

VITA
for
John M. Klinck

Date of Revision: January 15, 2019

Born: May 15, 1950 Ft. Monmouth, N.J.

Present Title: Professor and Interim Director
Address: Center for Coastal Physical Oceanography
Department of Oceanography
Old Dominion University
Norfolk, Virginia 23529
phone: (757) 683-6005
email: klinck@ccpo.odu.edu

Home Address: 1101 North Shore Road
Norfolk, Virginia 23505
phone: (757) 423-7448

Military Status: Captain U.S. Army Reserve (Inactive)

Degrees: B.S. (Physics) Clemson University, 1972
M.S. (Physics) University of North Carolina, 1975
Ph.D. (Marine Science) North Carolina State University, 1980

Honorary and Professional Societies:

American Association for the Advancement of Science
American Geophysical Union
American Meteorological Society
European Geophysical Society
National Shellfisheries Association
Sigma Xi
The Oceanography Society

Research Interests:

Analytical and numerical modelling of physical and biological processes in oceanic, coastal and estuarine environments.

Employment:

2004-present Director, Center for Coastal Physical Oceanography
1996-present Professor, Old Dominion University
1989-1996 Associate Professor, Old Dominion University
June-Dec. 1987 Visiting Professor, Old Dominion University
1983-1989 Assistant Professor, Texas A&M University
Jan-May 1982 Visiting Assistant Professor, Texas A&M University
1981-1983 Assistant Research Scientist, Texas A&M University
1979-1981 Postdoctoral Research Associate, Florida State University
1975-1979 Graduate Research Assistant, Department of Marine Science and Engineering, North Carolina State University
1974 (summer) Oceanographic Assistant, Nova University

1973-1975 Graduate Teaching Assistant, Physics Department, University of North Carolina

1972 U.S. Army Officer (3 months active duty for training)

Committes and Panels:

- member National Science Foundation Arctic proposal review panel. Washington, D.C. March, 2016.
- member National Science Foundation physical oceanography proposal review panel. Washington, D.C. November, 2014.
- member National Science Foundation Ocean Sciences proposal review panel. Washington, D.C. November, 2014.
- member National Science Foundation Office of Polar Programs proposal review panel. Washington, D.C. September, 2010.
- member National Science Foundation Ocean Sciences proposal review panel. Washington, D.C. November, 2009.
- member National Science Foundation ITR review panel. Washington, D.C. May, 2004.
- Editor-in-Chief Journal of Geophysical Research, Oceans, 2003-Dec, 2005.
- member Individual Independent Technical Review of Biscayne Bay Feasibility Study Hydrodynamic model. Dept. of Env. Res. Management, Miami-Dade County, Florida. May, 2001.
- member Technical Review Committee for Craney Island (VA.) Eastward Expansion Project, 2000-2001.
- member Review Team for MMS program on Physical Oceanography of the Slope and Rise of the Gulf of Mexico, September, 2000.
- Editor Journal of Geophysical Research, Oceans, 2000-2002.
- member National Science Foundation Ocean Sciences review panel. Washington, D.C. November, 1998.
- member National Science Foundation Ocean Sciences special review panel. Washington, D.C. November, 1995.
- member National Science Foundation Polar Biology review panel. Washington, D.C. September, 1994.
- member National Science Foundation Land Margin Ecosystem Research review panel. Washington, D.C. April, 1994.
- member National Science Foundation High Performance Computing and Communication Grand Challenge Applications Group preproposal review panel. Washington, D.C. April, 1993.
- member National Science Foundation High Performance Computing and Communication Grand Challenge Applications Group review panel. Washington, D.C. July, 1993.
- member National Science Foundation and National Oceanic and Atmospheric Administration review panel on U.S. GLOBEC. Washington, D.C. December, 1992.
- Assoc. Editor Journal of Geophysical Research, Oceans, 1991-1992.
- member WOCE data management working group, 1991-1992.
- member program committee for Spring, 1992 American Geophysical Union meeting.
- member program committee for 1992 Ocean Sciences meeting.
- member National Science Foundation GLOBEC Biotechnology review panel, Washington, D.C. August, 1991.

- member program committee for Fall, 1991 American Geophysical Union meeting.
- member program committee for Spring, 1991 American Geophysical Union meeting.
- member program committee for Fall, 1990 American Geophysical Union meeting.
- member National Science Foundation Physical Oceanography review panel, Washington, D.C. April, 1990.
- member National Science Foundation Physical Oceanography review panel, Washington, D.C. April, 1988.
- member National Science Foundation Physical Oceanography review panel, Washington, D.C. August, 1986.
- member National Science Foundation Physical Oceanography review panel, Washington, D.C. April, 1986.
- member National Science Foundation Physical Oceanography review panel, Washington, D.C. April, 1985.

Teaching Experience:

- Dynamical Oceanography I and II - introduction to geophysical fluid dynamics. Two semester course. Fall, 1991 and Spring, 1992; Fall, 1994 and Spring, 1995; Spring, 1999 and Fall, 1999; Spring, 2002 and Fall, 2002; Spring, 2005 and Fall, 2005; Spring, 2006 and Fall, 2006; Spring, 2007 and Fall, 2007; Spring, 2008 and Fall, 2008; Spring, 2009 and Fall, 2009; Spring, 2010 and Fall 2010; Spring, 2011 and Fall 2011; Spring 2012; Spring 2015; Fall 2017; Fall 2018 and Spring 2019.
- Matlab for Oceanographers: introductory class for senior undergrad and beginning grad students. Spring, 2009; Spring, 2010; Spring, 2011; Spring, 2012; Spring, 2013; Spring, 2014; Spring, 2015; Spring, 2016; Spring, 2017; Spring, 2018; Spring 2019.
- Field studies class for senior undergrad majors (2 semester, co-taught). Fall 2014/Spring 2015; Fall 2015/Spring 2016; Fall 2016/Spring 2017; Fall 2017/Spring 2018; Fall 2018/Spring 2019.
- Simulation Techniques - numerical techniques for ocean modelling. Fall, 1985; Spring, 1987; Spring, 1989; Spring, 1990; Fall, 1992; Spring, 1996; Fall, 1997; Spring, 2000; Fall, 2002; Spring, 2007; Spring, 2010; Fall, 2012.
- Middle Atlantic Bight and Delaware Bay physical and biological processes: Reading class. Fall, 2008.
- Freshman Oceanography for non-majors (Honors) Spring, 2004.
- Introductory Physical Oceanography - core course for all graduate students. Spring, 1984; Spring, 1986; Spring, 1988; Spring, 1991; Fall, 2012; Fall, 2013, Fall, 2014, Fall, 2015, Fall, 2016.
- Theory of Ocean Circulation - dynamics of large scale circulation. Spring, 1982; Fall, 1983; Fall, 1986; Fall, 1988; Spring, 1994.
- Oceanographic Data Methods - analysis techniques appropriate for oceanographic observations. Fall, 1995.
- Quantitative methods for oceanography - introduction to computer use for new graduate students. Fall, 1997; Fall, 1998; Fall, 1999.
- Regional Descriptive Oceanography Spring, 1997.
- Physical Oceanography of Estuaries - description and classification, dynamics of circulation. Fall, 1984; Spring, 1996.
- Fluid dynamics for oceanography - introduction for new graduate students. Spring, 1990.

Physical Oceanography - survey for senior undergraduates. Summer, 1988; Fall, 1989.
 Survey of Oceanography - undergraduate, nontechnical survey. Fall, 1983.
 Seminar Techniques - practice seminars. Fall, 1990.

Postdoctoral Researchers Supervised:

2013-2014	Jennifer Graham
2013-2015	Pierre St-Laurent
1997-1999	Jun She

Ph.D. Student Committees Chaired:

Aug, 2017	James Haluska, Old Dominion University.
Aug, 2017	Stefanie Mack, Old Dominion University.
May, 2012	Diego Narvaez, Old Dominion University.
May, 2008	Bin Zhang, Old Dominion University.
May, 2008	Y. Sinan Husrevoglu, Old Dominion University.
May, 2004	Kyung-Hoon Hyun, Old Dominion University.
Dec, 1999	David A. Smith, Old Dominion University.
July, 1995	Yvette H. Spitz, Old Dominion University.
Dec, 1992	Julie McClean-Padman, Old Dominion University.

M.S. Student Committees Chaired:

Aug, 2016	Andrew Foor, Old Dominion University.
May, 2012	Michael Scruggs, Old Dominion University.
Dec, 2010	Mahmoud Kamel, Old Dominion University.
May, 2009	Matthew Fuhrmann, non-thesis, Old Dominion University.
May, 1994	Andry Ratsimandresy, non-thesis, Old Dominion University.
Aug, 1991	Tim P. Boyer, non-thesis, Old Dominion University.
Aug, 1984	Annick Lopez-Garcia, A numerical study of seasonal circulation in the Gulf of Cariaco, Texas A&M University.

