

CURRICULUM VITAE

James Dixon Hagy III

US Environmental Protection Agency
National Health and Environmental Effects Research Laboratory
Gulf Ecology Division
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I. Personal Data

Date of Birth: January 31, 1969

Citizenship: USA

II. Education:

Ph.D. Marine Ecology. University of Maryland at College Park, College Park, MD.
December 2001.

M.S. Marine Ecology. University of Maryland at College Park, College Park, MD.
January 1996.

B.S. Biology. Duke University, Durham, NC. 1991. Cum Laude, Graduation with
Distinction in Biology by Honors Thesis.

III. Professional Background

April 2005 - present. Research Ecologist. GS-0408-13. US Environmental Protection
Agency, National Health and Environmental Effects Research Laboratory, Gulf
Ecology Division. Gulf Breeze, FL.

October 2004 - April 2005. Research Ecologist. GS-0408-12. US Environmental
Protection Agency, National Health and Environmental Effects Research
Laboratory, Gulf Ecology Division. Gulf Breeze, FL.

March 2003 - October 2004. Post-Doctoral Ecologist. GS-0408-12. US Environmental
Protection Agency, National Health and Environmental Effects Research
Laboratory, Gulf Ecology Division. Gulf Breeze, FL.

January 2002 - March 2003. Post-Doctoral Ecologist. GS-0408-11. US Environmental
Protection Agency, National Health and Environmental Effects Research
Laboratory, Gulf Ecology Division. Gulf Breeze, FL.

January 1999 - May 1999. Teaching Assistant. "Population Dynamics of Exploited
Marine Populations." Instructor: M. J. Fogarty. Chesapeake Biological
Laboratory. Solomons, MD.

August 1996 - December 2000. Web Site Administrator. Estuarine Research Federation.

September 1993 - January 2002. Graduate Research Assistant. Chesapeake Biological Laboratory, Solomons, MD.

December 1991 - August 1993. Faculty Research Assistant. Chesapeake Biological Laboratory, Solomons, MD.

June 1990 - August 1990. Maryland Sea Grant Summer Intern. Horn Point Laboratory, Cambridge, MD.

IV. Awards:

- 2010 EPA S-Award (December). *For outstanding leadership and productivity supporting nutrients research*
- 2010 EPA Bronze Medal. *For sustained outstanding achievements in scientific research and technical support leading to the establishment of nutrient criteria in the nation's waters.*
- 2010 Exceptional/Outstanding ORD Technical Assistance to the Regions or Program Offices. *For exceptional technical assistance, leadership and service to EPA in the development of nutrient criteria for Florida inland waters.*
- 2009 EPA S-Award (December), Superior Accomplishment Recognition for Broad-High Value contributions to the Division, including exceptional technical leadership and vision in assisting OW, Region 4 and the State of Florida in ongoing efforts to develop defensible approaches to nutrient criteria..
- 2009 NHEERL/Gulf Ecology Division, Publication of the Year Award (for Greene, Lehrter and Hagy 2009 Publication in *Ecological Applications*)
- 2008 EPA S-Award (December), Superior Accomplishment Recognition for exceptional technical leadership in ongoing efforts to develop integrated modeling approaches to address estuarine nutrient criteria and Gulf hypoxia.
- 2008 EPA S-Award (August), Superior Accomplishment Recognition for outstanding leadership and contributions to Gulf Alliance efforts to develop approaches to reduce nutrients and establish nutrient criteria in coastal waters
- 2008 EPA S-Award (May), Superior Accomplishment Recognition
- 2007 NHEERL/Gulf Ecology Division, Scientist of the Year
- 2007 NHEERL/Gulf Ecology Division, Publication of the Year Award (for Hagy and Murrell 2007 Publication in *Estuarine, Coastal and Shelf Science*)
- 2007 ORD Team Honor Award for Exceptional/Outstanding ORD Technical Assistance to the Regions or Program Offices
- 2007 EPA Performance Recognition (Quality Step Increase)
- 2006 EPA Performance Recognition (Quality Step Increase)
- 2006 EPA T-Award for contribution to Gulf of Mexico Science Symposium, April 25-27, 2006, New Orleans, LA

