Crassostrea virginica*) juvenile abundance in Chesapeake Bay. *Limnol. Oceanogr.* 52(3): 959-965.
- Kimmel DG**, Miller WD and Roman MR. 2006. Regional scale climate forcing of mesozooplankton dynamics in Chesapeake Bay. *Estuaries and Coasts* 29(3): 375-387.

- Zhang X, Roman M, McGilliard C, **Kimmel D** and Boicourt W. 2006. Temporal and spatial variability in zooplankton biomass and hydrographic variables along an axial transect in Chesapeake Bay. *J. Geophysical Res.* 111: C05S11, doi:10.1029/2005JC003085.
- Miller WD, **Kimmel DG** and Harding LW. 2006. Predicting Susquehanna River discharge using winter climate patterns. *Water Resources Res.* 42: W05414, doi:10.1029/2005WR004270.
- Kimmel DG**, Roman MR and Zhang X. 2006. Spatial and temporal variability in factors controlling mesozooplankton dynamics in Chesapeake Bay: Evidence from biomass size spectra. *Limnol. Oceanogr.* 51(1): 131-141.
- Kemp WM, Boynton WR, Adolf JE, Boesch DF, Boicourt WC, Brush G, Cornwell JC, Fisher TR, Glibert PM, Hagy JD, Harding LW, Houde ED, **Kimmel DG**, Miller WD, Newell RIE, Roman MR, Smith EM and Stevenson JC. 2005. Eutrophication of Chesapeake Bay: Historical trends and ecological interactions. *Mar. Ecol. Prog. Ser.* 303:1-29.
- Roman MR, Adolf JE, Bichy J, Boicourt WC, Harding LW, Houde ED, Jung S, **Kimmel DG**, Miller WD and Zhang X. 2005. Chesapeake Bay plankton and fish abundance enhanced by Hurricane Isabel. *EOS.* 86(28): 261, 265.
- Kimmel DG** and Roman MR. 2004. Long-term trends in mesozooplankton abundance in Chesapeake Bay USA: influence of freshwater input. *Mar. Ecol. Prog. Ser.* 267: 71-83.
- Kuperman RG, Checkai RT, Ruth LM, Henry T, Simini M, **Kimmel DG**, Phillips CT and Bradley BP. 2003. A proteome-based assessment of the earthworm *Eisenia fetida*: response to chemical warfare agents in sandy loam soil. *Pedobiologia.* 47(5-6): 617-621.
- Bradley BP, Shrader EA, Meiller JC and **Kimmel DG**. 2002. Protein expression signatures: a method of proteomics. *Mar. Env. Res.* 54: 373-377.
- Kimmel DG** and Bradley BP. 2001. Specific protein responses in the calanoid Copepod *Eurytemora affinis* exposed to salinity and temperature combinations. *J. Exp. Mar. Biol. Ecol.* 266(2): 135-149.

## 2. Books or chapters in books or other publications

- Kimmel D**, Axler K, Cormack B, Crouser D, Fennie W, Keister J, Lamb J, Pinger C, Rogers L, Suryan R. 2023. Current and Historical Trends for Zooplankton in the Western Gulf of Alaska. Ecosystem Status Report 2023: Gulf of Alaska (eds B Ferriss). North Pacific Fishery Management Council, Anchorage, AK, p 81-88.
- Danielson S, Statscewich H, Hennon T, Kelley T, Farley E, Kimmel D, Horne J, Mordy C. 2023. Seward Line Spring Oceanography. Ecosystem Status Report 2022: Gulf of Alaska (eds B Ferriss). North Pacific Fishery Management Council, Anchorage, AK, p 76-78.
- Yasumiishi E, Eisner L, **Kimmel D**. 2023. Large Copepod Abundance as an Indicator of Pollock Recruitment to Age-3 in the Southeastern Bering Sea. Ecosystem Status Report 2023: Eastern Bering Sea (ed E Siddon). North Pacific Fishery Management Council, Anchorage, AK, p 162-165.
- Kimmel D**, Cooper D, Cormack B, Harpold C, Murphy J, Paquin M, Pinger C, Snyder B, Suryan R. 2023. Current and historical trends for zooplankton in the Bering Sea. Ecosystem Status Report 2023: Eastern Bering Sea (ed E Siddon). North Pacific Fishery Management Council, Anchorage, AK, p 93-107

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- Kimmel D**, Barrett J, Cooper D, Crouser D, Deary A, Eisner L, Lamb J, Murphy J, Pinger C, Cormack B, Porter S, Strasburger W, Suryan R. 2022. Current and historical trends for zooplankton in the Bering Sea. Ecosystem Status Report 2022: Eastern Bering Sea (ed E Siddon). North Pacific Fishery Management Council, Anchorage, AK, p 79-90
- Kimmel D**, Axler K, Deary A, Harpold C, Crouser D. 2021. Current and Historical Trends for Zooplankton in the Western Gulf of Alaska. Ecosystem Status Report 2021: Gulf of Alaska (eds B Ferriss, S Zador). North Pacific Fishery Management Council, Anchorage, AK, p 70-75.
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- Yasumiishi E, Eisner L, **Kimmel D**. 2020. Large Copepod Abundance (Sample-Based and Modeled) as an Indicator of Pollock Recruitment to Age-3 in the Southeastern Bering Sea. Ecosystem Status Report 2020: Eastern Bering Sea (ed E Siddon). North Pacific Fishery Management Council, Anchorage, AK, p 109-113.
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- Fisher J, **Kimmel D**, Ross T, Batten S, Bjorkstedt E, Galbraith M, Jacobson K, Keister J, Sastri A, Suchy K, Zeman S, Perry RI. 2020. Copepod responses to, and recovery from, the recent marine heatwave in the Northeast Pacific. *PICES Press*. 28(1): 65-71, 74.
- Kimmel D**, Lamb J, Murphy J, Paquin M, Rogers L, Sewall F, Waters C 2019. Leading zooplankton indicator for the southeastern Bering Sea: 2019 Rapid Zooplankton Assessment. *Ecosystem Considerations: 2019 Status of the Eastern Bering Sea Marine Ecosystem* (eds E Siddon & S Zador), pp. 80-84.
- Kimmel D**, Harpold C, Lamb J, Paquin M, Rogers L 2019. Rapid Zooplankton Assessment in the western Gulf of Alaska. *Ecosystem Considerations: 2019 Status of the Gulf of Alaska Marine Ecosystem* (eds S Zador & E Yasumiishi), pp. 77-81.
- Kimmel D**, Lamb J, Ferm N, Fugate C, Harpold C. 2018. Rapid Zooplankton Assessment for 2018 – Distribution, abundance, and lipid content – and historical time series. *Ecosystem Considerations: 2018 Status of the Eastern Bering Sea Marine Ecosystem* (eds S Zador & EC Siddon), pp. 78-87.
- Harpold C, **Kimmel D**. 2017. Leading zooplankton indicator for the Bering Sea: spring and fall 2017 Rapid Zooplankton Assessment and long-term time series. *Ecosystem Considerations: 2017 Status of the Eastern Bering Sea Marine Ecosystem* (eds S Zador & EC Siddon), pp. 99-104.