Reviewed Publications:

- 2019 Kuykendall, K., E.N. Powell, J.M. Klinck, P. Moreno, R. Leaf, The effect of abundance changes on a management strategy evaluation for the Atlantic surfclam (*Spisula solidissima*) using a spatially explicit, vessel-based fisheries model *Ocean and Coastal Management*, submitted.
- 2019 Pinones, A., E.E. Hofmann, J. Burns, J.M. Klinck, M.S. Dinniman, D. Costa, K. Goetz, and F. Roquet. Hydrographic variability along the inner and mid-shelf region of the western Ross Sea obtained using instrumented seals. *Prog. Ocean.*, **172**, . doi: 10.1016/j.ocean.2019.01.003
- 2018 Munroe, D. D. Haidvogel, J. Caracappa, J. Klinck, E. Powell, E. Hofmann, B. Shank, and D. Hart. Modeling larval dispersal and connectivity in the Atlantic sea scallop (*Placopecten magellanicus*) in the Middle Atlantic Bight. *Fish Research*, **208**, 7-15 .
- 2018 Hofmann, E.E., E.N. Powell, J.M. Klinck, D.M. Munroe, R. Mann, D.B. Haidvogel, D.A. Narvaez, Z. Zhang, and K.M. Kuykendall. An Overview of Factors Affecting Distribution of the Atlantic Surfclam (*Spisula solidissima*), a Continental Shelf Biomass Dominant, During a Period of Climate Change. *J. Shellfish Res.* **37(4)**, 821-831.

- 2018 Powell, E.N., E.E. Hofmann, and J.M. Klinck. Oysters, sustainability, management models and the world of reference points. *J. Shellfish Res*, **37(4)**, 833-849.
- 2018 Dinniman, M.S., J.M. Klinck, E.E. Hofmann, and W.O. Smith, Jr. Effects of projected changes in wind, atmospheric temperature and freshwater inflow on the Ross Sea. *J. Climate*, **31**, 1619-1635. doi: 10.1175/JCLI-D-17-0351.1
- 2017 Davis, L.B., E.E. Hofmann, J.M. Klinck, M.S. Dinniman and A. Piñones. Distributions of *Euphausia superba*, *Euphausia cryastallorophius* and *Plueragramma antarcticum* with correlations to environmental features in the western Ross Sea, Antarctica. *Marine Ecology Progress Series*, doi: 10.3354/meps12347.
- 2017 Kuykendall, K.M. E.N. Powell, J.M. Klinck, P.T. Moreno, and R.T. Leaf. Management strategy evaluation for the Atlantic surfclam (*Spisula solidissima*) using a spatially explicit, vessel-based fisheries model. *Fishery Bulletin*, **115**, 300-325. doi: 10.7755/FB.115.3.3.
- 2017 Li, Y., D.J. McGillicuddy, Jr, M.S. Dinniman, J.M. Klinck Processes influencing formation of low-salinity high-biomass lenses near the edge of the Ross Ice Shelf *J. Mar. Sys.*, **166**, 108-119. doi: 10.1016/j.jmarsys.2016.07.002
- 2017 Bidegain, G., E.N. Powell, J.M. Klinck, E.E. Hofmann, T. Ben-Horin, D. Bushek, S.E. Ford, D.M. Munroe, and X. Guo. Modeling the transmission of *Perkinsus marinus* in the Eastern oyster *Crassostrea virginica* *Fisheries Research*, **186**, 82-93 doi: 10.1016/j.fishres.2016.08.006
- 2017 Mack, S.L., M.S. Dinniman, D.J. McGillicuddy, P.N. Sedwick, and J.M. Klinck. Dissolved iron transport pathways in the Ross Sea: Influence of tides and horizontal resolution in a regional ocean model. *J. Marine Sys.*, **166**, 73-86, doi: 10.1016/j.jmarsys.2016.10.008.
- 2016 Munroe, D.M., D.A. Narvaez, D. Hennen, L. Jacobsen, R. Mann, E.E. Hofmann, E.N. Powell, and J.M. Klinck. Fishing and Bottom Water Temperature as Drivers of Change in Maximum Shell Length in Atlantic Surfclams (*Spisula solidissima*) *Estuarine, Coastal and Shelf Science*, **170**, 112-122, doi:10.1016/j.ecss.2016.01.009
- 2016 Bidegain, G., E.N. Powell, J.M. Klinck, T. Ben-Horin, and E.E. Hofmann. Microparasitic disease dynamics in benthic suspension feeders: Infective dose, non-focal hosts, and particle diffusion. *Ecol. Mod.*, **328**, 44-61.
- 2016 Munroe, D.M., D.A. Narvaez, D. Hennen, L. Jacobsen, R. Mann, E.E. Hofmann, E.N. Powell, and J.M. Klinck. Fishing and Bottom Water Temperature as Drivers of Change in Maximum Shell Length in Atlantic Surfclams (*Spisula solidissima*). *Est. Coast. Shelf Sci.*, , .
- 2016 Bidegain, G., E.N. Powell, J.M. Klinck, T. Ben-Horin, and E.E. Hofmann. Marine infectious disease dynamics and outbreak thresholds: pandemic infection and the potential role of filter feeders. *Ecosphere*, **7(4)**, doi: 10.1002/3cs2.1286
- 2015 Narvaez, D.A., D.M. Munroe, E.E. Hofmann, J.M. Klinck, E.N. Powell, R. Mann, and E. Curchitser. Long-term dynamics in Atlantic surfclam (*Spisula solidissima*) populations: The role of bottom water temperature. *J. Mar. Sys.*, **141**, 136-148.
- 2015 Zhang, X, D. Haidvogel, D.M. Munroe, E.N. Powell, J.M. Klinck, R. Mann, and F.S. Castruccio. Modeling larval connectivity of the Atlantic surfclams within the Middle Atlantic Bight: Model development, larval dispersal and metapopulation connectivity *Est. Coast. Shelf Sci.*, **153**, 38-53.
- 2015 Dinniman, M.S., J.M. Klinck. L.-S. Bai, D.H. Bromwich, K.M. Hines and D.M. Holland. The effect of atmospheric forcing resolution on delivery of ocean heat

- to the Antarctic floating ice shelves. *J. Climate*, **28(15)**, 6067-6085. doi: 10.1175/JCLI-D-14-00374.1.
- 2015 St-Laurent, P., J.M. Klinck, and M.S. Dinniman. Impact of local winter cooling on the melt of Pine Island Glacier, Antarctica. *J. Geophys. Res.*, **120**, 67186732, doi:10.1002/2015JC010709.
- 2015 Munroe, D., E.N. Powell, S. Ford, E. Hofmann, and J.M. Klinck. Consequences of asymmetric selection pressure and larval dispersal on the evolution of disease resistance; a metapopulation modeling study with oysters. *Marine Ecol Prog Ser*, **531**, 221-239. doi: 10.3354/meps11349.
- 2015 Powell, E.N., J.M. Klinck, D.M. Munroe, E.E. Hofmann, P. Moreno, and R. Mann. The value of captains' behavioural choices in the success of the surfclam (*Spisula solidissima*) fishery on the U.S. Mid-Atlantic coast: a model evaluation. *J. Northw. Atl. Fish Sci.*, **47**, 1-27. doi:10.2960/J.v47.m701
- 2015 Zhang, X., D.A. Haidvogel, D. Munroe, E.N. Powell, J.M. Klinck, R. Mann, and F.S. Castruccio. Modeling larval connectivity of the Atlantic surfclams within the Middle Atlantic Bight: Model development, larval dispersal and metapopulation connectivity. *Est. Coast. Shelf Sci*, **153**, 38-53. DOI: 10.1016/j.ecss.2014.11.033
- 2014 Munroe, D., J.M. Klinck, E.E. Hofmann, and E.N. Powell. A Modeling Study of Metapopulation Genetic Connectivity in Delaware Bay Oysters and the Role of Marine Protected Areas. *Aquatic Conservation*, **24**, 645-666. DOI: 10.1002/aqc.2400
- 2014 Soniat, T.M., N. Cooper, E.N. Powell, J.M. Klinck, M. Abdelguerfi, S. Tu, R. Mann, and P.D. Banks. Estimating sustainable harvest of eastern oysters, *Crassostrea virginica*. *J. Shell. Res.*, **33(2)**, 381-394.
- 2014 Smith Jr., W.O., K.T. Goetz, D.E. Kaufman, B.Y. Queste, V. Asper, D.P. Costa, M.S. Dinniman, M.A.M. Friedrichs, E.E. Hofmann, K.T. Heywood, J.M. Klinck, J.T. Kohut, and C.M. Lee. Multiplatform, multidisciplinary investigations of the impacts of modified circumpolar deep water in the Ross Sea, Antarctica. *Oceanography*, **27(2)**, 180-185.
- 2014 Paillard, C., F. Jean, S.E. Ford, E.N. Powell, J.M. Klinck, E.E. Hofmann, and J. Flye-Sainte-Marie. A theoretical individual-based model of brown ring disease in manila clams, *Ruditapes philippinarum*. *J. Sea Res.*, **91C**, 15-34. doi: 0.1016/j.seares.2014.03.05.
- 2014 Smith Jr., W.O., M.S. Dinniman, E.E. Hofmann and J.M. Klinck. The effects of changing winds and temperatures on the oceanography of the Ross Sea in the 21st century *Geophys. Res. Lett.*, **41(5)**, 1624-1631. doi: 10.1002/2014GL059311
- 2013 Piñones, M.A., E.E. Hofmann, K.L. Daly, M.S. Dinniman, J.M. Klinck. Modeling the remote and local connectivity of Antarctic krill populations along the western Antarctic Peninsula *Marine Ecol Prog Ser*, **481**, 69-82. doi:10.3354/meps10256.
- 2013 Piñones, M.A., E.E. Hofmann, K.L. Daly, M.S. Dinniman, J.M. Klinck. Modeling environmental controls on the transport and fate of early life stages of Antarctic krill (*Euphausia superba*) on the western Antarctic Peninsula continental shelf *Deep-Sea Res.*, **82**, 17-31. doi:10.1016/j.dsr.2013.08.001
- 2013 Munroe, D.M., E.E. Hofmann, E.N. Powell and J.M. Klinck. How do shellfisheries influence genetic connectivity in metapopulations? A modeling study examining the role of lower size limits in oyster fisheries. *Can J Fish Aquat Sci*, **70**, 1813-1828. doi: 10.1139/cjfas-2013-0089.