- 2005 Award for significant contributions to peer reviewing for the journal *Estuaries* (now *Estuaries and Coasts*), Estuarine Research Federation, awarded October 2005
- 2005 Level III Science and Technological Achievement Award (STAA) for Hagy et al. 2004 manuscript in *Estuaries*, awarded May 2006
- 2004 NHEERL/Gulf Ecology Division, Publication of the Year Award (for Hagy et al. 2004 manuscript in *Estuaries*)
- 2004 EPA S-Award, Superior Accomplishment Recognition
- 2003 EPA S-Award, Superior Accomplishment Recognition

V. Research:

A. Areas of Concentration/Interest

Coastal Systems Ecology, Coastal Hypoxia, Physical-Biological Interactions in Ecosystems, Ecosystem Modeling, Coastal Food Webs, Statistical Modeling of Environmental Data, Computer Programming

B. Journal Publications

- Vincent, A. M., J. Flippin, E. Leppo, and **J. D. Hagy III**. Dissolved oxygen requirements of Florida-resident saltwater species applied to water quality criteria development. *In prep.*
- Hagy, J. D.** and J. Jackson. Seagrass colonization depth in Florida estuaries applied to numeric nutrient criteria development. *In prep.*
- Cerco, Carl F., D. Tillman, and **J. D. Hagy**. 2010. Coupling and comparing a spatially- and temporally-detailed eutrophication model with an ecosystem network model: An initial application to Chesapeake Bay. *Environmental Modelling & Software*. 25: 562-572.
- Kemp, WM, J. Testa, D. Conley, D. Gilbert, and **J. D. Hagy**. 2009 Temporal responses of coastal hypoxia to nutrient loading and physical controls. *Biogeosciences* 6: 2985-3008
- Greene, R.M., J. C. Lehrter, and **J.D. Hagy III**. 2009. Multiple regression models for hindcasting and forecasting midsummer hypoxia in the Gulf of Mexico. *Ecological Applications*. 19(5): 1161-1175
- Breitbart, D. L., J. K. Craig , R. S. Fulford, K. A. Rose, W. R. Boynton, D. Brady, B. J. Ciotti, R. J. Diaz, K. D. Friedland, **J. D. Hagy III**, D. R. Hart, A. H. Hines, E. D. Houde, S. E. Kolesar, S. W. Nixon, J. A. Rice, D. H. Secor, and T. E. Targett. 2009. Nutrient enrichment and fisheries exploitation: Interactive effects on estuarine living resources and their management. *Hydrobiologia*. 629:31-47 (doi: 10.1007/s10750-009-9795-8)
- Murrell, M. C., J. G. Campbell, **J. D. Hagy III**, J. Caffrey. 2009. Effects of irradiance on benthic and water column processes in a shallow micro-tidal estuary: Pensacola Bay, Florida, USA. *Estuarine, Coastal and Shelf Science* 81: 501-512.

