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Education: Ph.D., Boston University Marine Program, Woods Hole, MA, 1982, Ecology  
B.S., Rensselaer Polytechnic Institute, Troy, NY, 1975, Biology

Awards: Phi Lambda Upsilon Chemical Honor Society  
Aldo Leopold Leadership Fellowship 2001  
*Estuaries* – recognized for outstanding contributions to peer review 2005  
American Association for the Advancement of Science Fellow, Class of 2013  
Association for the Sciences of Limnology and Oceanography, Sustaining Fellow Class of 2019

Societies: American Association for the Advancement of Science  
Council Delegate for Biological Sciences 1995-1998  
American Institute of Biological Sciences  
American Society of Limnology and Oceanography  
American Association of Underwater Sciences  
American Chemical Society  
Ecological Society of America  
Estuarine Research Society:  
Governing Board 1988-1990; President-Elect 1997-1999, President 1999-2001,  
Past-President 2001-2003  
New England Estuarine Research Society  
Member-at-Large 1987-1989; President 1989-1991  
Oceanographic Society  
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Professional Appointments:

Interim Director, Ecosystems Center, Marine Biological Laboratory, Woods Hole, MA, June 2016-present  
Senior Scientist, Ecosystems Center, Marine Biological Laboratory, Woods Hole, MA, 2003-present  
Graduate Faculty, University of Maine, School of Marine Science 2018-2023  
Professor MBL/Brown Joint Program 2007-2018  
Graduate Faculty, Graduate School of Oceanography, University of Rhode Island 2005-Present  
Associate Scientist, Ecosystems Center, Marine Biological Laboratory, Woods Hole, MA, 1990-2003  
Adjunct Associate Professor, Boston University, Boston, MA, 1991-Present  
Assistant Scientist, Ecosystems Center, Marine Biological Laboratory, Woods Hole, MA, 1983-1989  
Postdoctoral Investigator, Woods Hole Oceanographic Institution, Woods Hole, MA, 1982-1983  
Coordinator, Summer Marine Ecology Course, Marine Biological Laboratory, Woods Hole, MA, Summer 1981  
Research Assistant, Boston University Marine Program, Woods Hole, MA, 1977 - 1981  
Teaching Fellow, Boston University Marine Program, Woods Hole, MA, 1975 - 1977  
Taught Freshman Chemistry Lab, Rensselaer Polytechnic Institute, Summer 1975

Publications:

Giblin, A. E., A. Bourg, I. Valiela and J. M. Teal. 1980. Uptake and losses of heavy metals in sewage sludge by a New England salt marsh. *American Journal of Botany* 67: 1059-68.  
Breteler, R. J., A. E. Giblin, J. M. Teal and I. Valiela. 1981. Trace enrichments in decomposing litter of *Spartina alterniflora*. *Aquatic Botany* 11:111-120.

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- Budy, P., C.A. Pennock, A.E. Giblin, C. Luecke, D.L. White, and G.W. Kling. Understanding the effects of climate change disturbance on pristine arctic lakes: multi-trophic level response to recovery to a twelve-year low level fertilization experiment. *Limnology and Oceanography*.

#### Submitted Papers:

- Daniels, W.C. J.M. Russell, C. Morrill, W.M. Longo, A.E. Giblin, P. Holland-Stegar, J. Welker, X. Wen, A. Hu and Y. Haung. Regional feedbacks strongly modulated Arctic Alaskan climate since the last ice age. (submitted to QRS).
- Upreti, K. V.H. Rivera-Monroy, K. Maiti, A.E. Giblin, E. Castaneda-Moya. Dissimilarity nitrate reduction to ammonium (DNRA) is marginal relative to denitrification in emerging-eroding wetlands in a subtropical oligohaline and eutrophic coastal delta. (submitted to Science of the Total Environment)