- 2013 Munroe, D.M., J.M. Klinck, E.E. Hofmann and E.N. Powell. A modelling study of the role of marine protected areas in metapopulation genetic connectivity in Delaware Bay oysters. *Aquatic Cons.*, **24**(5), 645-666, doi: 10.1002/aqc.2400.
- 2013 Munroe, D.M., E.N. Powell, R. Mann, J.M. Klinck, and E.E. Hofmann. Underestimation of primary productivity on continental shelves: evidence from maximum size of extant surfclam (*Spisula solidissima*) populations. *Fisheries Oceanography*, **22**, 220233. doi:10.1111/fog.12016
- 2013 Mack, S., L. Padman, J.M. Klinck. Extracting tidal variability of sea ice concentration from AMSR-E passive microwave single-swath data: a case study of the Ross Sea *Geophys. Res. Lett.*, **40**, 547-552. DOI: 10.1002/grl.50128.
- 2013 St-Laurent, P., J.M. Klinck, and M.S. Dinniman. On the Role of Coastal Troughs in the Circulation of Warm Circumpolar Deep Water on Antarctic Shelves. *J. Phys. Ocean.*, **43**(1), 51-64. doi: 10.1175/JPO-D-11-0237.1
- 2012 Soniat, T.M., J.M. Klinck, E.N. Powell, N. Cooper, M. Abdelguerfi, E.E. Hofmann, J. Dahal, S. Tu, J. Finigan, B.S. Eberline, J.F. La Peyre, M.K. La Peyre and F. Quaddoura. A shell-neutral modeling approach yields sustainable oyster harvest estimates: a retrospective analysis of the Louisiana state primary seed grounds. *J. Shellfish. Res.*, **31**(4), 1103-1112.
- 2012 Soniat, T.M., J.M. Klinck, E.N. Powell, and E.E. Hofmann. Understanding the success and failure of oyster populations: Periodicities of *Perkinsus Marinus*, and oyster recruitment, mortality and size. *J. Shellfish. Res.*, **31**(3), 635-646.
- 2012 Murphy, E.J., R.D. Cavanagh, E.E. Hofmann, S.L. Hill, A.J. Constable, D.P. Costa, M.H. Pinkerton, N.M. Johnston, P.N. Tranthan, J.M. Klinck, D.A. Wolf-Gladrow, K.L. Daly, O. Maury, S.C. Doney. Developing integrated models of Southern Ocean food webs: Including ecological complexity, accounting for uncertainty and the importance of scale *Prog. Ocean*, **102**, 74-92.
- 2012 Powell, E.N., J.M. Klinck, X. Guo, E.E. Hofmann, S.E. Ford and D. Bushek. Can oysters *Crassostrea virginica* develop resistance to dermo disease in the field: the impediment posed by climate cycles. *J. Mar. Res.*, **70**(2-3), 309-355.
- 2012 Narvaez, D.A., J.M. Klinck, E.N. Powell, E.E. Hofmann, J. Wilkin, D.B. Haidvogel. Modeling the dispersal of Eastern Oyster (*Crassostrea virginica*) larvae in Delaware Bay. *J. Mar. Res.*, **70**(2-3), 381-409.
- 2012 Narvaez, D.A., J.M. Klinck, E.N. Powell, E.E. Hofmann, J. Wilkin, D.B. Haidvogel. Circulation and behavior controls on dispersal of Eastern Oyster (*Crassostrea virginica*) larvae in Delaware Bay. *J. Mar. Res.*, **70**(2-3), 411-440.
- 2012 Munroe, D., J. Klinck, E. Hofmann, E.N. Powell. The role of larval dispersion in metapopulation gene flow: local population dynamics matter. *J. Mar. Res.*, **70**(2-3), 441-467.
- 2012 Powell, E.N., J.M. Klinck, K. Ashton-Alcox, E.E. Hofmann and J.M. Morson. The rise and fall of *Crassostrea virginica* oyster reefs: the role of disease and fishing in their demise and a vignette on their management. *J. Mar. Res.*, **70**(2-3), 505-558
- 2012 Dinniman, M.S., J.M. Klinck and E.E. Hofmann. Sensitivity of Circumpolar Deep Water transport and ice shelf basal melt along the west Antarctic Peninsula to changes in the winds. *J. Climate*, **25**, 4799-4816.
- 2011 Dinniman, M.S., J.M. Klinck and W.O. Smith, Jr. A model study of Circumpolar Deep Water on the West Antarctic Peninsula and Ross Sea continental shelves. *Deep-Sea Res. II*, **58**, 1508-1523, doi: 10.1016/j.dsr2.2010.11.013