- Ferm N, Lamb J, **Kimmel D**. 2017. Rapid Zooplankton Assessment and long-term time series, western Gulf of Alaska spring and summer 2017. *Ecosystem Considerations: 2017 Status of the Gulf of Alaska Marine Ecosystem* (eds S Zador & E Yasumiishi), pp. 83-87.
- Moss J, Harpold C, Paquin M, **Kimmel D**. 2017. Rapid Zooplankton Assessment, Eastern Gulf of Alaska, summer 2017. *Ecosystem Considerations: 2017 Status of the Gulf of Alaska Marine Ecosystem* (eds S Zador & E Yasumiishi), pp. 90-92.
- Kimmel D**. 2016 Eastern Bering Sea zooplankton rapid assessment time-series hindcast. *Ecosystem Considerations: 2016 Status of the Eastern Bering Sea Marine Ecosystem* (eds S Zador & EC Siddon), pp. 97-99.
- Kimmel D**. 2016. Gulf of Alaska zooplankton rapid assessment time-series hindcast. *Ecosystem Considerations: 2016 Status of the Gulf of Alaska Marine Ecosystem* (eds S Zador & E Yasumiishi), pp. 60-62.
- Kimmel DG**. 2011. Chapter 6.05 - Plankton Consumer Groups: Copepods. *In: Trophic relationships of coastal and estuarine systems* (Eds: Wilson JG, Luczkovich JJ). *In: Treatise on Estuarine and Coastal Science* (Eds: Wolanski E, McClusky D). 6: 95-126.
- Kimmel DG**, Townsend H, Carruthers TJB, Fertig B. 2010. Chapter 8: Environmental statistics: balancing simplicity and explanatory power. *In: Integrating and Applying Science: A Handbook for Effective Coastal Ecosystem Management*. Longstaff BL, Carruthers TJB, Dennison WC, Lookingbill TR, Hawkey JM, Thomas JE, Wick EC, Woerner J (Ed). IAN Press, Cambridge, Maryland. 113-132 pp.
- Boesch DF, Coles VJ, **Kimmel DG**, Miller WD. 2010. Chapter 23: Climate change: coastal dead zones. Comstock GL (Ed). *In: Life Science Ethics*. Springer, Dordrecht, The Netherlands. 423-434 pp.
- Boesch DF, Coles VJ, **Kimmel DG**, Miller WD. 2007. Ramifications of climate change for Chesapeake Bay hypoxia. *In: Regional Impacts of Climate Change in the United States: Four Case Studies*. The Pew Center on Global Climate Change. 57-70 Pp.  
[http://www.pewclimate.org/regional\\_impacts](http://www.pewclimate.org/regional_impacts).

### 3. Technical Reports

- CZR Incorporated, **Kimmel DG**. 2016. Annual creeks report for 2015 monitoring year PCS Phosphate Company, Inc. Volumes I and II. CZR, Inc. Wilmington, NC.
- Kimmel DG**. 2016. PCS Phosphate effluent dispersal in the Pamlico River estuary: 2015. Institute for Coastal Science and Policy, East Carolina University, Greenville NC.
- CZR Incorporated, **Kimmel DG**. 2015. Annual creeks report for 2014 monitoring year PCS Phosphate Company, Inc. Volumes I and II. CZR, Inc. Wilmington, NC.
- Kimmel DG**. 2015. PCS Phosphate effluent dispersal in the Pamlico River estuary: 2014. Institute for Coastal Science and Policy, East Carolina University, Greenville NC.
- CZR Incorporated, **Kimmel DG**. 2014. Annual creeks report for 2013 monitoring year PCS Phosphate Company, Inc. Volumes I and II. CZR, Inc. Wilmington, NC.
- Kimmel DG**. 2014. PCS Phosphate effluent dispersal in the Pamlico River estuary: 2013. Institute for Coastal Science and Policy, East Carolina University, Greenville NC.
- CZR Incorporated, **Kimmel DG**. 2013. Annual creeks report for 2012 monitoring year PCS Phosphate Company, Inc. Volumes I and II. CZR, Inc. Wilmington, NC.

## D. Contracts and Grants

### 1. Awarded

- \$313,677. Long-term decline in copepod size in Alaska's large marine ecosystems. North Pacific Research Board. 4/01/2021-3/30/2023. PI: **Kimmel D** (lead), Ohlberger J (UW).
- \$715,893. Expanding exploration and using innovative technologies to assess the rapidly changing Bering and Chukchi Seas. 7/01/2020-9/30/2022. National Ocean Partnership Program. PI: Stabeno (lead PI), Duffy-Anderson (lead-PI), Ladd C, Stepien C, Mordy C, Chang B, Lomas M, Farley E, Logerwell L, Berchok C, Eisner L, **Kimmel D**, Gann J, Nielsen J, Du, X.
- \$452,195. Validation of regional ocean model hindcasts for zooplankton biomass via comparisons with thirty years of field sampling data in a rapidly changing ecosystem. Modeling, Analysis, Predictions and Projections. NOAA Climate Office. 10/1/2020-9/30/2023. PI: **Kimmel D** (lead), Thorson JT, Pilcher D,
- \$30,000. Late summer/Fall BASIS survey euphausiid monitoring in the Eastern Bering Sea. Eastern Bering Sea Regional Action Plan. Spear (lead PI), **Kimmel D**, Andrews A, Ressler P.
- \$289,000. Establishing new community trophic indices for the Bering Sea: a stable isotopic retrospective analysis of food web structure. Regional Work Plan Program AFSC. 10/01/2019-9/30/2021 Miller T (lead PI), Heintz R, Ortiz I, **Kimmel D**, Zeppelin T.
- \$1,044,177 (NOAA/AFSC). Arctic Integrated Ecosystem Survey (IES) Phase II: Oceanography and Lower Trophic Level Productivity. North Pacific Research Board. 07/01/2016-09/30/2021. PI: Ladd C (lead), Stabeno P, Duffy-Anderson J, Eisner L, **Kimmel D**, McCabe R, Mordy C, Lomas M.
- \$156,581. NCPC Tract Water Quality Monitoring. CZR Incorporated. 01/01/2015-12/31/2015 (Renewed annually). PI: **Kimmel DG**.
- \$74,575. PCS Phosphate Effluent Monitoring and Water Quality in the Pamlico River Estuary. PCS Phosphate Corporation. 01/01/2015-12/31/2015 (Renewed annually). PI: **Kimmel DG**.
- \$297,699 (Year 1: \$81,371). Linking water quality, food quality, and larval fish condition to determine strategic habitat area quality. 07/01/2015-06/30/2019. NC Department of Environment and Natural Resources. PI: **Kimmel DG**
- \$6,800. Colored Dissolved Organic Matter (CDOM) as a control of primary and secondary production in the Neuse River Estuary: A New Paradigm. 07/01/2014-06/30/2015. ECU Division of Research and Graduate Studies. PI: Miller R, **Kimmel DG**
- \$137,750. NCPC Tract Water Quality Monitoring. CZR Incorporated. 01/01/2014-12/31/2014 (Renewed annually). PI: **Kimmel DG**.
- \$73,087. PCS Phosphate Effluent Monitoring and Water Quality in the Pamlico River Estuary. PCS Phosphate Corporation. 01/01/2014-12/31/2014 (Renewed annually). PI: **Kimmel DG**.
- \$4,900. Evaluating land use effects on the stinging sea nettle *Chrysaora quinquecirrha*: are shoreline hardening structures providing habitat for a nuisance species? North Carolina Sea Grant minigrant. PI: **Kimmel DG**.
- \$125,716. NCPC Tract Water Quality Monitoring. CZR Incorporated. 01/01/2013-12/31/2013 (Renewed annually). PI: **Kimmel DG**.