- Testa, J. M., W. M. Kemp, W. R. Boynton, and **J. D. Hagy III**. 2008. Long-term changes in water quality and productivity in the Patuxent River Estuary: 1984-2003. *Estuaries and Coasts*. 31: 1021- 1037 (DOI 10.1007/s12237-008-9095-y)
- Boynton, W.R., **J. D. Hagy**, J. C. Cornwell, W. M. Kemp, S. M. Greene, M. Owens, J. E. Baker, and R. K. Larsen. 2008. Nutrient budgets and management actions in the Patuxent River estuary, Maryland. *Estuaries and Coasts* 31:623-651.
- Newell, R. I. E., W. M. Kemp, **J. D. Hagy III**, C. A. Cerco, J. M. Testa, and W. R. Boynton. 2007. Top-down control of phytoplankton by oysters in Chesapeake Bay, USA: Comment on Pomeroy et al. (2006). *Marine Ecology Progress Series*. 341: 293-298.
- Hagy, J. D. III** and M. C. Murrell. 2007. Susceptibility of a Gulf of Mexico estuary to hypoxia: An analysis using box models. *Estuarine, Coastal and Shelf Science*. 74: 239-253
- Murrell, M. C., **J. D. Hagy III**, E. M. Lores, and R. M. Greene. 2007. Phytoplankton production in relation to nutrient distributions in a subtropical estuary: importance of freshwater flow. *Estuaries and Coasts*. 30(3): 390-402.
- Hagy, J. D. III**, J. C. Lehrter, and M. C. Murrell. 2006. Effects of Hurricane Ivan on water quality in Pensacola Bay, FL USA. *Estuaries and Coasts*. 29(6A): 919-925.
- Scavia, D., E. L. A. Kelly, and **J. D. Hagy III**. 2006. A simple model for forecasting the effects of nitrogen loads on Chesapeake Bay hypoxia. *Estuaries and Coasts*. 29(4): 674-684.
- Fisher, T. R., **J. D. Hagy III**, W. R. Boynton, and M. R. Williams. 2006. Cultural eutrophication in the Choptank and Patuxent River estuaries of Chesapeake Bay. *Limnology and Oceanography*. 51: 435-447.
- W.M. Kemp, W.R. Boynton, J.E. Adolf, D.F. Boesch, W.C. Boicourt, G. Brush, J.C. Cornwell, T.R. Fisher, P.M. Glibert, **J.D. Hagy**, L.W. Harding, E.D. Houde, D.G. Kimmel, W.D. Miller, R.I.E. Newell, M. R. Roman, E.M. Smith, J.C. Stevenson. 2005. Eutrophication of Chesapeake Bay: Historical Trends and Ecological Interactions. *Marine Ecology Progress Series* 303: 1-29.
- Hagy, J. D.**, W. R. Boynton, and D. A. Jasinski. 2005. Modelling phytoplankton deposition to Chesapeake Bay sediments during winter-spring: interannual variability in relation to river flow. *Estuarine, Coastal and Shelf Science*. 62: 25-40.
- Hagy, J. D.**, W. R. Boynton, C. W. Keefe, and K. V. Wood. 2004. Hypoxia in Chesapeake Bay, 1950-2001: Long-term change in relation to nutrient loading and river flow. *Estuaries* 27(4): 634-658.
- McConnell, L. L., J. A. Harman-Fetcho, and **J. D. Hagy, III**. 2004. Measured concentrations and model predictions of atrazine fate in the Patuxent River estuary. *Journal of Environmental Quality*. 33: 594-604.

Hagy, J. D., L. P. Sanford and W. R. Boynton. 2000. Estimation of net physical transport and hydraulic residence times for a coastal plain estuary. *Estuaries* 23(3): 328-340.

Fisher, T. R., **J. D. Hagy**, and E. Rochelle-Newall. 1998. Dissolved and Particulate Organic Matter in Chesapeake Bay. *Estuaries*. 21(2): 215-229.

Boynton, W. R., L. Murray, **J. D. Hagy**, C. Stokes, and W. M. Kemp. 1996. A comparative analysis of eutrophication patterns in a temperate coastal lagoon. *Estuaries*. 19(2B): 408-421.

C. Book Chapters

Hagy, J.D. and W. M. Kemp. Estuarine Food Webs. In: J. Day, W.M. Kemp and A. Yanez-Arancibia, eds. *Estuarine Ecology. 2nd Edition. in prep.*

Boynton, W. R., **J. D. Hagy**, and D. L. Breitburg. 2001. Issues of Scale in Land-Margin Ecosystems. In: R. L. Gardner, W. Michael Kemp, V. S. Kennedy and J. E. Petersen (eds.). *Scaling Relations in Experimental Ecology*. New York: Columbia University Press.

D. Technical Reports (Selected)

EPA 2010 (**J. Hagy**, contributing author). Methods and Approaches for Deriving Numeric Criteria for Nitrogen/Phosphorus Pollution in Florida's Estuaries, Coastal Waters, and Southern Flowing Waters. Report submitted to Nutrient Criteria Review Panel of the EPA Science Advisory Board. November 2010. 140 pp.

