

CURRICULUM VITAE

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I. Education

- 1990 Ph.D. Zoology (Oceanography minor). North Carolina State University.
1984 M.S. Ecology. North Carolina State University.
1981 B.Sc. (Hons). Human and Environmental Biology. University of York, UK.

II. Professional Background

- 2011- present Director, University of Maryland Center for Environmental Science Chesapeake Biological Laboratory
2006- present Professor, University of Maryland Center for Environmental Science Chesapeake Biological Laboratory
2000-2006 Associate Professor, University of Maryland Center for Environmental Science Chesapeake Biological Laboratory
1994-2000 Assistant Professor, University of Maryland Center for Environmental Science Chesapeake Biological Laboratory
1990-1994 Post-doctoral Fellow, Department of Biology, McGill University
1986-1990 Research Specialist, Center for Great Lakes Studies, University of Wisconsin
1984-1986 Secondary School Teacher, London Borough of Bexley, London, UK

III. Awards and Special Recognition

A. Personal

- 2008 Graduate Education Award for Excellence in Teaching. MEES Graduate Student Association, University of Maryland
2001 President's Award for Excellence in the Application of Science. University of Maryland Center for Environmental Science.
1998 Graduate Education Award for Excellence in Teaching. MEES Graduate Student Association, University of Maryland
1989-1990 Research Fellow in Population Biology - Electric Power Research Institute/ Sport Fishing Institute.
1987 Best Student Paper Award - American Fisheries Society (North Central Division).
1986 Harkema Award for Graduate Research - North Carolina State University.
1983 Organization for Tropical Studies course participant - OTS/University of Costa Rica.

B. With students

- 2011-2013. A. R. Colton. Presidential Management Fellowship. U. S. Fish and Wildlife Service, Blacksburg, VA.
2011 A. R. Colton. Best student paper award -Runner Up. Annual Meeting Tidewater Chapter of the American Fisheries Society, Gloucester Point, VA.

- 2008 A. C. Peer. Steven A. Berkeley Conservation Award. American Fisheries Society.
- 2004 K. L. Curti. Best student paper award - Runner-up. Annual Meeting Tidewater Chapter of the American Fisheries Society. Salisbury, MD.
- 2002 O. P. Jensen. Best student paper award. Annual Meeting Tidewater Chapter of the American Fisheries Society, Virginia Beach, VA.
- 2001 M. J. Frisk. Best poster award. Annual MEES Graduate Colloquium. College Park, MD.
- 2000 V. C. Caceres. Sally Richardson Award for Best Student Paper - 24th Annual Larval Fish Conference. Gulf Shores, AL.
- 2000 V. C. Caceres. Best poster award. Annual MEES Graduate Colloquium. Baltimore, MD.
- 2000 M. G. Frisk. Best student paper award. Annual Meeting Tidewater Chapter of the American Fisheries Society, Nags Head, NC.
- 1999 C. J. Heyer. Best Presentation Award. Annual MEES Graduate Colloquium. Frostburg, MD.
- 1999 M. G. Frisk. Best student paper award -Runner Up. Annual Meeting Tidewater Chapter of the American Fisheries Society, Gloucester Point, VA.

IV. Research

A. Areas of Professional Expertise

Recruitment processes in fishes with emphases on life history, feeding, growth, size-dependent processes, physical-biological interactions, spatial and temporal variability; Blue crab ecology and exploitation; Population dynamics and stock assessment; Quantitative methods in ecology with emphasis on modeling, experimental design and statistics.