- \$73,087. PCS Phosphate Effluent Monitoring and Water Quality in the Pamlico River Estuary. PCS Phosphate Corporation. 01/01/2013-12/31/2013 (Renewed annually). PI: **Kimmel DG**.
- \$85,191. RAPID collaborative research: historic freshwater input and hypoxia effects on zooplankton populations in the northern Gulf of Mexico. NSF-Biological Oceanography Program. 08/01/2011-07/31/2012. PIs: **Kimmel DG** (lead PI), Roman MR, Pierson JJ.
- \$4,953. Hydrocarbon signatures in coastal NC waters and mesozooplankton tissue. North Carolina Sea Grant minigrant. PIs: **Kimmel DG** (lead PI), Mitra S
- \$29,745. Analyzing 70 years of oyster monitoring data to help guide oyster restoration in Maryland. Maryland Sea Grant. 02/01/2011-01/31/2012. PIs. Newell RIE (lead PI), **Kimmel DG**, Tarnowski M.
- \$44,284. RAPID Collaborative Research: Spatially-explicit, high-resolution mapping and modeling of quantify hypoxia and oil effects on the living resources of the northern Gulf of Mexico. NSF-Biological Oceanography Program. 08/01/2010-07/31/2011. PIs. **Kimmel DG** (lead PI), Roman MR, Pierson JJ, Brandt SB.
- \$134,849. Collaborative Research: The estuarine chlorophyll maximum as an ecosystem integrator and indicator of contemporaneous nutrient and climatic perturbations. NSF-Division of Environmental Biology. 04/01/2010-03/31/2012. PIs: Paerl HW (lead PI), **Kimmel DG**, Wetz M.
- \$43,996. Collaborative Research: Life histories of species in the genus *Calanus* in the North Atlantic and North Pacific Oceans and response to climate forcing. NSF-Biological Oceanography Program. 08/01/2008-07/31/2011. PIs: **Kimmel DG**, Pierson JJ (lead PI)
- \$527,428. Dynamic stability and particle transformations: tracing pathways of production in Estuarine Turbidity Maxima. NSF Biological Oceanography Program. 10/01/05-9/30/09. PIs: Houde E (lead PI), Crump B, North E, Roman M, Sanford L, Chao S-Y, Hood R, Murray L and **Kimmel DG**.
- \$1,462,729. NGOMEX 2006 – Spatially-explicit, High-resolution Mapping and Modeling to Quantify Hypoxia Effects on the Living Resources of the Northern Gulf of Mexico. NOAA Coastal Ocean Program. PIs: Brandt S (lead PI), Ludsins S, Mason D, Roman M, Boicourt W, **Kimmel DG**, Jochem F, Lavrentyev P.

## E. Seminars, presentations, posters, websites

### 1. Invited seminars and papers

- 2020 Community College of Baltimore County, Biodiversity Seminar Series
- 2019 EcoFOCI Seminar Series
- 2018 Marine Mammal Commission Annual Meeting, Seattle WA
- 2018 University of Washington
- 2017 EcoFOCI Seminar Series
- 2012 Time series analysis workshop. Office for Faculty Excellence, East Carolina University.
- 2012 Keynote Speaker: Great Decisions Lecture Series, East Carolina University
- 2011 University of North Carolina, Institute for Marine Sciences
- 2011 Keynote Speaker: American Democracy Project, California University of Pennsylvania

2010 Keynote Speaker: Atlantic Estuarine Research Society Fall meeting  
2010 Duke University Marine Laboratory  
2009 University of North Carolina, Institute for Marine Sciences  
2008 St. Mary's College, Maryland  
2007 University of Lille, France  
2006 Keynote Speaker, Transitional Waters Reference Network, Lecce, Italy  
2006 Wallops Island Marine Science Consortium  
2006 North Carolina State University, Center for Marine Sciences and Technology  
2006 Pennsylvania State University  
2006 IAN Chesapeake Bay Seminar Series  
2004 University of Maryland Baltimore County  
2003 Smithsonian Environmental Research Center  
2003 Chesapeake Biological Laboratory  
2003 Sarbanes Cooperative Oxford Laboratory

## 2. Contributed papers and posters

Keister J, **Kimmel DG**. 2024. Comparison of the response of copepods to interannual change across three regions of the North Pacific. 7<sup>th</sup> Zooplankton Production Symposium. Hobart, Tasmania, Australia.

Wood GA, Bernard KS, Ciannelli L, **Kimmel DG**. 2024. Response of euphausiids in the southeastern Bering Sea to environmental variability between a recent cold (2008-2012) and warm (2014-2018) period. 7<sup>th</sup> Zooplankton Production Symposium. Hobart, Tasmania, Australia.

Harpold CE, **Kimmel D**, Ladd C, Stabeno P. 2024. Zooplankton community and transport dynamics in the Bering Canyon and Unimak Pass regions of the Bering Sea, Alaska. 7<sup>th</sup> Zooplankton Production Symposium. Hobart, Tasmania, Australia.

Groves SL, **Kimmel DG**, Lemagie E, Zhao J, Liang D, Bi H. 2024. Maximum entropy (MaxEnt) model predicts northward shift in Bering Sea cold pool and change in euphausiid distribution. 7<sup>th</sup> Zooplankton Production Symposium. Hobart, Tasmania, Australia.

Lamb JF, **Kimmel DG**, Rogers L. 2024. Results of multi-year diet analysis project of young of the year Walleye Pollock (*Gadus chalcogrammus*) in the Western Gulf of Alaska, USA. 7<sup>th</sup> Zooplankton Production Symposium. Hobart, Tasmania, Australia.

**Kimmel DG**, McCabe R, Stabeno P, Lemagie E, Bi H. 2024. Copepod and euphausiid abundances in the southeastern Bering Sea estimated from the PlanktonScope shadowgraph imaging system. 7<sup>th</sup> Zooplankton Production Symposium. Hobart, Tasmania, Australia.

Crouser D, Ohlberger J, Woodard G, **Kimmel D**. 2024. Changes in copepod size in response to warm and cold conditions during spring in the eastern Bering Sea. 7<sup>th</sup> Zooplankton Production Symposium. Hobart, Tasmania, Australia.

Gonzalez S, Thorson J, Veron M, Barnett L, Cooper L, Danielson D, Grebmeier J, Iken K, Eisner L, **Kimmel D**, Logerwell E, Lomas M, McCabe R, Nielsen J, Yasumiishi E. 2024. Spatiotemporal variability of Pacific Arctic marine ecosystems. Alaska Marine Science Symposium, Anchorage, AK, USA.

- Kimmel DG**, Lemagie E, McCabe R, Stabeno P, Bi H. 2024. Southeastern Bering Sea zooplankton abundances estimated from PlanktonScope imaging system. Alaska Marine Science Symposium, Anchorage, AK, USA.
- Lamb JF, **Kimmel DG**, Rogers L. 2024. Possible effects of climate on a multi-year diet analysis project of young of the year Walleye Pollock (*Gadus chalcogrammus*) in the Western Gulf of Alaska, USA. Alaska Marine Science Symposium, Anchorage, AK, USA.
- Spear AH, **Kimmel DG**. 2024. Differential response of the copepods, *Calanus glacialis* and *Pseudocalanus* spp. to warming in the Chukchi Sea. Alaska Marine Science Symposium, Anchorage, AK, USA.
- Crouser D, Oehlberger J, Woodard G, **Kimmel D**. 2024. Changes in copepod size in response to warm and cold conditions during spring in the eastern Bering Sea. Alaska Marine Science Symposium, Anchorage, AK, USA.
- Spear AH, **Kimmel DG**. 2023. Differential response of the copepods, *Calanus glacialis* and *Pseudocalanus* spp. to recent warming in the Chukchi Sea. PICES 2023 Annual Meeting. Seattle, Washington USA
- Lamb JF, **Kimmel DG**, Rogers L. 2023. Preliminary results of multi-year diet analysis project of Walleye Pollock (*Gadus chalcogrammus*) in the Western Gulf of Alaska, USA. PICES 2023 Annual Meeting. Seattle, Washington USA
- Kimmel DG**, Crouser DC, Harpold CE, Lamb JF. 2023. Rapid Zooplankton Assessment: developing a tool to apply zooplankton information to ecosystem-based fisheries management. PICES 2023 Annual Meeting. Seattle, Washington USA
- Crouser D, Oehlberger J, Woodard G, **Kimmel D**. 2023. Changes in copepod size in response to warm and cold conditions during spring in the eastern Bering Sea. PICES 2023 Annual Meeting. Seattle, Washington USA
- Bi H, **Kimmel D**, Cheng X. 2023. Rapid plankton biomass assessment in coastal waters. PICES 2023 Annual Meeting. Seattle, Washington USA
- Keister J, Stabeno P, Logerwell L, Tabisola H, **Kimmel D**, Lemagie E, Rogers L, Mordy C, Eisner L, Axler K, Crouser D. 2023. Contributions of NOAA's EcoFOCI program to climate science and ecosystem-based fisheries management. PICES 2023 Annual Meeting. Seattle, Washington USA
- Litzow M, Connors B, Eisner L, Fedewa E, **Kimmel D**, Kristiansen T, Malick M, Nielsen J, Szuwalski C. 2023. Human-induced borealization and the collapse of the Bering Sea snow crab fishery. Alaska Marine Science Symposium, Anchorage, AK, USA.
- Sullaway G, Cunningham C, **Kimmel D**, Thorson J, Pilcher D. 2023. Validating the ROMS-NPZ Bering 10k model with empirical zooplankton data. Alaska Marine Science Symposium, Anchorage, AK, USA.
- Crouser D, Oehlberger J, Woodard G, **Kimmel D**. 2023. Changes in copepod size in response to warm and cold conditions in the eastern Bering Sea: NPRB Project Number 2008. Alaska Marine Science Symposium, Anchorage, AK, USA.
- Gonzalez S, Eisner L, **Kimmel D**, Lomas MW, Nielsen J, Schnetzer A, Irby M, Logerwell E, Hopcroft R. 2023. Planktonic associations in the Northern Bering and Chukchi Seas in the warm period of 2017-2019. Alaska Marine Science Symposium, Anchorage, AK, USA.
- Gann JC, Mincks SL, Mueter FJ, Strasburger WW, Kimmel D, Eisner LB. Responses to phytoplankton size and community composition by *Calanus* and *Pseudocalanus* during