Hagy, J. 2010. Chapter 5: 11. Pensacola Bay. In: Glibert, PM, C. Madden, W. Boynton, D. Flemer, C. Heil, and J. Sharp (eds). Estuarine Nutrient Criteria Development: State of the Science. U.S. Environmental Protection Agency, Washington, DC 202 pp.

Committee on Environmental and Natural Resources. 2010. Scientific Assessment of Hypoxia in U.S. Coastal Waters. Interagency Working Group on Harmful Algal Blooms, Hypoxia, and Human Health of the Joint Subcommittee on Ocean Science and Technology. Washington, DC. 164 pp. Primary Authors: Jewett EB, Kidwell DM, Lopez CB, Bricker SB (NOAA), Burke MK, Walbridge MR (USDA), Eldridge PM, Greene RM, **Hagy JD** (EPA), Buxton HT (USGS), Diaz RJ (VIMS).

Hagy, J. 2009. Hypoxia in the Northern Gulf of Mexico. Posted to the Gulf Coast Ocean Observing System (GCOOS) web site, <http://gcoos.org>.

National Oceanic and Atmospheric Administration. 2008. (**J. Hagy**, contributing author). NOAA Workshop: Ecological Effects of Sea Level Rise in the Florida Panhandle and Coastal Alabama: Research and Modeling Needs. Center for Sponsored Coastal Ocean Research (CSCOR). National Oceanic and Atmospheric Administration, Silver Spring, MD. 24 pp.

- Environmental Protection Agency. 2008. (**J. Hagy**, contributing author). Development of Nutrient Criteria for Estuarine Waters: A Synthesis of Two ORD Case Studies. US Environmental Protection Agency, Washington, DC. *in press*
- Hagy, J. D.**, J. C. Kurtz and R. M. Greene. 2008. An approach for developing numeric nutrient criteria for a Gulf coast estuary. US Environmental Protection Agency, Office of Research and Development, National Health and Environmental Effects Research Laboratory, Research Triangle Park, NC. EPA/600/R-08/004. 48 pp.
- Environmental Protection Agency. 2006. (**J. Hagy**, contributing author) Gulf of Mexico Hypoxia, 2002-2005 Survey Report. US EPA National Health and Environmental Effects Research Laboratory, Gulf Ecology Division. 81 pp.
- Hagy, J. D. III.** 2006. Session 6 Panel Summary. Contribution to Symposium Report from Symposium entitled "Hypoxia in the Northern Gulf of Mexico, Assessing the State of the Science" April 25-27, 2006, New Orleans, LA.
- Cherry, J. S. II and **J. D. Hagy III.** 2006 Pensacola Bay FL. Land-Ocean Interactions in the Coastal Zone (LOICZ) Biogeochemical Budgets. Electronically published through the LOICZ web page (<http://www.loicz.org>)
- Hagy, J. D.** and W. M. Kemp. 2002. Patuxent River, MD. Land-Ocean Interactions in the Coastal Zone (LOICZ) Biogeochemical Budgets. Electronically published through the LOICZ web page (<http://www.loicz.org>)
- Hagy, J. D.** 2002. Eutrophication, hypoxia and trophic transfer efficiency in Chesapeake Bay. Ph.D. Dissertation. University of Maryland College Park. College Park, MD. 446 pp.
- Kemp, W. M., R. Bartleson, S. Blumenshine, **J. D. Hagy** and W. R. Boynton. 1999. Ecosystem Models of the Chesapeake Bay Relating Nutrient Loadings, Environmental Conditions, and Living Resources. Final Report. US EPA Chesapeake Bay Program, Annapolis, MD.
- Hagy, J. D.** and W. R. Boynton. 1998. Seasonal and spatial patterns in stable isotopic composition of Chesapeake Bay food web components. Newsletter of the Land Margin Ecosystem Research Program. Land Margin Ecosystems Research Coordination Office, The Ecosystems Center, 7 MBL Street, Marine Biological Laboratory, Woods Hole, MA 02543.
- Hagy, J. D.**, W. R. Boynton, and M. M. Weir. 1998. Estimating Nitrogen and Phosphorus Loads for Patuxent River, 1960-1977. pp. 184-211, In: W. R. Boynton and F. M. Rohland (eds). Maryland Chesapeake Bay Water Quality Monitoring Program. Ecosystem Processes Component. Level One Interpretive Report No. 15. Chesapeake Biological Laboratory. University of Maryland Center for Environmental Science. Solomons, MD. 20688-0038. Ref. No. [UMCES]CBL 98-073a.