- 2011 Piñones, M.A., E.E. Hofmann, M.S. Dinniman, J.M. Klinck. Lagrangian simulation of transport pathways and residence times along the Western Antarctic Peninsula. *Deep-Sea Res.*, **58**, 1524-1539, doi:10.1016/j.dsr2.2010.07.001.
- 2011 Powell, E.N., J. Morson and J.M. Klinck, Application of a gene-based population dynamics model to the optimum egg size problem: why do bivalve planktotrophic eggs vary in size? *J. Shell Res.*, **30**, 403-423.
- 2011 Powell, E.N., J.M. Klinck, X. Guo, S.E. Ford and D. Bushek. The potential for oysters, *Crassostrea virginica*, to develop resistance to dermo disease in the field: evaluation using a gene-based population dynamics model. *J. Shell Res.*, **30(3)**, 685-712.
- 2011 Powell, E.N., J.M. Klinck, and E.E. Hofmann. Generation time and the stability of sex-determining alleles in oyster populations as deduced using a gene-based population dynamics model. *J. Theoretical Biol.*, **271**, 27-43.
- 2010 J.M. Klinck and M.S. Dinniman. Exchange across the shelf break at high southern latitudes *Ocean Science*, **6**, 513-524. doi:10.5194/os-6-513-2010
- 2010 Loeb, V., E.E. Hofmann, J.M. Klinck, and O. Holm-Hansen. Hydrographic control of the marine ecosystem in the south Shetland-Elephant Island and Bransfield Strait region *Deep-Sea Res.*, **57(7-8)**, 519-542 doi: 10.1016/j.dsr2.2009.10.004
- 2009 Hofmann, E.E., D. Bushek, S. Ford, X. Guo, D. Haidvogel, D. Hedgecock, J. Klinck, C. Milbury, D. Narvaez, E. Powell, Y. Wang, Z. Wang, J. Wilkin, L. Zhang. Understanding how disease and environment combine to structure resistance in estuarine bivalve populations. *Oceanography*, **22(4)**, 212-231.
- 2009 Powell, E.N., J.M. Klinck, K.A. Ashton-Alcox and J.N. Kraeuter. Multiple stable reference points in oyster populations: implications for reference point-based management. *Fish Bull.*, **107**, 133-147.
- 2009 Powell, E.N., J.M. Klinck, K.A. Ashton-Alcox and J.N. Kraeuter. Multiple stable reference points in oyster populations: biological relationships of the eastern oyster (*Crassostrea virginica*) in Delaware Bay. *Fish Bull.*, **107**, 109-132.
- 2009 Loeb, V., E.E. Hofmann, J.M. Klinck, O. Holm-Hansen, W.B. White, ENSO and variability of the Antarctic Peninsula pelagic marine ecosystem. *Ant. Sci.*, **21**, 135-148. doi: 10.1017/S0954102008001636.
- 2008 Soniat, T.M., E.E. Hofmann, J.M. Klinck, and E.N. Powell. Differential modulation of eastern oyster (*Crassostrea virginica*) disease parasites by the El-Niño-Southern Oscillation and the North Atlantic Oscillation *Int. J. Earth Sci.*, **98**, 99-114. doi: 10.1007/s00531-008-0364-6
- 2008 Kraeuter, J.N., J.M. Klinck, E.N. Powell, E.E. Hofmann, S.C. Buckner, R.E. Grizzle and V.M. Bricelj. Effect of the fishery on the northern quahog (=hard clam, *Mercenaria mercenaria* L.) population in Great South Bay, New York: a modeling study. *J. Shellfish Res.*, **27(4)**, 653-666.
- 2008 Zhang, B. and J.M. Klinck. The effect of Antarctic Circumpolar Current transport on the frontal variability in Drake Passage. *Dyn. Atm. Ocn.*, **45**, 208-228.
- 2008 Jordi, A., J.M. Klinck, G. Basterretxea, A. Orfila, and J. Tintore. Estimation of shelf-slope exchanges induced by frontal instability near submarine canyons. *J. Geophys. Res.*, **113**, C05016, doi:10.1029/2007JC004207.
- 2008 Costa, D., J.M. Klinck, E.E. Hofmann, M.S. Dinniman and J.M. Burns. Upper ocean variability in the west Antarctic Peninsula continental shelf waters as measured using instrumented seals, *Deep-Sea Res. II*, **55**, 323-337.

- 2007 Dinniman, M.S., J.M. Klinck and W.O. Smith, Jr. The influence of sea ice cover and icebergs on circulation and water mass formation in a numerical circulation model of the Ross Sea, Antarctica *J. Geophys. Res.*, **112** (C11),C11013. doi: 10.1029/2006JC004036.
- 2007 Polyakov, O. J.N. Krauter, E.E. Hofmann, S.C. Buckner, V.M. Bricelj, E.N. Powell and J.M. Klinck. Benthic predators and northern quahog (=hard clam)(*Mercenaria mercenaria* Linnaeus, 1758) populations. *J. Shellfish Res.*, **26**(4), 995-1010.
- 2007 Powell, E.N. and J.M. Klinck. Is oyster shell a sustainable estuarine resource? *J. Shell. Res.*, **26**, 181-194.
- 2006 Fach, B.A. and J.M. Klinck. Transport of Antarctic krill (*Euphausia superba*) across the Scotia Sea Part I: Circulation and particle tracking simulations. *Deep-Sea Res. I*, **53**, 987-1010.
- 2006 Hofmann, E.E., J.M. Klinck, J.M. Krauter, E.N. Powell, R.E. Grizzle, S.C. Buckner, V.M.Bricelj. A population dynamics model of the Hard clam, *Mercenaria mercenaria*: development of the age- and length-frequency structure of the population. *J. Shellfish Res.*, **25**(2), 417-444.
- 2006 Soniat, T.M., E.N. Powell, E.E. Hofmann, J.M. Klinck. Understanding the Success and Failure of Oyster Populations: Climatic Cycles and *Perkinsus marinus*. *J. Shellfish Res.*, **25**(1), 83-94.
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- 1992 Hofmann, E.E., C.M. Lascara and J.M. Klinck. Palmer LTER: Upper ocean circulation in the LTER region from historical sources. *Ant. J. of the U.S.*, **23**, 239-241.
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- 1988 Klinck, J.M. Wind forced variations in a one-layer model of the Antarctic Circumpolar Current. (Abstract) *EOS*, **69**(44).
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- 1987 Klinck, J.M. book review of *General Circulation of the Ocean*, H.D.I. Abarbanel and W.R. Young, Eds. *EOS*, **68**(27), 621.
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- 1984 Klinck, J.M. EOF analysis of central Drake Passage currents from DRAKE 79. (Abstract) *EOS*, **65**(45), 935.
- 1982 Klinck, J.M. Evidence for shelf waves in northern Drake Passage. (Abstract) *EOS*, **63**(45), 1014.
- 1981 Klinck, J.M. Flow variability in northern Drake Passage. (Abstract) *EOS*, **62**(45), 924.
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- 1975 Klinck, J.M. and L.J. Pietrafesa. A numerical method for solutions of systems of nonlinear algebraic equations. Center for Marine and Coastal Studies. North Carolina State Univ. Rep. No. 75-2.

Research Grants and Contracts:

- DOE/LANL Grant, 4/17 to 3/19, "Circum-Antarctic ocean/sea ice/ice shelf model configuration and testing", \$111,932, (with M. Dinniman, N. Urban, C. Little)
- NSF Grant, 5/17 to 4/19, "Collaborative Research: Particulate organic carbon export of the Antarctic Peninsula by nonlinear mesoscale eddies and wind forcing", \$46,564, (with M. Dinniman, P. Yeager)
- NSF Grant, 1/16 to 12/18, "The impact of oceanic forcing on the melting of west Antarctic Peninsula glaciers", \$143,522, (with M. Dinniman, C. Moffat, D. Sutherland, E. Domack)
- EPA Grant, 8/14 to 7/17, "Modeling the impacts of water quality on SAV and other living resources", \$73,333, (with R. Zimmerman, V. Hill, M. Dinniman)
- NSF Grant, 6/12 to 11/17, "Development of a theoretical basis for modeling disease processes", \$1,384,482, (with E. Hofmann, E. Powell)

- NSF Grant, 7/11 to 6/14, "Collaborative research: Impact of mesoscale processes on iron supply and plankton dynamics in the Ross Sea", \$393,267, (with E. Hofmann, P. Sedwick, M. Dinniman).
- NSF Grant, 8/10 to 7/13, "Collaborative Research: SAMs contribution to increased ocean heat content on the continental shelf of western Antarctic Peninsula", \$306,348, (with M. Dinniman).
- NSF Grant, 2/11 to 7/13, "Collaborative Research: Atmosphere-Ocean coupling causing ice shelf melt in the Antarctic (ACCIMA)", \$149,724, (with M. Dinniman).
- NOAA subcontract through VIMS, 3/1/2010 to 2/29/2012, "Development Of A Population Dynamics Basis For Area Management Of Shellfish Resources To Mitigate The Effects Of Climate Change: The Surf Clam Exemplar" \$100,000, (with Hofmann).
- NSF Grant, 10/1/2009 - 9/30/2012, "Processes controlling cross shelf exchange in the Amundsen/Bellingshausen Seas" \$559,574. (with M. Dinniman)
- NSF Grant, 10/1/2009 - 9/30/2012, "CNH: Collaborative research: Climate change and response in a coupled marine system" \$300,000. (with E. Hofmann)
- NASA (through ESR), 10/26/2009 - 11/30/2012, "Antarctic sea ice: assessing contributions of tides and inertial response to sea-ice variability using satellite passive microwave remote sensing and a coupled ocean/sea-ice model" \$252,353. (with M. Dinniman)
- NSF Grant, 8/15/2009 - 7/31/2011, "Collaborative research: seasonal evolution of chemical and biological variability in the Ross Sea" \$197,814. (with E. Hofmann, W. Smith)
- NSF Grant, 8/1/2009 - 7/31/2010, "Collaborative research: planning grant: I/UCRC for wind energy" \$10,000. (with L. Atkinson, G. Georgen, S. Dahli, T. Ezer)
- NOAA Grant, 7/1/2009 - 6/30/2011, "Science education advancing research of the Chesapeake Bay in its habitats (SEARCH)" \$165,305. (with D. Dickerson, S. McKinney, L. Nelson and E. Hofmann)
- NSF Grant, 7/1/2009 - 6/30/2013, "Collaborative research: Weddell seals as autonomous sensors of the winter oceanography of the Ross Sea" \$246,960. (with E. Hofmann)
- NOAA Grant, 06/01/06 - 05/31/10 "Oyster Disease Research Program: The influence of disease on oyster generation time and implication for fecundity and habitat maintenance" \$132,588. (with E. Hofmann, E. Powell)
- NSF Grant, 09/01/06 - 08/31/09, "Collaborative Research: Field and Modeling Studies in Support of Understanding Disease Resistance in Estuarine Populations and Response to Climate Change", \$324,904. (with E. Hofmann, E. Powell, D. Haidvogel)
- NSF Grant OPP - , 04/01/06 - 12/31/10, "Collaborative Research: U.S. SO GLOBEC Synthesis and Modeling: Circulation and Hydrographic Data Analysis and Modeling Studies", \$278,511. (with E. Hofmann)
- NSF Grant OPP - , 09/01/05 - 08/31/08, "Comparative habitat utilization by two Southern Ocean seals: foraging behavior of Crabeater and Elephant seals using novel methods of oceanographic data collection", \$120,718. (with E. Hofmann, D. Costa, D. Crocker, M. Goebel)
- NSF Grant OPP - , 03/01/04 - 02/28/07, "Collaborative Research: Seasonal Biogeochemical processes in the Ross Sea: A Modeling Approach", \$397,293. (with E. Hofmann, W. Smith)
- NOAA, SW Fisheries Center, 09/01/04 - 08/31/06, "Continued Hydrographic Studies and Analysis in support of the U.S. AMLR Program", \$24,997. (with E. Hofmann).