- late summer in the southeast Bering Sea: potential implications for age-0 pollock recruitment. PICES 2022 Annual Meeting. Busan, South Korea.
- Kimmel DG**, Crouser DC, Kaźmierczak P, Kłopotwska B, Ciupiński M, Bi H. 2022. Automation of rapid zooplankton assessment for use in ecosystem-based fisheries management. PICES 2022 Annual Meeting. Busan, South Korea.
- Bi H, Cheng Y, Cheng X, Benfield MC, **Kimmel DG**, Zheng H, Groves B, Ying K. 2022. A novel end-to-end deep learning system for marine biological and environmental images. PICES 2022 Annual Meeting. Busan, South Korea.
- Crouser D, **Kimmel D**, Keister J. 2022. Deep learning approach for automatically processing zooplankton image data. Ocean Sciences Meeting 2022. Virtual Meeting
- Bi H, Cheng Y, Cheng X, Benfield MC, **Kimmel D**, Zheng H, Ying K. 2022. Taming the data deluge: a new approach for classifying marine biological and environmental images. Ocean Sciences Meeting 2022. Virtual Meeting
- Sewell F, Murphy J, Farley E, Strasburger W, Yasumiishi E, **Kimmel D**. 2022. Growth rate potential for juvenile chum salmon in rapidly warming northern Bering and southern Chukchi Seas. Alaska Marine Science Symposium, Anchorage, AK, USA.
- Murphy J, Kibler S, Siddon E, Eisner L, Willis M, Mousey A, Pickart R, Fachon E, Stabeno P, Lefevbre K, Logerwell E, Anderson D, Gann J, Cooper D, Stimmelmayer R, Kulis D, Sheffield G, Snyder J, **Kimmel D**, Duffy-Anderson J, Bowers E, Grebmeier J. 2022. Paralytic shellfish toxins in Arctic food webs in 2019 during anomalously warm ocean conditions and estimated toxin doses to walruses and bowheads. Alaska Marine Science Symposium, Anchorage, AK, USA.
- Wright DL, **Kimmel D**, Strausz D, Roberson N. 2022. To stay or go? Modeling the prey base of north Pacific right whales on the eastern Bering Sea shelf to gain insight into possible shifting distributions of feeding whales. Alaska Marine Science Symposium, Anchorage, AK, USA.
- Grüss A, Arimitsu M, Barnes C, Barnett L, Cheng W, Eisner L, Haynie A, Hermann A, Holsman K, **Kimmel D**, Lomas M, Reum J, Richar J, Rohan S, Siddon E, Stawitz C, Thorson J. 2021. Novel synthesis framework for ecosystem dynamics forecasts community reassembly in the Bering Sea and identifies demographic fingerprint of cold pool for Alaska pollock. Alaska Marine Science Symposium, Virtual Event.
- Banas N, Hunter A, Ashjian CA, Keister JE, Campbell RE, **Kimmel DG**, Eisner LB, Ferreira SA, Zhang J. 2020. Modelling *Calanus* population dynamics under climate change along the North American Pacific margin from the California Current to the Arctic. Ocean Sciences Meeting. San Diego CA, USA.
- Goldstein ED, Cieciel K, Cooper D, Duffy-Anderson J, Eisner LB, Farley E, **Kimmel D**, Kuletz K, Ladd CA, Logerwell E, Mordy CW, Spear AH, Stabeno PJ. 2020. Impacts of unprecedented loss of sea ice on multiple trophic levels and ecosystem structure in the Chukchi and Beaufort Seas. Ocean Sciences Meeting. San Diego CA, USA.
- Bond N, Stabeno P, **Kimmel D**, Deary A. 2020. Warm anomalies at depth in the northern Gulf of Alaska in summer 2019. Alaska Marine Science Symposium, Anchorage, AK, USA.
- Kimmel D**, Duffy-Anderson J. 2020. Zooplankton abundance trends and patterns in the Shelikof Strait, western Gulf of Alaska 1990-2017: is a phenological shift underway? Alaska Marine Science Symposium, Anchorage, AK, USA.

- Thorson J, Eisner L, **Kimmel D**, Rogers L, Yasumiishi E. 2020. Seasonal spatio-temporal models for *Calanus* index standardization and phenology in the eastern Bering Sea. Alaska Marine Science Symposium, Anchorage, AK, USA.
- Stabeno P, **Kimmel D**, Ladd C, Mordy C. 2020. Reduction of sea ice in the Bering Sea in 2018 and 2019 and some implications for the ecosystem. Alaska Marine Science Symposium, Anchorage, AK, USA.
- Kuletz K, Cushing D, Mueter F, Osnas E, **Kimmel D**, Labunski E, Gall A, Renner H, Dragoo D. 2020. Seabirds signal changes in the Pacific arctic. Alaska Marine Science Symposium, Anchorage, AK, USA.
- Lefebvre K, Quakenbush L, Stimmelmayer R, Sheffield G, Hendrix A, Bryan A, Mounsey A, Willis M, Iversen E, **Kimmel D**, Duffy-Anderson J, Murphy J, Cieciel K, Siddon E, Eisner L, Fergusson E, Showalter S, Yasumiishi E, Gann J, Grebmeier J, Kibler S, Anderson D, Fachon E, Snyder J, Sylvander B. 2020. Algal toxins in Alaskan arctic food webs: krill, clams, benthic worms, fish, ice seals, walruses and whales! Alaska Marine Science Symposium, Anchorage, AK, USA.
- Lamb JF, **Kimmel DG**. 2020. Regional differences in walleye pollock size, condition, and prey selectivity suggest density-dependent effects on the western Gulf of Alaska 2013 year class. Alaska Marine Science Symposium, Anchorage, AK, USA.
- Kimmel DG**. Zooplankton abundance trends and patterns in the Shelikof Strait, western Gulf of Alaska 1990-2017. PICES 2019 Annual Meeting. Victoria, BC, Canada.
- Mordy C, Duffy-Anderson J, Siddon E, Stabeno P, Andrews A, Deary A, Fugate C, Harpold C, **Kimmel D**, Lamb J, Porter S. 2018. Response of the Bering Sea Ecosystem to an Ice-Free Winter. AGU Fall Meeting, San Francisco, CA, USA.
- Kimmel DG**, Duffy-Anderson JT, Wilson MT, Eisner LB. Copepod dynamics across warm and cold periods in the eastern Bering Sea: implications for Walleye pollock (*Gadus chalcogrammus*) and the Oscillating Control Hypothesis. Ocean Sciences Meeting, Portland, OR, USA
- Busby MS, Duffy-Anderson J, Ferm NC, Goldstein ED, **Kimmel DG**, Logerwell E. Ichthyo- and zooplankton collected in the eastern Chukchi Sea during summer 2017 with emphasis on the Distributed Biological Observatory (DBO) regions. Ocean Sciences Meeting, Portland, OR, USA
- Mordy C, Eisner LB, Hermann AJ, **Kimmel D**, Ladd CA, Lomas WM, Mier KL, Proctor P, Stabeno PJ, Wisegarver E. 2018. Spatiotemporal variability of nitrogen deficits on the eastern Bering Sea Shelf. Ocean Sciences Meeting, Portland, OR, USA
- Duffy-Anderson J, Andrews A, Cieciel K, Eisner L, Farley E, Ferm N, Heintz R, **Kimmel D**, Lamb J, Murphy J, Siddon E, Spear A, Stabeno P, Vollenwider J, Wisegarver E. 2018. The cold pool refuge: what an atypical warm stanza and recent cooling reveal about ecosystem structure and walleye pollock in the eastern Bering Sea. Alaska Marine Science Symposium, Anchorage, AK, USA
- Lichti DA, Rinchar J, **Kimmel DG**. 2017. Are all rivers created equal? Determining how food web dynamics affect fish nursery habitat. 24<sup>th</sup> Biennial Coastal Estuarine Research Federation Conference, Providence, RI, USA