#### Peer-Reviewed Short Reports published with students:

- Zago, C. and A.E. Giblin. 1994. Analysis of acid volatile sulfide and metals to predict the toxicity of Boston Harbor sediments. *Biol. Bull.* 187:290-291.
- Monaghan, E. and A.E. Giblin. 1994. The effects of coupling between the oxic and anoxic layers of sediment on nutrient release to overlying water. *Biol. Bull.* 187:288-289.
- Weston, N., S. Carini, A. Giblin, G. Banta, C. Hopkinson, and J. Tucker. 1996. Estimating denitrification in sediments of the Parker River Estuary, Massachusetts. *Biol. Bull.* 191: 334-335.
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- Morlock, S., D. Taylor, A. Giblin, C. Hopkinson, J. Tucker. 1997. Effect of salinity on the fate of inorganic nitrogen in sediments of the Parker River Estuary, Massachusetts. *Biol. Bull.* 193: 290-292.
- Greenbaum, A. and A.E. Giblin. 2000. Differences in properties of salt marsh sediments between hayed and reference sites. *Biol. Bull.* 199: 225-226.
- Koop-Jakobsen, K., and A.E. Giblin. 2002. Tidal flushing of ammonium from intertidal salt marsh sediments – the relative importance of adsorbed ammonium. *Biol. Bull.* 203: 258-259.
- Thoms, Trisha, A.E. Giblin, K.H. Foreman. 2003. Multiple approaches to tracing nitrogen loss in the West Falmouth wastewater Plume. *Biol. Bull.* 205: 242-243.

#### Technical Reports:

- Teal, J. M., A. E. Giblin, J. C. Goldman, D. G. Aubrey and A. G. Gaines, Jr. 1982. The coastal impact of groundwater discharge: An assessment of anthropogenic nitrogen loading in Town Cove, Orleans, MA. W.H.O.I.