- NOAA, 10/01/04 - 09/30/06, "Modeling Oyster Larvae Transport in Chesapeake Bay", \$50,186. (with E. Hofmann, E. Powell)
- EPA-STAR, 12/01/04 - 08/31/07, "The Importance of Blooms of Brown Tide, *Aureococcus anophagefferens*, in Coastal Lagoonal Systems: Coupling Numerical Simulation Modeling with ...", \$135,049. (with E. Hofmann and E. Powell)
- NY Sea Grant, 1042799, 8/15/04 - 8/14/05, "A model study of the growth, survival and recruitment of Hard Clam (*Mercenaria mercenaria*) larval and post-settlement populations", \$30,465. (with E. Hofmann)
- NSF Grant OCE-0412696, 8/1/04 - 7/31/07, "Genomic approaches to understanding genetic and physiological causes of variation in survival, dispersal, and recruitment of larval marine organisms", \$114,897. (with E. Hofmann, D. Hedgecock, D. Manahan and E. Powell)
- NSF Grant OCE-9911731, 6/15/00 - 5/31/03, "Collaborative research: Comparative modeling and data analysis studies for the Ross Sea and west Antarctic Peninsula regions: a JGOFS synthesis and modeling project", \$236,250. (with E. Hofmann, B. Prezelin and W. Smith)
- NOAA Grant NFFR7000-2-00073, 9/10/02 - 8/31/03, "Hydrographic Studies & Analyses in Support of the US AMLR Program" \$39,881. (with E. Hofmann)
- NSF Grant OCE-0136403, 04/15/2002 - 03/31/2005, "Doppler turbulence techniques for ocean observatories: An interactive approach using in situ measurements and LES models", \$845,885. (with A. Gargett and C.E. Grosch).
- ONR Grant N00014-02-1-0184, 12/1/01 - 10/30/02, "Effect of internal radius and shorter horizontal scale bathymetric variations on coastal dynamics and models", \$50,000.
- NSF Grant OPP-0087690, 2/15/01 - 1/31/04, "Variability in transport and recruitment of antarctic krill across the Scotia Sea", \$348,575. (with E. Hofmann and E. Murphy)
- NSF Grant OPP-9909956, 9/15/00 - 9/14/03, "WinDSSOcK: Winter distribution and success of Southern Ocean krill", \$305,471. (with E. Hofmann and R. Locarnini)
- Sea Grant (NOAA), New York Sea Grant, 9/1/00 - 8/31/02, "Modeling hard clam growth, survival and environmental interactions: what are the controlling factors?", \$68,198. (With E. Hofmann)
- NSF Grant OCE-9911731, 6/15/00 - 5/31/03, "Collaborative research: Comparative modeling and data analysis studies for the Ross Sea and west Antarctic Peninsula regions: a JGOFS synthesis and modeling project", \$236,250. (with E. Hofmann, B. Prezelin and W. Smith)
- Sea Grant (NOAA), Virginia Graduate Marine Science Consortium, 10/1/99 - 9/30/00, "Effect of climate variability on the prevalence and intensity of Dermo and MSX diseases in eastern oyster populations", \$87,652. (with E. Hofmann)
- NSF Grant OCE-9618293, 3/1/97 - 2/28/00, "Dynamics of steep sided coastal submarine canyons", \$146,000. (with B. Hickey and S. Allen)
- NSF Grant OPP-9525806, 10/1/95 - 9/30/98, "Modeling the transport and exchange of krill between the Antarctic Peninsula and South Georgia", \$212,149. (with E. Hofmann and E. Murphy)
- Sea Grant (NOAA), Virginia Graduate Marine Science Consortium, 9/1/95 - 8/31/97, "Crassostrea Virginia pathogens in Chesapeake Bay oyster populations; a dual disease simulation model of parasite-host interactions over a large spatial scale", \$101,068. (with E. Powell and E. Hofmann)

- NSF Grant OCE-9416748, 6/1/95 - 5/31/98, "Effects of external forcing and turbulent mixing on the dynamics of an estuarine plume", \$170,000. (with G. Wheless)
- Sea Grant (NOAA), Virginia Graduate Marine Science Consortium, 9/1/91 - 8/31/93, "South Atlantic Bight recruitment experiment (SABRE): physical oceanography and modeling", \$100,000. (with L. Atkinson and E. Hofmann)
- U.S. Army Corps of Engineers, 7/1/91 - 30/6/93, "Coupled oyster-hydrodynamics model for Galveston Bay and the Galveston Bay ship channel project", \$139,720. (with E. Powell and E. Hofmann)
- NSF Polar Programs, 10/31/91 - 9/30/97. "Long-term ecological research on the Antarctic marine ecosystem: an ice dominated environment". Total award is \$3,761,395 with \$318,668 to Hofmann and Klinck. (with R. Ross, L. Quetin, B. Prezelin, R. Smith, E. Hofmann, W. Trivelpiece and W. Fraser)
- Commonwealth of Virginia, State Council of Higher Education, 6/91 - 5/96. "Center for Coastal Physical Oceanography", \$500,000 per year. (with L. Atkinson, G. Csanady, C. Grosch, E. Hofmann, A. Kirwan and J. Kroll)
- NSF Grant OCE-89-22860, 4/1/90 - 3/31/92. "Analysis of the Community Modelling Effort North Atlantic Simulation", \$92,210. (with G. T. Csanady).
- NSF Grant OCE-89-96235, 6/89 - 12/92 "Modelling of the total transport of the Antarctic Circumpolar Current using realistic wind fields", \$183,721 (continuation of previous project, no additional funds).
- NSF Grant OCE-87-09777, 7/87 - 6/90. "Modelling of the total transport of the Antarctic Circumpolar Current using realistic wind fields", \$183,721.
- NASA Equipment Grant NAGW-1109, 6/87 - 5/88. "Video display hardware for a satellite ocean data analysis system", \$46,985. (with W. Nowlin).
- ONR Grant N00014-80-C-0113 (continued), 1/87 - 12/88. "Modelling the circulation in a canyon/shelf system", \$55,722.
- ONR Grant N00014-80-C-0113 (continued), 1/86 - 12/86. "Modelling the circulation in a canyon/shelf system", \$45,000. (with D. C. Smith, IV).
- NSF Equipment Grant OCE-84-16099, 5/85 - 10/86. "Video graphics display system", \$25,484.
- ONR Grant N00014-80-C-0113, 1/85 - 12/85. "Modelling the circulation in a canyon/shelf system", \$36,099. (with D. C. Smith, IV).
- NSF Grant OCE 83-08959, 8/83 - 7/85. "Analysis of vorticity dynamics at Drake Passage from DRAKE79 current meter records", \$65,000.
- Subcontract to NSF Grant OCE 79-25351 through Florida State University, 3/81 - 6/82, "The effect of coastal upwelling events on fjord circulation", \$12,142.