Hagy, J. D. and W. R. Boynton. 1998. The Effects of Nitrogen and Sediment Loading on Water Quality in the Virginia Western Shore Tributaries of Chesapeake Bay. Presented to the Technical Synthesis Workshop of the Virginia Tributary Strategy Program. Virginia Institute of Marine Science, Gloucester, VA. March 17-18, 1998.

Hagy, J. D. 1996. Residence Times and Net Ecosystem Processes in Patuxent River Estuary, MD. M. S. Thesis. University of Maryland at College Park, College Park, MD.

Hagy, J. D., W. R. Boynton, L. P. Sanford, and J. Tuttle. 1993. Natural Scales of Variability in Chesapeake Bay Ecosystems. Final Report. Research Coordinating Committee, Multiscale Experimental Ecosystem Research Center, University of Maryland System, Center for Environmental and Estuarine Studies

Boynton, W.R., L. Murray, W.M. Kemp, **J.D. Hagy,** C. Stokes, F. Jacobs, J. Bowers, S. Souza, B. Krinsky, and J. Seibel. 1992. Maryland's Coastal Bays. An Assessment of Aquatic Ecosystems, Pollutant Loadings, and Management Options. Maryland Department of the Environment.

E. Other Publications

Hagy, JD. and RM. Greene. 2010. EPA Proposes Numeric Criteria to Protect Florida's Waters from nitrogen and Phosphorus Pollution. *Coastal and Estuarine Research Federation Newsletter*. 36(1): 29.

Hagy, JD. and RM. Greene. 2009. Protecting Florida Waters from Nutrient Enrichment. *Coastal and Estuarine Research Federation Newsletter*. 35(2): 5-6.

F. Invited Presentations

Hagy, J.D. Development of Numeric Nutrient Criteria for Sustainable Water Quality Management. Utah State University Spring Runoff Conference "Water, Climate and Sustainability of our Changing World" March 29-30, 2011 (Plenary)

Hagy, J.D. Methods for Development of Numeric Nutrient Criteria for Estuaries: Lessons from Florida Estuaries Presentation to the National Water Quality Monitoring Council, February 1, 2011. Pensacola Beach, FL.

Hagy, J.D. Numeric Nutrient Criteria Development for Florida Estuaries. Presentation to the EPA Science Advisory Board, December 13, 2010. Washington, DC.

Hagy, J.D. Numeric Nutrient Criteria Development for Protection of Downstream Estuaries. Presentation to the EPA Science Advisory Board, December 14, 2010. Washington, DC.

Hagy, J.D. Nitrogen in Pensacola Bay Watershed and Estuary: Ecological Process to Environmental Management Process. University of West Florida, September 17, 2010.