- Dornblaser, M. M., J. Tucker, G. T. Banta, K. H. Foreman, M. L. O'Brien and A. E. Giblin. 1989. Obtaining undisturbed sediment cores for biogeochemical process studies using SCUBA. In: M. Long and W. Jaap (eds.), *Diving for Science. Proceedings of the Ninth Annual Scientific Diving Symposium*. American Academy of Underwater Sciences, Woods Hole, MA.
- Giblin, A. E. (ed.) 1990. *New England Coastal Pond Bibliography and Data Book*. Published by the WHOI Coastal Research Center.
- Banta, G. T., A. E. Giblin, J. Tucker and J. E. Hobbie. 1990. Benthic respiration and nitrogen release in Buzzards Bay Massachusetts. Report to EPA.
- Giblin, A. E., and K. H. Foreman. 1991. *The habitats of Buzzards Bay. The Buzzards Bay Project*, Massachusetts C.Z.M.
- Giblin, A. E., J. Tucker and C. Hopkinson. 1991. Sediment Oxygen Demand and nitrogen flux in Massachusetts Bay. MWRA Environmental Quality Dept. Technical Report Series No. 91-5 June 1991. Massachusetts Water Resources Authority, Boston, MA. 38 pp.
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- Giblin, A. E., C. S. Hopkinson and J. Tucker. 1993. Metabolism, nutrient cycling and denitrification in Boston Harbor and Massachusetts Bay sediments. MWRA Environmental Quality Dept. Technical Report Series No. 93-2. Massachusetts Water Resources Authority, Boston, MA. 46 pp.
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- Giblin, A. E., C. S. Hopkinson, J. Tucker, B. Nowicki and J. R. Kelly. 1994. Metabolism, nutrient cycling and denitrification in Boston Harbor and Massachusetts Bay sediments in 1993. MWRA Environmental Quality Dept. Technical Report Series 94-5 Massachusetts Water Resources Authority, Boston, MA. 61pp.
- Giblin, A. E., C. S. Hopkinson, J. Tucker, B. Nowicki and J. R. Kelly. 1995. Metabolism, nutrient cycling and denitrification in Boston Harbor and Massachusetts Bay sediments in 1994. MWRA Environmental Quality Dept. Technical Report Series 95-13 Massachusetts Water Resources Authority, Boston, MA. 56pp.
- Tucker, J. and A. E. Giblin, and C.S. Hopkinson. 1999. Metabolism, nutrient cycling and denitrification in Boston Harbor sediments in 1998. Boston: Massachusetts Water Resources Authority. Report ENQUAD 1999-08. 33p.
- Giblin, A.E., C. Wright, S.T. Roy, 1999. Bathymetry, sediment characterization, and benthic oxygen and phosphorus fluxes in six New York City reservoirs. Prepared for the NYC Depart. of Environmental Protection. 104 pp.
- Tucker, J., A. E. Giblin, C.S. Hopkinson, and D.Vasiliou. 2000. Benthic nutrient cycling in Boston Harbor and Massachusetts Bay: 1999 Annual Report. Boston: Massachusetts Water Resources Authority. Report ENQUAD 2000-11. 63p.
- Tucker, J., A. E. Giblin, C.S. Hopkinson, and D.Vasiliou. 2001. Benthic nutrient cycling in Boston Harbor and Massachusetts Bay: 2000 Annual Report. Boston: Massachusetts Water Resources Authority. Report ENQUAD 01-07. 48p.
- Tucker, J., S. Kelsey, A. E. Giblin, and C.S. Hopkinson. 2002. Benthic metabolism and nutrient cycling in Boston Harbor and Massachusetts Bay: Summary of baseline data and observations after one year of Harbor-to-Bay diversion of sewage effluent. Boston: Massachusetts Water Resources Authority. Report ENQUAD 2002-13 83p.
- Tucker J and Giblin AE. 2002. Stable isotope analyses of sediment and invertebrate samples from Boston Harbor and Massachusetts Bay. Boston: Massachusetts Water Resources Authority. Report 2002-21. 24 p.
- Tucker J, Kelsey S, Giblin AE and Charles S Hopkinson J. 2003. 2002 annual benthic nutrient flux monitoring report. Boston: Massachusetts Water Resources Authority. Report 2003-08. 52p.
- Tucker J, Kelsey S, Giblin AE and Charles S Hopkinson J. 2004. 2003 annual benthic nutrient flux monitoring report. Boston: Massachusetts Water Resources Authority. Report 2004-05. 68p.
- Tucker J, Kelsey S, Giblin AE and Charles S Hopkinson J. 2005. 2004 annual benthic nutrient flux monitoring report. Boston: Massachusetts Water Resources Authority. Report 2005-11. 68 p.
- Tucker J and Giblin AE. 2006. Combined work/quality assurance plan for benthic nutrient flux monitoring: 2006-2007. Boston: Massachusetts Water Resources Authority. Report 2006-11. 46 p.
- Tucker J, Kelsey S, Giblin AE and Hopkinson Jr CS. 2006. 2005 annual benthic nutrient flux monitoring report. Boston: Massachusetts Water Resources Authority. Report 2006-17. 69 p.

- Tucker J, Kelsey S, Giblin AE and Hopkinson Jr CS. 2007. 2006 Annual benthic nutrient flux monitoring report. Boston: Massachusetts Water Resources Authority. Report 2007-07. 65 p.
- Tucker J, Kelsey S, Giblin AE and Hopkinson Jr CS. 2008. 2007 Annual benthic nutrient flux monitoring report. Boston: Massachusetts Water Resources Authority. Report 2008 p.
- Tucker J, Kelsey S, Giblin AE and Hopkinson Jr CS. 2009. 2008 Annual benthic nutrient flux monitoring report. Boston: Massachusetts Water Resources Authority. Report.

#### Book Reviews:

- Review of F. M. Morel, "Principles of Aquatic Chemistry" for Biogeochemistry, 1(4).
- Review of Glibert, P.M. and T. M. Kana (Eds) "Aquatic Microbial Ecology and Biogeochemistry: A Dual Perspective" for Harmful Algae (2017) vol 68.
- Review of Macfarlane, S. (2018) "Swirling Currents: Controversy, Compromise and Dynamic Coastal Change". Gulf of Maine Institute Journal Vol II Number 3.