- Lichti DA, Rinchar J, **Kimmel DG**. 2017. Are all rivers created equal? Determining how food web dynamics affect fish nursery habitat. 147<sup>th</sup> American Fisheries Society Annual Meeting, Tampa, FL, USA
- \*Lichti DA, Rinchar J, **Kimmel DG**. 2017. Are all rivers created equal? Determining how food web dynamics affect fish nursery habitat. Carolina's Coastal Conference (NC Sea Grant), Raleigh, NC, USA
- \*Awarded honorable mention
- Lichti DA, Rinchar J, **Kimmel DG**. 2017. Are all rivers created equal? Determining how food web dynamics affect fish nursery habitat. Society for Freshwater Science 2017 Annual Meeting, Raleigh, NC, USA
- Kimmel D**, Duffy-Anderson J. 2017. Copepods differ in phenology, size distribution, and estimated production rates across warm and cold periods in the Eastern Bering Sea. Alaska Marine Science Symposium, Anchorage, AK, USA
- Lichti DA, Rinchar J, Schnetzer A, **Kimmel DG**. 2016. Dynamics of community composition and fatty acid profiles of seston and zooplankton in contrasting estuarine systems. ICES/PICES 6<sup>th</sup> Zooplankton Production Symposium, Bergen, Norway.
- Lichti DA, Rinchar J, **Kimmel DG**. 2015. Changes in the zooplankton community fatty acid profiles at the freshwater/saltwater interface. Atlantic Estuarine Research Society Spring Meeting, Wanchese, NC, USA.
- Kimmel DG**, Ludwig-Monty S. 2015. A moving target: the search for phenology changes in the Tar-Pamlico estuary amidst rapid anthropogenic change. Coastal and Estuarine Research Federation biennial meeting, Portland, OR.
- Kimmel DG**, Tarnowski M, Newell, RIE. 2015. Regional scale weather variability influences eastern oyster (*Crassostrea virginica*) larval settlement in Chesapeake Bay. ASLO Aquatic Sciences Meeting. Granada, Spain.
- Lichti, D, **Kimmel DG**. 2015. Changes in the zooplankton community fatty acid profiles at the freshwater/saltwater interface: implications for larval fish growth and survival. ASLO Aquatic Sciences Meeting. Granada, Spain.
- Sassano, N, **Kimmel DG**. 2014. Evaluating land-use effects on the stinging sea nettle *Chrysaora quinquecirrha*: are shoreline hardening structures creating habitat for nuisance species? 24<sup>th</sup> Biennial Meeting of the Coastal Society and 7<sup>th</sup> National Summit on Coastal and Estuarine Restoration. Washington, DC.
- Zhang H, Mason DM, Stow CA, Adamack AT, Brandt S, Zhang X, **Kimmel D**, Roman M, Boicourt W, Ludsins S. 2013. Impact of hypoxia on habitat quality of pelagic fishes in the northern Gulf of Mexico. Coastal and Estuarine Research Federation biennial meeting, San Diego, CA.
- Wetz M, Cira E, **Kimmel D**, Paerl H. 2013. Relative influence of top down and bottom up controls upon estuarine phytoplankton growth and community composition. Coastal and Estuarine Research Federation biennial meeting, San Diego, CA.
- McGlaughon BD, **Kimmel DG**, Wetz M, Cira E, Paerl H. 2013. Spatial and temporal variability of the mesozooplankton community in relation to the chlorophyll maximum of the Neuse River estuary, North Carolina USA. Coastal and Estuarine Research Federation biennial meeting, San Diego, CA.



- Lichti DA, Rinchard J, **Kimmel DG**. 2013. You are what you eat: determining the fatty acid composition in western Albemarle Sound and Chowan River, North Carolina. Coastal and Estuarine Research Federation biennial meeting, San Diego, CA.
- Cira E, Wetz M, **Kimmel D**, Paerl H. 2013. Bottom-up and top-down controls upon estuarine phytoplankton growth and community composition. ASLO Ocean Sciences Meeting, February 2013, New Orleans, LA.
- Cathey AM, Miller N, **Kimmel DG**. 2012. Trace and minor chemistry of juvenile *Mercenaria* shell: spatiotemporal patterns and implications for modeling larval dispersal. Coastal and Estuarine Research Federation: 2012 Argentina. Fall 2012, Mar Del Plata, Argentina.
- \*Cathey AM, Miller N, **Kimmel DG**. 2012. The elemental chemistry of natural waters within a well-mixed estuarine system during periods of hard clam *Mercenaria* larval dispersal. Southeastern Estuarine Research Society Meeting, Spring 2012, Beaufort, NC  
\**Won best student oral presentation*
- Snyder J, **Kimmel DG**, Mitra S. 2012. Presence of polycyclic aromatic hydrocarbons in mesozooplankton collected from the northern Gulf of Mexico succeeding the *Deepwater Horizon* oil spill. National Conference on Undergraduate Research. Weber State University, Ogden, UT.
- Cathey AM, **Kimmel DG**. 2011. The elemental chemistry of natural waters within a well-mixed estuarine system during periods of hard clam *Mercenaria mercenaria* larval dispersal. Coastal and Estuarine Research Federation biennial meeting, Daytona, FL.
- Kimmel DG**, Mitra S, Snyder J\*, Scalise K, McGlaughon BD, Roman MR, Jahn GL, Pierson JJ, Brandt SB, Montoya J, Rosenbauer RJ, Lorenson TD, Wong FL, Campbell PL. 2011. Macondo-1 well oil-derived polycyclic aromatic hydrocarbons in mesozooplankton from the northern Gulf of Mexico. Coastal and Estuarine Research Federation biennial meeting, Daytona, FL.
- Pierson JJ, Runge J, Head E, Plourde S, Johnson C, Leising A, **Kimmel DG**, Pershing AJ. 2011. Predicting copepod dormancy timing in response to climate change. Ecosystem Studies of Sub-Arctic Seas Open Science Meeting. Seattle, Washington.
- Kimmel DG**, Plourde S, Leising A, Pierson JJ, Runge J, Maps F. 2011. Regional scale climatological forcing of *Calanus finmarchicus* dynamics in the Gulf of Maine and the Gulf of St. Lawrence. Fifth International Zooplankton Production Symposium. Pucón, Chile.
- Runge JA, Maps F, Leising A, Pershing AJ, Pierson JJ, **Kimmel DG**. 2011. Scenarios of climate change impacts on local production of the sub-arctic copepod, *Calanus finmarchicus*, in the Gulf of Maine. Fifth International Zooplankton Production Symposium. Pucón, Chile.
- Kimmel DG**, Roman MR. 2010. Long-term changes in *Acartia tonsa* in the upper Chesapeake Bay: an indirect consequence of eutrophication. Climate change impacts on estuarine and coastal ecosystems: a zooplankton perspective. Boulogne, France
- Devreker D, Roman MR, Pierson JJ, **Kimmel DG**, Souissi S. 2009. Population dynamics of the copepod *Eurytemora affinis* in two trans-Atlantic estuaries: the Chesapeake Bay (USA) and the Seine estuary (France). Coastal and Estuarine Research Federation biennial meeting, Portland, Oregon.
- Kimmel DG**, Roman MR. 2009 Long-term changes in *Acartia tonsa* in the upper Chesapeake Bay: an indirect consequence of eutrophication. Coastal and Estuarine Research Federation biennial meeting, Portland, Oregon.