B. Peer-Reviewed Publications

1. Papers in Refereed Journals or Books

- Frisk., M. G., A. Jordaan and T. J. Miller. (*in press*). Moving beyond the current paradigm in marine population connectivity: Are adults the missing link? *Fish and Fisheries*. 00:000-0000. [UMCES Contribution No. 4716]
- Link, J. S., S. Gaichas, T. J. Miller, T. E. Essington, A. Bundy, J. Boldt, K. F. Drinkwater and E. Moksness. 2012. Synthesizing lessons learned from comparing fisheries production in 13 northern hemisphere ecosystems: emergent fundamental features. *Marine Ecology Progress Series* 459:293-302. Doi: 10.3354/meps09829 [UMCES Contribution No. 4676]
- Lucey, S. M., A. M. Cook, J. Boldt, J. S. Link, T. E. Essington and T. J. Miller. 2012. Comparative analyses of surplus production dynamics of functional feeding groups across 12 large marine ecosystems. *Marine Ecology Progress Series* 459:219-229. Doi: 10.3354/meps09825 [UMCES Contribution No. 4667]
- Holsman, K., T. E. Essington, T. J. Miller, M. Koen-Alonso and W. J. Stockhausen. 2012. Comparative analysis of cod and herring production dynamics across 13 northern marine ecosystems. *Marine Ecology Progress Series*. 459:231-246 [UMCES Contribution No. 4647]
- Peer, A. C., G. M. Selckmann and T. J. Miller. 2012. A standardized method and analytical approach for predicting reproductive stage in teleosts using ovary color and female characteristics. *Transactions of the American Fisheries Society*. 141:1036-1044 [UMCES Contribution No. 4643]
- Williams, E. P., A. C. Peer, T. J. Miller, D. H. Secor and A. R. Place. 2012. A phylogeny of the temperate sea basses (Moronidae) characterized by a unique translocation of the ND6

- gene. *J. Fish Biol.* 80:110-130. doi:10.1111/j.1095-8649.2011.03158.x [UMCES Contribution No. 4569]
- Ihde, T. F., M. J. Wilberg, D. H. Secor and T. J. Miller. 2011. FishSmart: Harnessing the knowledge of stakeholders to enhance US marine recreational fisheries with application to the Atlantic king mackerel fishery. *Am. Fish. Soc. Symp.* 73:75-93. [UMCES Contribution No. 4378]
- Kendall, M. S., T. J. Miller and S. J. Pittman. 2011. Patterns of scale-dependency and the influence of map resolution on the seascape ecology of reef fish. *Marine Ecology Progress Series.* 427:259-274. doi:10.1016/j.fishres.2010.12.016 [UMCES Contribution No. 4474]
- Ihde, T. F., M. J. Wilberg, D. A. Loewensteiner, D. H. Secor and T. J. Miller 2011. The increasing importance of marine recreational fishing: challenges for management. *Fisheries Research* 108:268-276. [UMCES Contribution No. 4480]
- Nye, J. A., D. A. Loewensteiner, and T. J. Miller. 2011. Annual, seasonal and regional variability in diet of Atlantic croaker (*Micropogonias undulatus*) in Chesapeake Bay. *Estuaries and Coasts.* 34:691-700. Online First. doi 10.1007/s.12237-010-9348-4. [UMCES Contribution No. 4449]
- Frisk, M. G., T. J. Miller, R. Latour and S. J. D. Martell. 2011. Assessing biomass gains from marsh restoration in Delaware Bay using Ecopath with Ecosim. *Ecological Modelling.* 222:190-200. doi:10.1016/j.ecolmodel.2010.08.026 [UMCES Contribution No. 4446]
- Hines, A. H., E. G. Johnson, M. Z. Darnell, D. Rittschof, T. J. Miller, L. J. Bauer, R. Aguilar and P. Rodgers. 2010. Predicting effects of climate change on blue crabs. Pages 109-128 In G. H. Kruse, G. L. Eckert, R. J. Foy, R. N. Lipcius, B. Sainte-Marie, D. L. Stram and D. Woodby (Eds.)_Biology and Management of Exploited Crab Populations under Climate Change. Alaska Sea Grant College Program, University of Alaska Fairbanks, Fairbanks, AK.
- Bunnell, D. B., D. Lipton and T. J. Miller. 2010. The bioeconomic impact of potential new management regulations on the Chesapeake Bay blue crab fishery. *North American Journal of Fisheries Management.* 30:1505-1521 doi 10.1577/M09-182.1 [UMCES Contribution No. 4456]
- Miller, T. J., J. A. Blair, T. F. Ihde, R. M. Jones, M. J. Wilberg and D. H. Secor. 2010. An innovative role for scientists in stakeholder centered approaches to fisheries management. *Fisheries.* 35(9):425-433. [UMCES Contribution No. 4428]
- Link, J. S., B. A. Megrey, T. J. Miller, T. E. Essington, J. Boldt, A. Bundy, E. Moksness, K. F. Drinkwater and R. I. Perry. 2010. Comparative analysis of marine ecosystems: International production modeling workshop. *Biology Letters.* 6:723-726. doi: 10.1098/rsbl.2010.0526 [UMCES Contribution No. 4441]
- Bauer, L. J. and T. J. Miller. 2010. Spatial and interannual variability in winter mortality of the blue crab (*Callinectes sapidus*) in the Chesapeake Bay. *Estuaries and Coasts.* 33:678-687. doi 10.1007/s12237-009-9237-x [UMCES Contribution No. 4355]
- Bauer, L. J. and T. J. Miller. 2010. Temperature, salinity and size-dependent winter mortality of juvenile blue crab (*Callinectes sapidus*). *Estuaries and Coasts* 33:668-677. doi 10.1007/s12237-010-9277-2 [UMCES Contribution No.:4395]
- Frisk, M. G., S. J. D. Martell, T. J. Miller and K. Sosebee. 2010. Exploring the population dynamics of winter skate in the Georges Bank region using a length-based statistical catch-at-age model. *Canadian Journal of Fisheries and Aquatic Sciences* 67(5):774-792 [UMCES Contribution No. 4341]
- Kendall, M. S. and T. J. Miller. 2010. Relationships among map resolution, fish assemblages and habitat variables in a coral reef ecosystem. *Hydrobiologia.* 637:101-119 [UMCES Contribution No. 4357]
- Wilberg, M. J., T. F. Ihde, D. H. Secor, and T. J. Miller. 2009. FishSmart: A stakeholder-centered approach to improve fisheries conservation and management. *ICES CM/O:15*