#### Media/Outreach:

- Appeared in the movie "Tunnel Visions" about the Boston sewage outfall. The show aired on public TV station WGBH several times during 1994-1996.
- NPR Science Radio Program: Earth and Sky, Dec. 2000.
- WCIA& WNAN, Cape and Islands NPR Station, interviewed for story on acid rain, Feb. 2003.
- KTNA, Alaska Public Radio, interviewed for a story on the role of benthic production in Arctic Lakes and on diving in Arctic lakes, July 2004.
- Terrascope Radio – 2008. Featured in a "Science Minute" about research conducted by Ecosystems Center. Terrascope Youth Radio is a partnership project of the Massachusetts Institute of Technology (MIT) and the City of Cambridge Youth Programs and is sponsored by the National Science Foundation.
- New York Times, Science section September 2, 2008. Beyond carbon: scientists worry about nitrogen's effects. By Richard Morgan <http://www.nytimes.com/2008/09/02/science/02nitr.html?ei=5070&emc=eta1>>Beyond Discussed some of the work at the Toolik field station in the context of changes in the global N cycle.
- NSF- Science Nation – A video about the research going on at the Plum Island Ecosystems LTER produced for the National Science Foundation [https://www.nsf.gov/news/special\\_reports/science\\_nation/plumisland.jsp](https://www.nsf.gov/news/special_reports/science_nation/plumisland.jsp) September 2014.
- Gulf of Maine Institute Journal, (2016) "Rising Sea Levels Demonstrate Climate Change Impacts Local Communities" <https://www.gulfofmaineinstitute.org/single-post/2017/07/06/Research-Updates>
- WCAI. Salt Marshes Help Keep us above Water, Jan 23, 2017 <http://capeandislands.org/post/salt-marshes-help-keep-us-above-water#stream/0> Interview with Heather Goldstone.
- Climate Conversations - video about Science at Plum Island Ecosystems LTER and the importance of Federal Funding. <https://vimeo.com/209801741> Posted March 2017.
- WBUR. Why this invasive plant has a shot at some redemption. Nov. 27, 2018. <http://www.wbur.org/news/2018/11/27/phragmites-salt-marsh>

#### Other Activities:

- Cruise: R/V Oceanus #46, Sorting and Identifying Benthic Organisms; 24-30 May 1978
- Cruise: R/V Knorr #73-16, Chemical Analysis of Interstitial Water Samples; 29 June - 21 July 1979
- Cruise: R/V Ibis, Sediment and water sampling on Lake Victoria; 5-12 April 1996
- Testified on the Final EIS on the MDC Proposed Sludge Management Plan, Boston; 1979
- Testified as Expert Witness for Swansea, MA in "Swansea vs. Fall River" concerning proposed sewage discharge; November 1980
- Co-Instructor in Marine Pollution Course, "Isle of Shoals Marine Station"; August 1983
- Submitted Testimony to EPA on "Proposed Regulation of Fuel and Fuel Additives: Lead Phase Down"; Sept. 1984
- Advisor to Natural Resources Defense Council in "Norfolk Southern vs. Oberly"
- Member, Waquoit Bay National Estuarine Research Reserve Advisory Committee, 1986-1992
- Research Committee of Waquoit Bay National Estuarine Research Reserve, Chair 1986-1992
- Member, NSF Panel, Presidential Young Investigators Award, January 14-15, 1988
- Member, NSF Panel, Land Margin Ecosystems Research, May 5-6, 1988