Presentations at Professional Meetings:

- 2018 Klinck, J.M., E.N. Powell, R. Mann, E.E. Hofmann, S. Pace, M.C. Long. Growth rate variations of ocean quahog clams in the northwest Atlantic as a record of bottom water temperature variation, PC14C-0556. Ocean Sciences, Portland, Oregon, Feb 11-16.
- 2018 Moffat, C.F., M.S. Dinniman, J.M. Klinck, B. Aguiar-Gonzalez, D.A. Sutherland, J.A. Graham. Eddies, submarine troughs, and the heat budget of the west Antarctic Peninsula continental shelf HE41A-02. Ocean Sciences, Portland, Oregon, Feb 11-16.

- 2018 Mack, S.L., M.S. Dinniman, J.M. Klinck, D.J. McGillicuddy, L. Padman. Resolving eddies in regional ocean models of Antarctic shelf seas HE34A-2920. Ocean Sciences, Portland, Oregon, Feb 11-16.
- 2018 Riverman, K.L., D. Southerland, D. Carroll, C.F. Moffat, B. Aguiar-Gonzalez, M.S. Dinniman, J.M. Klinck, E.W. Domack. Dipping their toes in the water: ocean controls on glacier terminus and ice shelf locations along the west Antarctic Peninsula HE34A-2922. Ocean Sciences, Portland, Oregon, Feb 11-16.
- 2018 Aguiar-Gonzalez, B., C.F. Moffat, M.S. Dinniman, J.M. Klinck, D.A. Southerland, E.W. Domack, D.P. Costa. On the Warm Water Pathways and Seasonal Cycle of Subsurface Shelf Waters Forcing Glacier Retreat in the West Antarctic Peninsula HE34A-2918. Ocean Sciences, Portland, Oregon, Feb 11-16.
- 2018 Dinniman, M.S., P. St-Laurent, K.R. Arrigo, E.E. Hofmann, J.M. Klinck, R.M. Sherrell, S.E. Stammerjohn, P.L. Yager The ice shelf meltwater pump contribution to vertical exchange over the open shelf in the Amundsen Sea and elsewhere around Antarctica HE41A-04. Ocean Sciences, Portland, Oregon, Feb 11-16.
- 2016 J.M. Klinck, R. Zimmerman, M. Dinniman and V. Hill Modeling light and primary production in shallow, turbid tributaries. Chesapeake Modeling Symposium, June 1-2.
- 2016 J. Klinck, G. Bidigain, E. Powell, T. Ben-Horin, and E. Hofmann. Disease transmission by free-drifting infectious particles in sessile filter feeders: a theoretical and model analysis. (poster) Ocean Sciences, New Orleans, Feb 21-26.
- 2014 M.S. Dinniman, J.M. Klinck, D.H. Bromwich and D.M. Holland. The effect of atmosphere forcing resolution on delivery of ocean heat to the Antarctic floating ice shelves. AGU meeting, San Francisco, Dec 11-17.
- 2014 Klinck, J.M., M.S. Dinniman, D. McGillicuddy, and B. Greenan. Horizontal structure of ocean properties in the southern Ross Sea Ocean Sciences, Honolulu, Feb 23-28.
- 2010 Klinck, J.M. and M.S. Dinniman. How variability in wind and ACC transport affects Circumpolar Deep Water transport across the west Antarctic Peninsula continental shelf and its influence on ice shelf basal melt. AGU meeting, San Francisco, Dec 11-17.
- 2010 Klinck, J.M. How might an obscure water mass affect the Antarctic Ice sheet and end up flooding your basement? Invited seminar, University of Delaware, 1 October.
- 2010 Klinck, J.M., D.P. Costa, M.S. Dinniman, E.E. Hofmann. Using instrumented seals to observe spatial and temporal variations in environmental conditions on the west Antarctic Peninsula Ocean Sciences Meeting, Portland, Oregon, February 22-26.
- 2009 Klinck, J.M., M.S. Dinniman and L. Padman. Large scale context for oceanic processes on the west Antarctic Peninsula. 3rd GLOBEC Open Science Meeting, Victoria, BC, Canada, June 22-26.
- 2008 Klinck, J.M. and M.S. Dinniman. Fine-scale numerical models applied to high latitude deep ocean-shelf exchange. SCOR/IAPSO Workshop on Deep Ocean Exchange with the Shelf (DOES), Cape Town, South Africa, October 6-8.
- 2008 Klinck, J.M., Y.S. Husrevoglu and M.S. Dinniman. A model study of the influences of sea-ice and the Ross Ice Shelf on water properties. SCAR/IASC IPY Open Science Conference, St. Petersburg, Russia, July 8-11.
- 2008 Dinniman, M.S. and J.M. Klinck A high resolution coupled sea-ice/ocean model of the Antarctic Peninsula region: warm oceanic water intrusions onto the shelf. SCAR/IASC IPY Open Science Conference, St. Petersburg, Russia, July 8-11.

- 2008 Pinones, A., E.E. Hofmann, M.S. Dinniman, and J.M. Klinck Simulations of the Lagrangian particles on the western Antarctic Peninsula: the effect of circulation dynamics. SCAR/IASC IPY Open Science Conference, St. Petersburg, Russia, July 8-11.
- 2008 Pinones, A., E.E. Hofmann, M.S. Dinniman, and J.M. Klinck Circulation on the western Antarctic Peninsula and implications for biological production. SCAR/IASC IPY Open Science Conference, St. Petersburg, Russia, July 8-11.
- 2008 Loeb, V.J., E.E. Hofmann, J.M. Klinck, and O. Holm-Hansen ENSO drives interannual and decadal-scale variability of the Antarctic Peninsula pelagic marine ecosystem. SCAR/IASC IPY Open Science Conference, St. Petersburg, Russia, July 8-11.
- 2008 Dinniman, M.S. and J.M. Klinck. A high resolution coupled sea-ice/ocean model for the Antarctic Peninsula Region. Ocean Sciences Meeting, Orlando, FL, March 2-7.
- 2008 Loeb, V.H., E.E. Hofmann, J.M. Klinck, O. Holm-Hansen, W.B. White. ENSO drives interannual and decadal-scale variability of the Antarctic Peninsula pelagic marine ecosystem. Ocean Sciences Meeting, Orlando, FL, March 2-7.
- 2008 Klinck, J.M., Y.S. Husrevoglu and M.S. Dinniman. Continental shelf water mass distribution, transformation and off-shelf transport in a sea ice-ocean model of the Ross Sea, Antarctica. Ocean Sciences Meeting, Orlando, FL, March 2-7.
- 2008 Pinones, A, E.E. Hofmann, M.S. Dinniman, J.M. Klinck. West Antarctic peninsula circulation and implications for biological production. Ocean Sciences Meeting, Orlando, FL, March 2-7.
- 2008 Polyakov, O., E.N. Powell, J.N. Kraeuter, E.E. Hofmann, V.M. Bricelj, J.M. Klinck, S.C. Buckner. Virtual population analysis of Great South Bay hard clam (*mercenaria mercenaria*) populations. Ocean Sciences Meeting, Orlando, FL, March 2-7.
- 2008 Narvaez, D.A. J.M. Klinck, E.E. Hofmann, E.N. Powell, D. Hedgecock. The effect of immigration on disease resistance in an oyster population: a numerical model study. Ocean Sciences Meeting, Orlando, FL, March 2-7.
- 2007 Klinck, J.M. and M.S. Dinniman, The importance of high spatial resolution for models of Antarctic coastal circulation. 2nd Antarctic Meteorological Observation, Modeling, and Forecasting Workshop, Rome, Italy, 26-28 June.
- 2006 Klinck, J.M., M.S. Dinniman, S. Husrevoglu, E.E. Hofmann, W.O. Smith, Jr A regional numerical model of the Ross Sea, Antarctica: circulation, nutrients, and ice. AnSlope and CLIMA Workshop, LDGO, Palisades, NY, 13-15 June.
- 2006 Klinck, J.M., M.S. Dinniman and E.E. Hofmann Modelling the circulation on the west Antarctic Peninsula: the effect of buoyancy forcing SCAR Open Science Conference, Hobart, Australia, 9-19 July.
- 2006 Klinck, J.M. and M.S. Dinniman. Modeling the coastal current along the west Antarctic Peninsula: the effect of precipitation. Ocean Sciences Meeting, Honolulu, Hawaii, 20-24 February.
- 2005 Soniat, T.M., E.N. Powell, J.M. Klinck, and E.E. Hofmann. *Perkinsus marinus* infection of eastern oysters, *Crassostrea virginica*. Estuarine Research Foundation 18th Biennial Conference, Norfolk, VA, 16-20 October.
- 2005 Ocean processes on Antarctic shelves: small dynamical scales and global influence. Gordon Conference on Coastal Ocean Circulation, New London, NH, 5-10 June.

