

DONALD M. ANDERSON

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B.S., Mechanical Engineering, Massachusetts Institute of Technology, 1970

M.S., Civil Engineering, Massachusetts Institute of Technology, 1976

Ph.D., Aquatic Sciences, Department of Civil Engineering, MIT, 1977

Director, Coastal Ocean Institute, Woods Hole Oceanographic Institution, 2004-present

Senior Scientist, Woods Hole Oceanographic Institution, 1991-present

Associate Scientist, Woods Hole Oceanographic Institution, 1983-1991; tenure 1987

Assistant Scientist, Woods Hole Oceanographic Institution, 1979-1983

Postdoctoral Investigator, Woods Hole Oceanographic Institution, 1978-1979

Instructor, Massachusetts Institute of Technology Department of Civil Engineering, 1978

PROFESSIONAL SOCIETIES:

American Society of Limnology and Oceanography

Phycological Society of America

International Society for the Study of Harmful Algae (Member, ISSHA Council)

The Oceanography Society

SELECTED COMMITTEES AND DISTINCTIONS

Recipient, Stanley W. Watson Chair for Excellence in Oceanography (1993)

Recipient, NOAA Environmental Hero Award (1999)

Recipient, ISSHA's Yasumoto Lifetime Achievement Award (2006)

Bruun Memorial Medal, Bruun Memorial Lecture. IOC Assembly, Paris, France, 2005

Director, NATO ASI: The Physiological Ecology of Harmful Algal Blooms (1996)

Director, U.S. National Office on Marine Biotoxins and Harmful Algal Blooms

Member, Scientific Steering Committee, GEOHAB (1998-2003)

Scientific Advisor, U.S. Delegation to the IOC/FAO Intergovernmental Panel on Harmful Algal Blooms (1992-present)

Testimony before the Subcommittee on Oceans and Fisheries of the Committee on Commerce, Science, and Transportation, United States Senate 105th Congress, Second Session, May 20, 1998

Testimony for US Commission on Ocean Policy, 2002; prepared White Paper on Harmful Algal Blooms for inclusion in the Commission's report "Oceans and Human Health"

Testimony before the Committee on Science, Subcommittee on Environment, Technology and Standards, U.S. House of Representatives Hearing on the "Harmful Algal Bloom and Hypoxia Research Amendments Act of 2003", March 13, 2003

Briefing before the House Science Committee, "Coastal Nutrient Pollution and Harmful Algal Blooms", September 24, 2003

Briefing before New England congressional staffers, "The 2005 New England red tide", June 14, 2005

Congressional briefings, "Harmful Algal Blooms (Red Tides) and Ocean Health", House of Representatives, and U.S. Senate, June 23, 2005

Testimony before the Subcommittee on Fisheries Conservation, Wildlife and Oceans, U.S. House of Representatives Hearing on H.R. 1856, the Harmful Algal Bloom and Hypoxia Research Amendments Act of 2003, February 26, 2004.

RELEVANT PUBLICATIONS

(Publications selected from over 230 authored or co-authored publications)

- 2005 Anderson, D.M., B.A. Keafer, D.J. McGillicuddy, M.J. Mickelson, K.E. Keay, P.S. Libby, J.P. Manning, C.A. Mayo, D.K. Whittaker, J.M. Hickey, R. He, D.R. Lynch, and K.W. Smith. Initial observations of the 2005 *Alexandrium fundyense* bloom in southern New England: General patterns and mechanisms. Deep-Sea Res. II 52(19-21): 2856-2876.
- 2005 Anderson, D.M., C.A. Stock, B.A. Keafer, A. Bronzino Nelson, B. Thompson, D.J. McGillicuddy, M. Keller, P.A. Matrai, and J. Martin. *Alexandrium fundyense* cyst dynamics in the Gulf of Maine. Deep-Sea Res. II 52(19-21): 2522-2542.
- 2005 Anderson, D.M., B.A. Keafer, W.R. Geyer, R.P. Signell, and T.C. Loder. Toxic *Alexandrium* blooms in the western Gulf of Maine: The plume advection hypothesis revisited. Limnol. Oceanogr. 50(1): 328-345.
- 1997 Anderson, D. M. Bloom dynamics of toxic *Alexandrium* species in the northeastern United States. Limnol. & Oceanogr. 42: 1009-1022.
- 1994 Anderson, D. M., D. M. Kulis, G. J. Doucette, J. C. Gallagher and E. Balech. Biogeography of toxic dinoflagellates in the genus *Alexandrium* from the northeast United States and Canada as determined by morphology, bioluminescence, toxin composition, and mating compatibility. Mar. Biol. 120: 467-478.

OTHER SIGNIFICANT PUBLICATIONS

- 2005 Anderson, D.M., D.M. Kulis, B.A. Keafer, K.E. Gribble, R. Marin, and C.A. Scholin. Identification and enumeration of *Alexandrium* spp. from the Gulf of Maine using molecular probes. Deep-Sea Res. II 52(19-21): 2467-2490.
- 2005 Keafer, B.A., J.H. Churchill, D.J. McGillicuddy, and D.M. Anderson. Bloom development and transport of toxic *Alexandrium fundyense* populations within a coastal plume in the Gulf of Maine. Deep-Sea Res. II 52(19-21): 2674-2697.
- 2005 McGillicuddy, D.J., Jr., D.M. Anderson, D.R. Lynch, and D.W. Townsend. Mechanisms regulating large-scale seasonal fluctuations in *Alexandrium fundyense* populations in the Gulf of Maine: Results from a physical-biological model. Deep-Sea Res. II 52(19-21): 2698-2714.
- 2005 Stock, C.A., D.J. McGillicuddy, A.R. Solow, D. M. Anderson. Evaluating hypotheses for the initiation and development of *Alexandrium fundyense* blooms in the western Gulf of Maine using a coupled physical-biological model. Deep-Sea Res. II 52(19-21): 2715-2744.
- 2003 McGillicuddy, D.J., Jr., R.P. Signell, C.A. Stock, B.A. Keafer, M.D. Keller, R.D. Hetland, and D.M. Anderson. A mechanism for offshore initiation of harmful algal blooms in the coastal Gulf of Maine. J. Plankt. Res. 25(9): 1131-1138.