- Ludt W, Pierson JJ, **Kimmel DG**, Roman MR. 2009. Determining egg development rates of *Acartia tonsa* in the Chesapeake Bay using a DAPI staining technique and its significance. Coastal and Estuarine Research Federation biennial meeting, Portland, Oregon.
- Pierson JJ, Roman MR, **Kimmel DG**, Hood RR, Crump BC, Keller D, Lee D, Malpezzi M. 2009. Estimates of winter zooplankton production in the Chesapeake Bay estuarine turbidity maximum. Coastal and Estuarine Research Federation biennial meeting, Portland, Oregon.
- Kimmel DG**, Boicourt WC, Pierson JJ, Roman MR, Zhang X. 2009. Spatial patterns in hypoxia and mesozooplankton in the northern Gulf of Mexico. Coastal and Estuarine Research Federation biennial meeting, Portland, Oregon.
- Kimmel DG**, Boicourt WC, Pierson JJ, Roman MR, Zhang X. 2009. A comparison of the mesozooplankton response to hypoxia in Chesapeake Bay and the northern Gulf of Mexico using the biomass size spectrum. ASLO Aquatic Sciences Meeting, Nice, France.
- Pierson JJ, Roman MR, **Kimmel DG**, Zhang X, Boicourt WC, Loveland B. Quantitative relationships between zooplankton vertical distribution and oxycline depth: comparisons between regions, size classes, and time of day. Ocean Sciences Meeting 2008. Orlando, FL.
- Roman M, **Kimmel D**, Pierson J, Boicourt WC, Loveland B, Zhang X. Spatial patterns in hypoxia and zooplankton in the Gulf of Mexico. Ocean Sciences Meeting 2008. Orlando, FL.
- Pierson J, Roman M, **Kimmel D**, Hood R, Crump B, Keller D, Malpezzi M. 2007. Winter zooplankton abundance, distribution, and vital rates in the Chesapeake Bay estuarine turbidity maximum. Estuarine Research Federation. Providence, RI.
- North E, Houde E, Chao S, Crump B, Friedrichs C, Hood R, **Kimmel D**, Martino E, Roman M, Pierson J, Sanford L. 2007. A synthesis of biological-physical interactions in the Chesapeake Bay estuarine turbidity maximum. Estuarine Research Federation. Providence, RI.
- Kimmel DG** and Newell RIE. 2007. The influence of climate variation on eastern oyster (*Crassostrea virginica*) juvenile abundance in Chesapeake Bay. Estuarine Research Federation. Providence, RI.
- Ludsin SA, Brandt SB, Mason DM, Roman MR, **Kimmel DG**, Boicourt WC, Zhang X, Rae CM. 2007. Effects of hypoxia on the distribution and behavior of fish in the northern Gulf of Mexico. Water Rocks! ASLO Aquatic Sciences Meeting, Santa Fe, NM.
- Roman M, **Kimmel D**, Pierson J, Hozyash K, Boicourt W, Zhang X. 2007. Spatial and temporal variability of zooplankton in the northern Gulf of Mexico: effects of low oxygen bottom waters. Water Rocks! ASLO Aquatic Sciences Meeting, Santa Fe, NM.
- Kimmel DG**, Roman MR, Boicourt WC, Hozyash K, Zhang X. 2007. Zooplankton response to hypoxia in Chesapeake Bay and the northern Gulf of Mexico: evidence from biomass size spectra. Water Rocks! ASLO Aquatic Sciences Meeting, Santa Fe, NM.
- Kimmel DG**, Brooks MT, Roman MR, Taylor JC, Waggener A and Wazniak TM. MEGATRANSECT: 2006. Mapping low dissolved oxygen, zooplankton and fish abundance over a 24 hour period in the Neuse River, USA. 13<sup>th</sup> Ocean Sciences Meeting. Honolulu, HI.
- Zhang X, Wood RJ, Townsend H, **Kimmel DG** and Roman MR. 2006 Interaction between Atlantic menhaden and striped bass in Chesapeake Bay: implication for ecosystem-based fishery management. 13<sup>th</sup> Ocean Sciences Meeting. Honolulu, HI.

- Roman M, Boicourt W, **Kimmel D**, Spear A and Zhang X. Fine-scale distribution of mesozooplankton in relation to hypoxia in Chesapeake Bay and the northern Gulf of Mexico. 2006. 13<sup>th</sup> Ocean Sciences Meeting. Honolulu, HI.
- Ludsin SA, Brandt SB, Vanderploeg HA, Roman MR, Boicourt WC, **Kimmel DG** and Zhang X. 2006. Ecological responses of pelagic zooplankton and fish to seasonal hypoxia in the northern Gulf of Mexico, Chesapeake Bay, and Lake Erie. 13<sup>th</sup> Ocean Sciences Meeting. Honolulu, HI.
- Jung S, **Kimmel DG**, Adolf J, Houde ED, Harding LW and Roman MR. 2005. Biomass size spectra as integrative trophic indicators in Chesapeake Bay. Chesapeake Research Consortium/Estuarine Research Federation. Norfolk, VA.
- Kimmel DG** and Roman MR. 2005. Long-term changes in zooplankton abundance in the upper Chesapeake Bay. Chesapeake Bay Colloquium. Chesapeake Research Consortium/Estuarine Research Federation. Norfolk, VA.
- Kimmel DG**, Miller WD, Wood RJ, Harding LW and Roman MR. 2005. Regional scale climate forcing of Chesapeake Bay trophic dynamics. Estuarine Interactions: Biological-Physical Feedbacks and Adaptations. Estuarine Research Federation. Norfolk, VA.
- Miller WD, Harding LW and **Kimmel DG**. 2005. Predicting the spring discharge of the Susquehanna River from a synoptic climatology for the eastern United States. Estuarine Interactions: Biological-Physical Feedbacks and Adaptations. Estuarine Research Federation. Norfolk, VA.
- Roman M, Boicourt W, **Kimmel D** and Zhang X. 2005. Seasonal and annual variability in the spatial patterns of zooplankton biomass in Chesapeake Bay. Chesapeake Bay Colloquium. Chesapeake Research Consortium/Estuarine Research Federation. Norfolk, VA.
- Kimmel DG**, Zhang X and Roman MR. 2005. Spatial and temporal variability in factors affecting mesozooplankton dynamics in Chesapeake Bay: evidence from biomass size spectra. A Pilgrimage Through Global Aquatic Sciences. ASLO Summer Meeting. Santiago de Compostela, Spain.
- Kimmel DG**, Zhang X, Roman MR, Boicourt WC and others. 2004. Spatial and temporal variability of mesozooplankton biomass size spectra in Chesapeake Bay as measured by an optical plankton counter. Ocean Research Conference. ASLO/TOS. Honolulu, HI.
- Kimmel T, Driscoll C, Matsche M, Pieper L and **Kimmel D**. 2004. Population and health assessment of sea turtles in Maryland waters of the Chesapeake Bay. 24<sup>th</sup> Annual Symposium on Sea Turtle Conservation and Biology. San Jose, Costa Rica.
- Kimmel DG** and Roman MR. 2003. Weather patterns influence mesozooplankton dynamics in the Chesapeake Bay: implications for climate change. Estuaries on the Edge: Estuarine Research Federation. Seattle, WA.
- Kimmel DG** and Roman MR. 2003. Weather patterns as indicators of mesozooplankton dynamics in the Chesapeake Bay. The Earth's Eyes: Aquatic Sciences Through Space and Time: American Society of Limnology and Oceanography. Salt Lake City, UT.
- Kimmel DG** and Roman MR. 2002. Influence of water quality parameters on zooplankton abundance and community composition in the northern Chesapeake Bay: implications for climate change. Interdisciplinary Linkages in Aquatic Sciences and Beyond. American Society of Limnology and Oceanography. Victoria, British Columbia, Canada.