- 2004 Circulation and oceanic exchange on the west Antarctic Peninsular shelf using a numerical model. SCAR Open Science Conference, Bremen, Germany, 25-31 July.
- 2004 Klinck, J.M., M.S. Dinniman and E.E. Hofmann. Coastal-Ocean exchange on the west Antarctic Peninsula shelf using observations and a model. Ocean Sciences Meeting, Portland, Oregon, 26-30 January.
- 2003 Klinck, J.M. Effect of submarine canyon geometry on coastal circulation and shelf-ocean exchange. Gordon Conference on Coastal Ocean Models, New London, NH, 22-27 June, 2003.
- 2003 Klinck, J.M. Circulation and nutrient flux west of the Antarctic Peninsula and in the Ross Sea. Symposium for Upper ocean circulation and air-sea interaction, Tallahassee, FL, April 28-29.
- 2001 Klinck, J.M. and E.E. Hofmann. Ocean Observations west of the Antarctic Peninsula: a Southern Ocean GLOBEC project. Seventh Biannual Coordinating meeting of iAnZone. Ischia-Naples, Italy, October 15-17.
- 2001 Klinck, J.M., M.S. Dinniman and W.O. Smith, Jr. Model Study of Circulation and Biogeochemical Processes in the Ross Sea. Second International Conference on the Oceanography of the Ross Sea. Ischia-Naples, Italy, October 8-13.
- 2001 Klinck, J.M. and M.S. Dinniman. Modeling the circulation in the Ross Sea and on the west Antarctic Peninsula: a prelude to biogeochemical modeling. Gordon Conference on polar marine science. Ventura, California, March 11-16, 2001.
- 1999 Klinck, J.M. and M.S. Dinniman. Boundary conditions and coastal dynamics. Sigma Coordinate Ocean model users meeting. Bar Harbor, Maine, 20-22 September.
- 1999 Klinck, J.M. Particle drift in Drake Passage and the southern Scotia Sea. workshop on Large-scale variability in the Southern Ocean - patterns, mechanism and impacts. British Antarctic Survey, Cambridge, UK, 2-7 August.
- 1998 Klinck, J.M. Circulation near submarine canyons driven by transient upwelling winds. SEOM/SPEM/SCRUM users group meeting. Davis, CA, 28-30 October.
- 1998 Klinck, J.M. Effect of estuary width on coastal buoyant discharge. Poster presentation at 1998 Ocean Sciences Meeting, San Diego, CA, 9-13 February.
- 1997 Klinck, J.M., E.E. Hofmann, D.A. Smith and C.M. Lascara, Hydrography, heat and salt budgets on the West Antarctic Peninsula Continental Shelf. Poster presentation at the Gordon Research Conference on coastal ocean circulation, Colby-Smith College, NH, 15-20 June.
- 1996 Klinck, J.M. and G.H. Wheless, The influence of stratification, inlet width and tides on ocean-estuary exchange. Presented at 1996 Ocean Sciences Meeting, San Diego, CA, 12-16 February.
- 1995 Klinck, J.M. Cross shelf transport driven by flow over submarine canyons. Annual meeting of the European Geophysical Society, Hamburg, Germany.
- 1994 Hofmann, E.E., B.L. Lipphardt, C.M. Lascara, D.A. Smith, J.M. Klinck, R.A. Locarnini, R.C. Smith, Palmer LTER: Seasonal Changes in the Hydrographic Structure of the Upper 100 m of the Water Column, Poster presentation, SCAR Sixth Biology Symposium on Antarctic Communities: Species, Structure and Survival, Venice, Italy, 30 May to 3 June.
- 1994 Hofmann, E.E., D.A. Smith, B.L. Lipphardt, J.M. Klinck, R.A. Locarnini and R.C. Smith, Palmer LTER: Circulation and Heat Distributions on the Continental

- Shelf West of the Antarctic Peninsula, Presented at 1994 Ocean Sciences Meeting, San Diego, CA, 21-25 February.
- 1994 Hofmann, E.E., J.M. Klinck, E.N. Powell, *Perkinsus marinus* and Oyster Populations: Modeling the Disease, Presented at National Shellfisheries Association Meeting, Charleston, SC, 24-28 April.
- 1994 Klinck, J.M. Model study of effects of alongshore flow on circulation in submarine canyons. Ocean Sciences Meeting, San Diego, California.
- 1993 Klinck, J.M., C. M. Lascara, R. C. Smith. Hydrography and krill distributions in the Bellingshausen Sea as part of a long term ecological research program. Annual meeting of the European Geophysical Society, Wiesbaden, Germany.
- 1992 Klinck, J.M. Thermohaline structure of an eddy resolving North Atlantic model: the influence of boundary conditions. Annual meeting of the European Geophysical Society, Edinburgh, Scotland.
- 1992 Klinck, J.M., E.E. Hofmann, E.N. Powell. Modeling oyster populations. Adult size and reproductive effort. Aquaculture, '92, Orlando, Florida.
- 1992 Hofmann, E.E., J.M. Klinck, E.N. Powell, E.A. Wilson, Modeling Oyster Populations: Critical Feeding Periods, Growth and Reproduction, Presented at the 1992 Ocean Sciences Meeting, New Orleans, LA.
- 1992 Hofmann, E.E., E.N. Powell, J.M. Klinck and S.M. Ray, Modeling Oyster Populations: Population Crashes and Management, Presented at The Second Meeting of The International Society for Ecological Economics, Stockholm University, Stockholm, Sweden.
- 1991 Klinck, J.M. A T-S volumetric census of the CME North Atlantic simulation. Fall meeting of the American Geophysical Union, San Francisco, California.
- 1991 Hofmann, E.E., E.N. Powell and J.M. Klinck, Modeling the Dynamics of Diseased Oyster Populations, Presented at the 1991 Marine Benthic Ecology Meeting, Williamsburg, VA.
- 1991 Klinck, J.M. Large scale physical oceanography of the Southern Ocean. GLOBEC workshop on Southern Ocean zooplankton and climate change, Scripps Institute of Oceanography, May 9-11, 1991.
- 1990 Klinck, J.M. Seasonal transport variations in the Southern Ocean calculated from a one-layer spherical coordinate numerical model. Fall meeting of the American Geophysical Union, San Francisco, California.
- 1990 Klinck, J.M., E.N. Powell, J.D. Gauthier, K.-S. Choi and D.H. Lewis. Simulating the population dynamics of diseased oyster populations: environmental variation and disease Fifth International Congress on Ecology. Yokohama, Japan, 23-30 August.
- 1990 Klinck, J.M., E.N. Powell, J.D. Gauthier, K.-S. Choi, D.H. Lewis. Simulating the population dynamics of diseased oyster populations: environmental variation and disease. Annual meeting of the National Shellfisheries Association, Williamsburg, Virginia.
- 1988 Klinck, J.M. Wind forced variations in a one-layer model of the Antarctic Circumpolar Current. Fall meeting of the American Geophysical Union, San Francisco, California.
- 1987 Klinck, J.M.. Effect of a submarine canyon on stratified, geostrophic flow. Fall meeting of the American Geophysical Union, San Francisco, California.

- 1986 Klinck, J.M. The influence of a narrow transverse canyon on initially geostrophic flow. Spring meeting of the American Geophysical Union, San Francisco, California.
- 1986 Klinck, J.M. Fronts in the Antarctic Circumpolar Current with emphasis on Drake Passage and the South Atlantic. SCOR symposium on interfaces in the ocean, Hobart, Australia, 24-26 November.
- 1986 Klinck, J.M. The influence of a transverse canyon on geostrophic flow: steady solutions. Fall meeting of the American Geophysical Union, San Francisco, California.
- 1985 Klinck, J.M. The calculation of potential vorticity in central Drake Passage from DRAKE 79 current meter data. Fall meeting of the American Geophysical Union, San Francisco, California.
- 1984 Klinck, J.M. EOF analysis of central Drake Passage currents from DRAKE 79. Fall meeting of the American Geophysical Union, San Francisco, California.
- 1982 Klinck, J.M. Evidence for shelf waves in northern Drake Passage. Fall meeting of the American Geophysical Union, San Francisco, California.
- 1981 Klinck, J.M. Flow variability in northern Drake Passage. Fall meeting of the American Geophysical Union, San Francisco, California.
- 1978 Klinck, J.M., G.S. Janowitz and L.J. Pietrafesa. Time dependent response of a continuously stratified shelf to a moving storm. Fall meeting of the American Geophysical Union, San Francisco, California.