Member, NSF Panel, Facilities for Field Stations and Marine Labs, July 18-19, 1991  
 Member, NSF Sponsored Workshop: Antarctic Dry Valleys: Terrestrial and Aquatic Ecosystems, 6-9 Oct. 1991  
 Member, NAS Panel on the Coastal Ocean Program. 1993-95  
 Member, NSF Panel, Environmental Geochemistry and Biogeochemistry, May 1995  
 Member, Model Evaluation Group, Massachusetts Water Resources Authority, 1993-95  
 Member, NSF/NOAA Panel, Coastal Studies of the Great Lakes December 4-6, 1996  
 Member, NSF/NOAA Panel, Coastal Studies of the Great Lakes May 19-21, 1997  
 Member of Panel to evaluate Gulfwatch, Oct. 1997  
 Member, Science Board for the National Parks Service, Cape Cod National Seashore, 1997-2002  
 Member, Advisory Board, Cornell Research Training Grant in Biogeochemistry, 1997-2002  
 Chair, Cooperative Institute for Coastal and Estuarine Environmental Technology Advisory Board, 1999-2006  
 Local Organizer: April 1988 NEERS Meeting, Marine Biological Laboratory  
 Co-Local Organizer: AAUS 1989 National Meeting, Joint MBL/WHOI  
 Co-Organizer: ERF 2002 workshop: Estuarine Response to Climate Change and Variability. April 7-9, 2002.  
 Steering Committee: Workshop on Advanced Approaches to Quantify Denitrification, May 2004.  
 Steering Committee: Denitrification Research Coordination Network, 2005-Present.  
 Co-Chair, Nutrients and Contaminants Working Group, Workshop on Planning Coordinated Research on Ecosystems, Climate, and Policy in the Northeast. Sponsored by WHOI and NMFS Jan 11-13, 2005.  
 Member, NSF Panel, Biocomplexity, coupled human and natural systems, 2005  
 Member, NSF Panel DEB; April 2005, April 2006, April 2008, April 2009, April 2012, April 2017; FSML 2017  
 Member, Board of Gulf of Maine Institute, 2009-present, Chair 2015-present  
 Member, EPA Advisory Board for Nutrient Criteria for Florida Marine and Inland Waters 2010-2011  
 Member, Buzzards Bay Scientific Advisory Committee 2013-present  
 Member, Cape Cod Commission 208 Monitoring Subcommittee Committee 2014-2018  
 Member, LTER Executive Board, 2014-2017  
 Member, National Estuarine Research Reserves Science Collaborative Advisory Board, 2014-2016  
 Member, NSF FEW Workshop: Closing the Human Phosphorus Loop." June 8-9 2015  
 Member, NEON Science, Technology and Education Advisory Committee (STEAC) Sept 2016-present  
 Member, DOE, Biological and Environmental Research Advisory Committee (BERAC), subcommittee on user facilities, Feb 2018-2019  
 Member, State Commission on Ocean Acidification – October 2019-December 2020  
 Member, Scientific Advisory Board, DOE Coastal Observations, Mechanisms, and Predictions Across Systems and Scales COMPASS program, August 2021-present

#### Primary Advisor

Ketil Koop-Jakobsen, Ph.D. 2009 Boston University  
 Leanna Heffner, University of Rhode Island, Ph.D. 2013 Co-advisor (with Charles Roman)  
 Lindsay Brin, Brown University, Ph.D. 2013 Co-advisor (with Jeremy Rich)  
 William Daniels, Brown University, Ph.D. 2017 Co-advisor (with James Russell)

#### Graduate Committees:

Joseph Costa, Ph.D. 1987, Boston University, Marine Program  
 Diana Varela, M.S. 1990, Boston University Marine Program  
 Gary Banta, Ph.D. 1992, Boston University Marine Program  
 Georgia Murray, M.S., 1994, University of New Hampshire  
 Michael LaMontagne, Ph.D. 1994, Boston University Marine Program  
 John Portnoy, Ph.D. 1994, Boston University Marine Program  
 Dean Moosavi, Ph.D. 1998, University of New Hampshire  
 Cristina Zago, Ph.D. 1998, University of Venica, Italy  
 Jennifer Hauxwell, Ph.D. 2000, Boston University Marine Program  
 Joseph Walsh, Ph.D. 2000, Boston University  
 Pingsan Zhao, Ph.D. 2000, University of Georgia  
 Thomas Mondrup, MS. 2000. University of Roskilde  
 Erica Stieve, M.S. 2001, Boston University Marine Program  
 Jesse Schwartz, Ph.D. 2002, Boston University  
 Marci Cole, Ph.D. 2002, Boston University