- Hagy, J.D.** and R.M. Greene. Numeric Nitrogen Criteria for Streams to Protect Downstream Estuarine Waters in Florida. National Water Quality Monitoring Conference, Denver, CO. April 25-29, 2010.
- Hagy, J.D.** Nutrients in Pensacola Bay: Inputs, primary and secondary responses, and impacts on designated uses. Presented to the Estuary and Coastal Numeric Nutrient Criteria Development Meeting, Florida Department of Environmental Protection, Pensacola, FL, February 10, 2010.
- Hagy, J.** and J. Kurtz. An Ecological Tour of Pensacola Bay: Nutrient Impacts on Valued Ecological Resources and Services. Presented to the Florida Marine Nutrient Criteria Development Workshop, St. Petersburg, FL, June 5, 2008.
- Hagy, J.,** J. Kurtz and R. Greene. An Approach for Developing Numeric Nutrient Criteria for Pensacola Bay, FL. 19th Biennial International Estuarine Research Federation Conference. November 4-8, 2007. Providence, RI.
- Hagy, J.** EPA Research On Pensacola Bay Water Quality: Past, Present and Future Prospects. EPA Evening Lecture Series sponsored by the West Florida Regional Planning Council, Environmental Education Coordination Team and the Florida Association of Environmental Professionals. July 25, 2007, Pensacola, FL
- Hagy, J.** How Does Pensacola Bay Work? Invited presentation to the Ecosystem Processes subgroup of the Estuarine Nutrient Criteria Workgroup, sponsored by EPA OW/OST. May 22-23, 2006. Tiburon, CA.
- Hagy, J.,** J. Lehrter, M. Murrell, and J. Kurtz. 2005. Susceptibility of estuaries to hypoxia: A comparative approach. Invited symposium presentation at 18th Biennial International Estuarine Research Federation Conference. October 16-20, 2005. Norfolk, VA.
- Hagy, J. D.** 2004. Hypoxia in Chesapeake Bay: Perspectives From the Recent Past, 1950-2001. Invited presentation to "Oxygen Dynamics in Chesapeake Bay Revisited: New Perspectives on Trends, Impacts and Indicators. Maryland Sea Grant College. University Inn and Conference Center, University of Maryland, University College, Adelphi, MD, August 2-3, 2004
- Hagy, J. D.** 2004. A Scenario for Food Web Changes with Restoration in the Middle Chesapeake Bay. Invited presentation to EPA Council for Regulatory Environmental Modeling, Regional Seminar Series. "Lessons Learned from Chesapeake Bay Eutrophication and Ecosystem Modeling " June 22, 2004. Presented via teleconference from Gulf Breeze, FL, to multiple sites.
- Hagy, J. D.** 2004. Physical and Biological Controls on Hypoxia in Three Estuaries. Invited presentation to the University of Texas Marine Science Institute, Port Aransas, TX. April 5, 2004.
- Hagy, J. D.** 2004. A Scenario for Food Web Changes with Restoration in the Middle Chesapeake Bay. Invited presentation to EPA Chesapeake Bay Program symposium on coupling water quality and food web models for Chesapeake Bay. Annapolis, MD. January 8-9, 2004.

Murrell, M.C., **J.D. Hagy**, R. M. Greene and J. B. James. Phytoplankton- and Detritus-Based Food Webs in Gulf of Mexico Estuaries: Lessons from Pensacola Bay, FL, USA. Invited symposium presentation at the 17th Biennial International Estuarine Research Federation Conference, September 14-18, 2003. Seattle WA.

G. Contributed Presentations

Hagy, JD, JC Lehrter, EM Lincoln and BJ Watson. 2010. Numeric nitrogen criteria for streams to protect downstream estuarine waters: scaling up nutrient retention and loss. Mississippi-Alabama Bays and Bayous Symposium, Mobile, AL. December 3, 2010.

Hagy, JD, MC Murrell, JC Lehrter, RS Stanley and BA Schaeffer. 2008. Coupled biological-physical processes affecting hypoxia in the northern Gulf of Mexico. Ocean Sciences Conference, Orlando, FL. March 2-7, 2008.

Hagy, J, J. Kurtz, and R. Greene. 2007. An approach for developing numeric nutrient criteria for Pensacola Bay, FL. 19th Biennial International Estuarine Research Federation Conference, Providence, RI, November 4-8, 2007.

Hagy, J, J. Kurtz, and R. Greene. An approach for developing numeric nutrient criteria for Pensacola Bay, FL. NW Florida Environmental Symposium, University of West Florida, October 5, 2007.

Hagy, J, J. Kurtz, and R. Greene. 2007 An approach for developing numeric nutrient criteria for a Gulf coast estuary. Gulf of Mexico Alliance Nutrients Criteria Conference. Pensacola Beach, FL. January 16-18, 2007. Poster presentation

Hagy, J, 2005. Comparative analysis of the susceptibility of estuaries to hypoxia. 18th Biennial International Estuarine Research Federation Conference, Norfolk, VA, October 16-20, 2005.