- Bradley BP, Shrader EA, Meiller JC, Pavlick CD, Ruth LM and **Kimmel DG**. 2001. Protein expression signatures: a method of proteomics. Pollution Responses in Marine Organisms XI. Plymouth, UK.
- Bradley B, Shrader E, Meiller J and **Kimmel D**. 2001. Proteomics: opportunities in environmental toxicology. Society for Environmental Toxicology and Chemistry, 22<sup>nd</sup> Annual Meeting. Baltimore, MD.
- Kuperman R, Checkai R, Bradley B, Ruth LM, **Kimmel DG**, Simini M and Phillips C. 2001. Development of a proteome-based system for detecting exposure of soil biota to xenobiotics. Society for Environmental Toxicology and Chemistry, 22<sup>nd</sup> Annual Meeting. Baltimore, MD.
- Kimmel DG** and Bradley BP. 2000. Defining the ecological limits of *Eurytemora affinis* using proteome analysis. Research Across Boundaries. American Society of Limnology and Oceanography. Copenhagen, Denmark.

## F. Society Membership

American Geophysical Union  
 American Society for Limnology and Oceanography  
 Coastal and Estuarine Research Federation

## V. Teaching and Training

### A. Courses

Course No.	No. Lectures	Title	Institution	Semester	Enrollment	Credit Hours	Co-Instructors
BIOL 6882	28	Science Communication	ECU	Fall 2015	10	3	NA
BIOL 4250	28	Biological Oceanography	ECU	Spring 2012-16	30	3	NA
RCLS 4123	Study Abroad	Study Abroad in International Sustainability Australia: Humans and the Environment	ECU	Summer I 2013-2015	10-20	6	Vogelsong (ECU)
BIOL 4800	28	Biological Oceanography	ECU	Spring 2012-2013	30	3	NA
BIOL 6850	14	Advances in Ecology	ECU	Spring 2010-2011, Fall 2014	5-10	1	NA
BIOL 6910	14	Coastal Ecological Processes	ECU	Fall 2009-2013	10-15	4	NA
BIOL 2250	28	Ecology	ECU	Spring 2009-2010	150	3	Clough (2009)
MEES 698E	14	Zooplankton Ecology	UM/MEES	Fall 2007	9	3	Stoecker, Roman
MEES 608F	14	Bio-physical coupling in upper estuaries	UM/MEES	Fall 2006	7	1	Crump, Hood, Houde, North, Roman, Sanford

MEE5 608G	14	Survey of Applied Statistics for Ecologists	UM/MEE5	Fall 2005	11	1	Townsend (NOAA)
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## B. Advising

### 1. Graduate students currently supervised

None

### 2. Past graduate students supervised

Student	Degree	University	Graduation Date
Deborah Lichti	PhD	ECU	July 2018
Nina Sassano	MS	ECU	August 2015
Deborah Lichti	MS	ECU	May 2014
Andrew Cathey	PhD	ECU	December 2013
Mahealani Kaneshiro-Pineiro	PhD	ECU	May 2013
Benjamin D. McGlaughon	MS	ECU	May 2012

### 3. Current graduate student committee memberships

Student	Degree Sought	Advisor	Institution
Hart, Miranda	PhD	Schnetzer	NC State University
McClure, Will	MS	Schnetzer	NC State University
Sullaway, Genoa	PhD	Cunningham	U Alaska Fairbanks

### 4. Past graduate student committee memberships

Student	Degree Earned	Year	Advisor	Institution
Weems, Jared	PhD	2023	Mueter/Eckert	U Alaska Fairbanks
Wright, Dana	PhD	2023	Read	Duke University
Bunnell, Anne	PhD	2021	Edwards, Robert	ECU
Albecker, Molly	PhD	2018	Michael McCoy	ECU
Allen, Mary	PhD	2018	David Loomis	ECU
Geohrig, Tori	MS	2016	Marcelo Ardon	ECU
Speights, Cori	MS	2016	Michael McCoy	ECU
Werba, Jo	MS	2016	Michael McCoy	ECU
McCarthy, Lauren	PhD	2015	David Chalcraft	ECU
Smith, Chad	PhD	2015	Roger Rulifson	ECU
Hughes, Coley	PhD	2015	Roger Rulifson	ECU
Kain, Morgan	MS	2015	Michael McCoy	ECU
Elking, Brie	MS	2014	Roger Rulifson	ECU
Dell'apa, Andrea	PhD	2013	Roger Rulifson	ECU
Meyer, Kevin	PhD	2013	Judith O'Neill	UMCES-HPL
Paterson, Shona	PhD	2013	David Loomis	ECU
Leverett, Lindsay	MS	2011	Claudia Jolls	ECU
Sexton, Margaret	PhD	2011	Raleigh Hood	UMCES-HPL
Mabe, Wayne	MS	2011	Anthony Overton	ECU
Binion, Samantha	MS	2010	Anthony Overton	ECU
Vlahovich, Emily	MS	2009	Donald Meritt	UMCES-HPL

Jahn, Ginger	MS	2009	Elizabeth North	UMCES-HPL
Grant, Melissa	MS	2009	Donald Meritt	UMCES-HPL
Edwards, Jason	MS	2009	Thomas Miller	UMCES-CBL
Devreker, David	PhD	2007	Sami Souissi	l'Université du Havre, France

### 5. Undergraduate students advised

Student	Degree Earned	Year	Advisor	Institution
McCarthy, Michelle	BS	2019	Kimmel/Harpold	Navajo Technical University
Loyo, Eleazar	BS	2019	Kimmel/Harpold	University of Washington
Thaxton, Christopher	BS	2016	Kimmel	ECU
Valmassoi, Andrew	BS	2016	Kimmel	ECU
Brantley, William	BS	2015	Kimmel	ECU
Burch, Amber	BS	2015	Kimmel	ECU
DiVittorio, Madeline	BS	2015	Kimmel	ECU
Bryan, Kelsey	BS	2014	Kimmel	ECU
Shore, Amy	BS	2013	Kimmel	ECU
McLaughlin, Barryn	BS	2013	Kimmel	ECU
Howe, Jarrod	BS	2013	Kimmel	ECU
Cornelson, Amanda	BS	2012	Kimmel	ECU
Lell, Meghan	BS	2010-2011	Kimmel	ECU
Snyder, Jessica	BS	2010-2011	Kimmel	ECU
Nelson, Benjamin	BS	2010	Kimmel	ECU
Bell, Caitlin	BS	2009	Kimmel/Mitra	ECU
Ludt, William	BS	2008	Kimmel/Pierson	Research Experience for Undergraduates from University of Arizona