Gregg Moore, Ph.D. 2002, Boston University  
 Ketil Koop-Jakobsen. MS. 2003, University of Roskilde, Denmark  
 Ruth Herrold, Ph.D. 2003, Boston University  
 Sarah Good, MS, 2004, Boston University  
 Jennifer Bowen, Ph.D. 2004, Boston University  
 Joanna York, Ph.D. 2006, Boston University  
 Gretchen Gettel, Ph.D. 2006, Cornell University  
 Mirta Teichberg, Ph.D. 2007, Boston University  
 Robinson Fulweiler, Ph.D. 2007, University of Rhode Island  
 Liza Fox, MS, 2007, Boston University Marine Program  
 Jennifer Culbertson, Ph.D. 2007, Boston University Marine Program  
 Sophia Fox, Ph.D. 2007, Boston University Marine Program  
 Emily Peacock, M.S. 2007, Boston University Marine Program  
 Ylva Olsen, Ph.D. 2008, Boston University Marine Program  
 Lindsey Brin, M.S. 2008, Boston University Marine Program  
 Nadine Stewart Lysiak, Ph.D. 2008, Boston University Marine Program  
 Erin Kinney, Ph.D. 2010, Boston University Marine Program  
 Luke Cole, Ph.D. 2010, U. of Virginia  
 Lindsey Fields, Ph.D. 2013, University of Rhode Island  
 Elise Heiss, Ph.D. 2014, Boston University  
 Anna Murphy, Ph.D. 2015, Virginia Institute of Marine Science  
 Stuart Waugh, Ph.D. SUNY, 2015, Stony Brook  
 William Longo, Ph.D. 2017, Brown University  
 Lillian Aoki, Ph.D. 2018, University of Virginia  
 Kiran Upreti, Ph.D. 2019 LSU  
 Sarah Foster, Ph.D. 2019, Boston University  
 Kenneth Czaplak, Ph.D. Virginia Institute of Marine Science  
 Rachel Presley, Ph.D. University of Maine, Orno  
 Claudia Mazur, Ph.D. Boston University  
 Katherine Haviland, Ph.D. Cornell University

#### External Examiner

John Amaral, 1992, Ph.D. University of Manitoba  
 Grace Ann Hung, 2005, MS, McGill University  
 Elizabeth Robertson, Ph.D. 2015, U. Southern Denmark

#### Reader or Co-Advisor for Undergraduate Senior Theses:

Philip Colarusso, 1986, Worcester Polytechnic Institute  
 Fiona Boyer, 1997, Stirling University, Scotland  
 Shana Rapaport, 1999, Brandeis University  
 Richard Ricard, 2000, Connecticut College  
 Jeremy Sinaikin, 2000, Brown University  
 Adena Greenbaum, 2001, Wellesley College  
 Kyle Witteinghill, 2002, Middlebury College  
 Sarah Foster, 2005, Hampshire College  
 Craig McGowen, 2007, Brown University  
 Nick Peng, 2010, Connecticut College  
 Julia Russell, 2014, Columbia University  
 Emily Stone, 2016, Clark University

#### Internal Committees and Activities:

Seminar Committee, Ecosystems Center, 1983-1984  
 Annual Report Committee, Ecosystems Center, 1983-1984  
 Chairman, Education Committee, Ecosystems Center, 1984-1986, 1989-1993  
 Chairman, Facilities Committee, Ecosystems Center, 1987-1989; 1992-1997  
 Chairman, Ad-Hoc Diving Safety Committee, MBL, 1985

Member, Diving Control Board, MBL, 1986-Present; Chair - 1993-Present  
Sewage Project Oversight Committee, Ecosystems Center, 1986-1990  
Member, Nominating Committee, MBL Corporation, 1986, 1991  
Member Year-round Scientist Council, MBL, 1989  
Member, Human Resources Manager Search Committee, MBL, 1988  
Member, Ad-Hoc Grievance Committee, MBL, 1989  
MBL Representative, Coastal Research Center, WHOI 1992-2000  
Member By-Laws Review Committee, MBL, 1989-1991  
Member Fellowship Committee, MBL 1991-1997  
Member Lakian Fellowship Committee 1993-4  
Member Review for the Marine Resources Center, 2002  
Member MBL Science Council 2005-2006  
Member MBL Safety Committee 2006-present  
Member, Education Director Search Committee, MBL, 2009  
Member, Director's Council, 2016-present  
Member, Director's Search Committee, 2017