Hagy, J, M. Murrell, J. Campbell, 2004. Susceptibility of a Gulf of Mexico Estuary to Hypoxia. American Society of Limnology and Oceanography. June 13-18, 2004. Savannah, GA.

Hagy, J, M. Murrell, J. Campbell, J. Cherry. 2003. Susceptibility of a Gulf of Mexico Estuary to Hypoxia. 17th Biennial International Estuarine Research Federation Conference. September 14-18, 2003. Seattle, WA. (Poster Presentation)

Hagy, J. D., W. R. Boynton, W. M. Kemp and R. E. Ulanowicz. 2001. Effects of hypoxia on food web structure and efficiency during summer in mesohaline Chesapeake Bay: An assessment using network analysis. 16th Biennial International Estuarine Research Federation Conference. November 4-8, 2001. St. Pete Beach, FL.

Hagy, J. D. and W. R. Boynton. 2001. Analysis tools for inferring ecosystem process information from monitoring data. EMAP Symposium, Pensacola, FL, April 24-27, 2001.

- Hagy, J. D.** 2000. Hypoxia in Chesapeake Bay, 1950-1999: Progressive Development and River Flow Effects. Atlantic Estuarine Research Society (AERS) Fall 2000 Meeting. Smithsonian Environmental Research Center, Edgewater, MD. (Best Ph.D. Student Oral Presentation)
- Hagy, J. D.** and W. R. Boynton. 1999. Seasonal and regional patterns in carbon and nitrogen stable isotopes in Chesapeake Bay food webs. 15th Biennial International Estuarine Research Federation Conference, New Orleans, LA.
- Hagy, J. D.** and W. R. Boynton. 1997. River flow as a covariate in estuarine ecology: physical-biological effects of magnitude, variability and pulsing. 14th Biennial International Estuarine Research Federation Conference, Providence, RI.
- Hagy, J. D.,** W. M. Kemp, and W. R. Boynton. 1995. Net ecosystem processes in Patuxent River Estuary, MD. 13th Biennial International Estuarine Research Federation Conference. Corpus Christi, TX. November 15-18, 1995.
- Hagy, J.D.** and W.R. Boynton. 1994. Relationships Between External Forcings and Ecosystem Responses in Chesapeake Bay and A Western Shore Tributary Estuary. In: Hill, P. and S. Nelson (eds.) Toward a Sustainable Chesapeake: The Chesapeake Experiment. Proceedings of the 1994 Chesapeake Research Conference. Norfolk, VA. June 1-3, 1994.
- Hagy, J.D.** and W. R. Boynton. 1993. A computational framework for data visualization and flexible spatial and temporal averaging with applications to ecosystem regression models. 12th Biennial International Estuarine Research Federation Conference. Hilton Head, SC. November 14-18, 1993.
- Fisher, T.R. and **Hagy, J.D.** 1991. The distribution of dissolved organic carbon (DOC) along the salinity gradient of Chesapeake Bay. 11th International Estuarine Research Conference. San Francisco, CA. November 10-14, 1991.

VIII. Extramural Funding (Past and Current)

2007-2009. Regional Applied Research Effort (RARE). EPA Region 6. Development of a comprehensive geospatial database for Gulf of Mexico Hypoxia. (co-PI)

2009-2010. Regional Applied Research Effort (RARE). EPA Region 6. Development of an Approach to Establish Numeric Nutrient Criteria for the Northern Gulf of Mexico Hypoxic Zone. \$80,000 (co-PI)

2009-2012. Satellite Earth Image Products Applied to Development of Regulatory Water Quality Standards. NASA. \$1,215,100 (co-PI)

2010-2014. (Pending) Modeling of Hypoxia in a Northeastern Gulf of Mexico Estuary: An Integrated Approach for Watershed Loads, Physical Transport and Oxygen Dynamics in Mobile Bay, Alabama. NOAA Coastal Hypoxia Research Program, \$1,191,290 (co-PI)