Invited Lectures (last four years):

- 2015 Warm water and ice shelf basal melt in the Antarctic coastal ocean, University of Oslo, May 7
- 2012 Antarctic Circumpolar Current: The most important current in the ocean. Dept of Atm and Planetary Sciences, Hampton University, 1 October.
- 2010 How might an obscure water mass affect the Antarctic ice sheet and end up flooding your basement. College of Marine Science, University of Delaware, 1 October.

Professional Awards:

- 1997 Editor's Citation for Excellence in Refereeing. *Journal of Geophysical Research - Oceans*. Citation by Wendell Brown.

Professional Services:

Reviewer for - *Journal of Geophysical Research*
Journal of Physical Oceanography
Journal of Marine Research
Deep-Sea Research
Ocean Science
Journal of Fluid Mechanics
Science
Annals of Glaciology
Oceanography
Journal of Oceanography
 National Science Foundation
 National Aeronautics and Space Administration
 National Oceanic and Atmospheric Administration
 Natural Environmental Research Committee (UK)

Seagoing Experience:

- 2011 PRISM cruise on the RVIB N. B. Palmer (NBP1201), December 24, 2011 to Feb 7, 2012. Coordinator of ctd and xbt casts and data reduction.
- 2002 SO GLOBEC cruise on the RVIB N. B. Palmer (NBP0202), April 9 to May 19. Coordinator of ctd and xbt casts and data reduction.
- 2001 SO GLOBEC cruise on the RVIB N. B. Palmer (NBP0104), July 21 to September 2. Coordinator of ctd and xbt casts and data reduction.
- 1993 LTER cruise 93C on the R/V Polar Duke, August 22 to September 29. activities included acoustics logging, xbt and ctd casts, data reduction.

Professional Experience:

- 2018 participant in Ocean Sciences meeting, Portland, Oregon, 11-16 February.
- 2018 instructor at the Austral Summer Institute, Modeling the Circumpolar Ocean and regional circulation models, downscaling techniques, University of Concepcion, Concepcion, Chile, 22-26 January.
- 2017 participant in Southern Ocean Workshop, NCAR, Boulder, CO, April 10-13.
- 2016 participant in Polar Weather and Climate Week, Columbus, Ohio, June 4-8.
- 2016 participant Chesapeake Modeling Symposium, Williamsburg, VA, June 1-2.
- 2016 participant in the STAC Workshop: Shallow water models for Chesapeake Bay management. Gloucester Point, VA, April 20-21.
- 2015 participant in the RCN Marine Disease Modeling and Transmission Workshop, Norfolk, VA, May 11-15.
- 2014 COAWST modeling system training. Woods Hole, MA, August 25-28.
- 2014 participant in Chesapeake Modeling Symposium. Annapolis, MD. May 28-29.
- 2010 participant in Chesapeake Modeling Symposium. Annapolis, MD. May 10-11.
- 2009 Training to operate iRobot Seaglider. Seattle, WA. Sept 14-18.
- 2006 AnSlope/CLIMA workshop, Lamont-Doherty Earth Observatory, NY, 13-15 June.
- 2006 ORION design and implementation workshop, Salt Lake City, Utah. 27-30 June.
- 2005 participant in the Cetacean-Ecosystem Linkage Workshop, ODU, Norfolk, VA, November 2-4.
- 2004 participant in the Mid Atlantic Bight Physical Oceanography and Meteorology meeting. VIMS, VA, November 4-5.
- 2004 participant in the workshop on Antarctic Peninsula Climate Variability: History, causes and impacts. Cambridge, UK. September 16-18.
- 2004 participant in the SCAR Open Science Conference. July 26-28, Bermen, Germany.
- 2003 participant in the Chesapeake Community Model Program Workshop. November 19, 20, VIMS, Gloucester Point, VA.
- 2001 participant in the Seventh Biannual Coordinating meeting of iAnZone. October 15-17, Ischia-Naples, Italy
- 2001 participant in the Second International Conference on the Oceanography of the Ross Sea. October 8-13, Ischia-Naples, Italy.
- 2001 participant in the Gordon Conference on Polar Marine Science. March 11-16. Ventura, California.
- 1999 participant in Sigma Coordinate ocean model users group. September 20-22. Bar Harbor, Maine.

- 1999 participant in Large-scale variability in the Southern Ocean - patterns, mechanism and impacts. 2-7 August, British Antarctic Survey, Cambridge, UK.
- 1999 participant in the Second Marine Zooplankton Colloquium. 8-10 February. Savannah, Georgia.
- 1998 participant in the SEOM/SPEM/SCRUM users group. October 28-30. Davis, California.
- 1998 participant in the UCAR members meeting, Boulder, Colorado, October 6-7.
- 1998 participant in Southern Ocean GLOBEC planning workshop. September 31 - October 1, Arlington, Virginia.
- 1997 participant in international iAnZone/ASPeCt meeting to organize Antarctic research activities, Oracle, Arizona, December 1-5.
- 1997 participant in the UCAR members meeting, Boulder, Colorado, October 7-8.
- 1997 participant Gordon Research Conference on coastal ocean circulation. June 15-20.
- 1996 participant in the UCAR members meeting, Boulder, Colorado, October 8-9.
- 1995 participant in the SPEM uses group meeting, New Brunswick, New Jersey, October 30-November 1.
- 1995 participant in the UCAR members meeting, Boulder, Colorado, October 9-10.
- 1995 participant in the workshop on Southern Ocean modelling, Stevenson, Washington, January 17-19.
- 1994 participant in the UCAR members meeting, Boulder, Colorado, October 11-12.
- 1994 participant in ICES Symposium on Secondary Production. Plymouth, United Kingdom, August 15-19.
- 1994 participant in a workshop on the Benguela Ecology Programme. Cape Town, South Africa, July 25-27.
- 1994 participant in implimentation workshop for GLOBEC Southern Ocean Program. Bremerhaven, Germany, June 6-8.
- 1994 participant in SCAR 6th Biology Symposium. Venice, Italy, May 30 - June 3.
- 1994 participant in IAPSO Workshop on Interbasin Exchanges in the Southern Ocean. Sea Fisheries Research Institute, Cape Town, South Africa, March 28 - April 1.
- 1993 participant in workshop on GLOBEC Southern Ocean Planning, Old Dominion University, 15-17 June.
- 1993 participant in GLOBEC workshop on Secondary Production Modeling, Skidaway Institute of Oceanography, 23-25 February.
- 1992 attended the second meeting of the International Society for Ecological Economics, Stockholm University, Stockholm, Sweden, 3-6 August, 1992.
- 1992 convened a special session at the Ocean Sciences meeting on comparison of high resolution numerical models to observations.
- 1991 participant in GLOBEC workshop on Southern Ocean zooplankton and climate change, Scripps Institute of Oceanography, May 9-11, 1991.
- 1991 participant in Ocean Color Workshop by NASA. Honolulu, Hawaii. May 6-9.
- 1990 participant in workshop by NOAA on Coastal Ocean Program. Charleston, S.C., 27-29 June.
- 1990 participant in a workshop by DOE on ocean margins. Norfolk, Va., 18-20 June.
- 1989 represented ODU at the University Corporation for Atmospheric Research annual meeting. Boulder, Co., 10-11 October.

- 1989 participant in workshop for CoPO on shelf/deep ocean exchange. Norfolk, Va., 17-18 July.
- 1989 participant in workshop to describe the WOCE Community Modelling Effort North Atlantic simulation. Princeton, N.J., 27-28 February.
- 1988 participant in a workshop to design the WOCE Community Modelling Effort North Atlantic simulation. Boulder, Co., 14-15 January.
- 1988 participant in a workshop by Institute for Naval Oceanography on atmospheric forcing of ocean circulation. New Orleans, La., 5-8 January.
- 1987 attended Mid Atlantic Bight Physical Oceanography and Meteorology workshop. Norfolk, Va., 17-18 October.
- 1987 participant in meeting of Gulf States Scientific Computing Network to coordinate the regional network. Gulfport, Miss., 9-10 November.
- 1986 participant in a workshop to plan the WOCE Community Modelling Effort North Atlantic simulation. Princeton, N.J., 19 November.
- 1986 participant in the WOCE working group on numerical modelling to consider process dynamics in large-scale ocean circulation. Sidney, B.C., Canada, 22-25 July.
- 1985 lecturer at the NATO Advanced Study Institute on advanced physical oceanography numerical modelling. Banyuls-sur-Mer, France, 2-15 June.
- 1982 lecturer at the NATO Advanced Research Institute on coastal oceanography. Os, Norway, 6-11 June.

Languages:

- Spanish (moderate reading and speaking)
- German (some reading and speaking)
- Russian (minimal reading and speaking)