### 6. AFSC Interns

Student	Degree Sought	Advisor	Institution
Mathiske, Annabel	MS	Hagen, Wilhelm	Universite Bremen, Germany
Loyo, Eleazar	BS	McDonald	Univ. Washington
McCarthy, Michelle	BS		Navajo Technical University

### C. Training

2020 Telework Fundamentals for Employees  
 2020 NOAA COVID-19 Safety Orientation  
 2020 Preventing Harassment and Discrimination for Non-Supervisors  
 2020 Controlled Unclassified Information Basic User Awareness  
 2019 Foreign Travel Briefing  
 2019 Fly America Act Curriculum  
 2019 Basic Travel Training Curriculum  
 2018 NOAA Leadership Seminar  
 2017 Domestic Violence, Sexual Assault, and Stalking in the Workplace  
 2017 Defensive Driving Fundamentals  
 2017 Emergency Situations While Driving  
 2017 Urban Driving  
 2017 Safe Vehicle Backing

2016 – present Cybersecurity Awareness  
2016 – present Records Management 101  
2016 – present No FEAR Act

## VI. Outreach and Service

### A. Journal Service

2020: Guest Editor, *Deep Sea Research II* Special Issue on Gulf of Alaska  
2015-2023: Associate Editor, *Estuaries and Coasts*

Reviewer of manuscripts for *CalCOFI Reports*, *Canadian Journal of Fisheries and Aquatic Sciences*, *Deep Sea Research Part II*, *Ecological Research*, *Environmental Toxicology*, *Estuaries and Coasts*, *Estuarine Coastal and Shelf Science*, *Fisheries Oceanography*, *Frontiers in Marine Science*, *Helgoland Marine Research*, *Hydrobiologia*, *Journal of Experimental Marine Biology and Ecology*, *Journal Geophysical Research Oceans*, *Journal of Plankton Research*, *Limnology and Oceanography*, *Limnology and Oceanography Methods*, *Marine Biology*, *Marine Biology Research*, *Marine Ecology Progress Series*, *Marine Environmental Research*, *PLoS-ONE*, *Polar Biology*, *Progress in Oceanography*

### B. Public Service

2015-2016 North Carolina Division of Water Resources – Scientific Advisory Council on Nutrients  
2013-2016 City of Greenville Stormwater Stakeholders Group  
2013-2016 City of Greenville Environmental Advisory Commission  
2013 Invited Seminar: “State of the Oceans.” Cypress Group of the Sierra Club, Greenville, NC  
2012 Interview quote in the 13 April 2012 *Wall Street Journal*, Page A3  
2012 Radio interview for Summit Daily News about *Deepwater Horizon* spill  
2012 Radio interview for Voice of Russia Radio about *Deepwater Horizon* spill  
2012 Radio interview for International Business Times about *Deepwater Horizon* spill  
2012 Television (WITN, Greenville NC) interview about *Deepwater Horizon* spill  
2012 Radio interview for Public Radio East, Down East Journal about *Deepwater Horizon* spill  
2011 Pitt County Teen Leadership Institute  
2010-2016 Albemarle-Pamlico National Estuary Program Scientific and Technical Committee member  
2011 Science Judge for the Blue Heron Bowl competition  
2010 Interview on “Henry Hinton Show” about *Deepwater Horizon* spill  
2010 Television (WNCT, Greenville NC) interview about *Deepwater Horizon* spill  
2010 GoScience Café Event, panelist for a forum on the *Deepwater Horizon* spill  
2007 Advisor for Kevin Hoover, a Gifted and Talented student at Reservoir High School, Howard County, Maryland  
2007 Speaker Bureau: Mid-Atlantic Regional Air Monitoring Association annual meeting, Ocean City, Maryland  
2007 Speaker Bureau: St. Michaels Breakfast Club

### **C. East Carolina University Service**

2015-2016 Research Vessel Use and Safety Commission (University Wide Committee)  
2015-2016 Department of Biology Personnel Committee (Chair)  
2014-2015 Thomas Harriot College of Arts and Sciences Fiscal Sustainability Working Group  
2014-2015 ECU-UNCW Joint PhD Program in Marine Science Committee  
2014 Coastal Resources Management Director Search Committee (Chair)  
2014-2015 Department of Biology Personnel Committee (Co-chair)  
2014 Conservation Biologist Assistant Professor Search Committee  
2013-2015 Department of Biology Vehicle Use Committee  
2013-2015 Coastal Maritime Council  
2012-2014 Department of Biology Executive Committee  
2012 Microbial Ecologist Assistant/Associate Professor search committee  
2011-2013 Boating Control Safety Commission (University Wide Committee)  
2011 Macroecologist Assistant Professor search committee  
2010-2011 University Library Committee (University Wide Committee)  
2010-2011 Department of Biology Executive Committee  
2010 Wetland Ecologist Assistant Professor Search committee  
2009-2011 Department of Biology Graduate Committee  
2009-2014 Coastal Resource Management Graduate Applications Review Committee  
2009 Coastal Ocean Dynamics Assistant Professor search committee

### **D. UMCES and Horn Point Laboratory Service**

2008 MEES Oceanography AOS Admissions  
2007 Education Committee  
2007 Open House Committee  
2007 Seminar co-chair (with Victoria Coles)

### **E. Local/National/International Professional Service**

2019 - Present Member of PICES BIO Committee  
2023 – Vice-Chair PICES BIO Committee  
2018 Reviewer: Canadian Foundation for Innovation  
2017 National Science Foundation panelist  
2015 Reviewer: National Commission for Scientific and Technological Research (CONICYT), Chile  
2013 Session co-chair, Coastal and Estuarine Research Federation biennial meeting, San Diego, California  
2013 National Science Foundation panelist  
2011 Reviewer for Delaware Sea Grant  
2011 Session co-chair, Coastal and Estuarine Research Federation biennial meeting, Daytona, Florida  
2011 Reviewer for CNRS (Centre National de la Recherche Scientifique), France



- 2010-2012 Research Council of Norway, Panelist for the Council's annual grant competition.
- 2010 Reviewer for New York Sea Grant
- 2010 National Science Foundation panelist
- 2010 Scientific Committee for Workshop: Climate change impacts on estuarine and coastal ecosystems: a zooplankton perspective. Boulogne, France
- 2009 Session co-chair, Coastal and Estuarine Research Federation biennial meeting, Portland, Oregon
- 2008-2016 North Carolina Marine Fisheries Commission Blue Crab Advisory Committee
- 2008 Reviewer for Oregon Sea Grant
- 2008-2009 GLOBEC 3<sup>rd</sup> Pan-Regional Synthesis Meeting, Boulder, Colorado
- 2007-2008 State of Maryland Commission on Climate Change, Scientific and Technical Advisory Working Group
- 2007 Ecological Impacts of Hypoxia on Living Resources Workshop, NOAA, Bay St. Louis, MS, 26-29
- 2007 Session co-chair, ASLO Aquatic Sciences Meeting, Santa Fe, New Mexico
- 2006-Present Reviewer for National Science Foundation Biological Oceanography Program
- 2006 Gulf of Mexico Hypoxia: Assessing the State of the Science Symposium. NOAA, New Orleans, LA, 25-27
- 2006 EPA Oceanography and Coastal Processes (06-E7 & 06-E2, panel A) panel. Washington, DC. 13-14
- 2005 Zooplankton/Food-Web Monitoring for Adaptive Multi-species Management Workshop, Chesapeake Research Consortium, 12-13
- 2005 Participating Scientist in Center for Ocean Sciences Education Excellence (COSEE)
- 2002 Suspension Feeder Workshop: a workshop to assess what we know, don't know and need to know to determine their effects on water quality, Chesapeake Bay Program, 18-19