VII. Professional Activities

- Member, Policy and Public Outreach Committee, Coastal and Estuarine Research Federation. Appointed November 2010.
- Member, Products and Services Committee, Gulf Coast Ocean Observing System. Appointed ...
- Nutrients Team Leader, NHEERL/Gulf Ecology Division. (2007-2009)

Technical Panels

- Gulf of Mexico Alliance Physical-Chemical Monitoring Workgroup, 2008
- Gulf Coast Ocean Observing System, Products and Services Committee, Appointed 2008
- Technical Committee, Gulf Hypoxia Monitoring Implementation.
- Member, Florida/Alabama Panhandle Sea Level Rise Steering Committee, Sponsored by NOAA/CSCOR (2007-2008)
- OW/OST National Estuaries Experts Working Group, member (2005-2007)
- Invited panelist, Gulf of Mexico Hypoxia State of the Science Symposium, New Orleans, LA (2006)

Special Sessions and Symposia

Co-Convenor (with J. Steward, St. Johns River Water Management District) "Numeric Nutrient Criteria for Estuaries and Their Watersheds" A special symposium at the 21st Biennial International Estuarine Research Federation Conference. November 6-10, 2011. Daytona Beach, FL.

Co-Convenor (with J. Kurtz, GED and I. Davis, OW/OST) "Nutrient Criteria for Estuaries: Strategies for Managing Water Quality." A special symposium at the 19th Biennial International Estuarine Research Federation Conference. November 4-8, 2007. Providence, RI.

Co-Convenor (with Giancarlo Cicchetti, Ruth Carmichael and Scott Nixon), "Examining Nutrient Enrichment Effects On Coastal Ecosystems Through Comparative Ecological Approaches And Perspectives" a special symposium at the 18th Biennial International Estuarine Research Federation Conference. October 16-20, 2005. Norfolk, VA.

Lead organizer, "Response of Aquatic Food Webs to Nutrient Enrichment: Assessing the State of the Science" March 2-4, 2005, Pensacola Beach, FL

Peer Reviewing, Journals and Books:

Aquatic Ecology 2002; *Ecological Applications*, 2009; *Ecological Indicators*, 2003; *Ecological Modeling* 2005, 2008; *Ecology*, 1994; *Environmental Management*, 2007, 2008; *Estuaries and Coasts*, 2000, 2002, 2003, 2005, 2006, 2007, 2008; *2010 Estuarine, Coastal and Shelf Science*, 2007, 2008; *Hydrobiologia* 2003; *Journal of Coastal Research*, 2006; *Journal of Experimental Marine Biology and Ecology*, 2008; *Journal of Marine Systems*, 2008; *Limnology and Oceanography*, 2001; *Marine Ecology Progress*

Series, 1992, 1996, 1998, 2008, 2010; *Ophelia*, 1994; Proceedings of the Joint ECSA/ERF Conference on Changes in Fluxes in Estuaries, Plymouth, 1992; *Water Resources Research Institute*, 2003; Rhode Island Sea Grant College Program, 2006

Peer Reviewing, Proposals:

Alabama Center for Estuarine Science, 2004; Georgia Sea Grant College, 2005; National Science Foundation, 2005, 2008; NOAA Center for Sponsored Coastal Ocean Research, 2005 (Member of Proposal Review Panel), 2007 (ECOHAB program); NOAA/NSF (CAMEO), 2008; Maryland Sea Grant College, 2008.

Teaching and Mentoring:

Continuing Education Lectures, US EPA, Gulf Ecology division: “Statistical Modeling of Environmental Data”, June 2002.

Continuing Education Lectures, US EPA, Gulf Ecology division: “An Introduction to Coastal Physical Oceanography”, May 2004

M.S. Thesis Committee Member, J. Testa, University of Maryland, 2005-06

M.S. Thesis Committee Member, J. Senne, University of South Alabama, 2008-09

Ph.D. Committee Member. M. Wilson, University of South Florida, 2008-

Adjunct Professor, University of Maryland College Park (appointed 2006)

Adjunct Professor, University of South Alabama (appointed 2008)

Professional Society Memberships:

Estuarine Research Federation

Gulf Estuarine Research Society