- Miller, T. J., O. Fiksen and A. Gallego. 2009. Growth. p24-27 *In* North, E. W., A. Gallego and P. Petitigas. Manual of Recommended Best Practices for Modelling Physical-Biological Interactions During Fish Early Life. ICES Cooperative Research Report 295: 25-27. [UMCES Contribution No. 4425]
- Hinckley, S., B. A. Megrey and T. J. Miller. 2009. Recruitment prediction. P 78-83 *In* North, E. W., A. Gallego and P. Petitigas. Manual of Recommended Best Practices for Modelling Physical-Biological Interactions During Fish Early Life. ICES Cooperative Research Report 295: 77-82.
- Frisk, M. G. and T. J. Miller. 2009. Maturation of little skate, *Leucoraja erinacea*, and winter skate, *L. ocellata* in the western Atlantic from Cape Hatteras to Georges Bank.. Marine and Coastal Fisheries: Dynamics, Management and Ecosystem Sciences 1: 1-11. [UMCES Contribution No. 4220]
- Salice, C. J., T. J. Miller and G. Roesijadi. 2008. Demographic responses to multi-generational cadmium exposure in two strains of the freshwater gastropod *Biomphalaria glabrata*. Archives of Environmental Contamination and Toxicology 56:785-795. DOI: 10.1007/s00244-008-9203-9. [UMCES Contribution No. 4021]
- Wilberg, M. J., T. F. Ihde, T. J. Miller and D. H. Secor. 2008. Enhancing sustainability in marine recreational fisheries: a stakeholder-driven process for evaluating angling practices and management options for king mackerel in the U.S. ICES CM 2008/K:17. [UMCES-CBL 08-091]
- Kendall, M. S. and T. J. Miller. 2008. The influence of thematic and spatial resolution on maps of a coral reef ecosystem. Marine Geodesy 31:75-102.
- Frisk, M. G., T. J. Miller, S. J. D. Martell and K. K. Sosebee. 2008. New hypothesis helps explain elasmobranch "outburst" on Georges Bank in the 1980's. Ecological Applications 18:234-245. [UMCES Contribution No. 4114]
- Wilburg, M. J. and T. J. Miller. 2007. Problems with inferences of fish population dynamics based on maximum catch. Science. 316:1285. [UMCES Contribution No. 4090]
- Miller, T. J. 2007. Contribution of individual-based coupled physical biological models to understanding recruitment in marine fish populations. Marine Ecology Progress Series. 347:127-138. [UMCES Contribution No. 4082]
- Nye, J. A., D. D. Davis and T. J. Miller. 2007. The effect of maternal exposure to contaminated sediment on the growth and condition of larval *Fundulus heteroclitus*. Aquatic Toxicology 82:242-250. [UMCES Contribution No. 4059]
- Hewitt, D. A., D. M. Lambert, J. M. Hoenig, R. N. Lipcius, D. B. Bunnell and T. J. Miller 2007. Direct and indirect estimates of natural mortality for blue crab. Transactions of the American Fisheries Society. 136:1030-1040. [UMCES Contribution No. 4066]
- Miller, T. J. 2006. Patterns of total removals. Pages 189-212 *In* Fisheries ecosystem planning for the Chesapeake Bay. American Fisheries Society, Trends in Fisheries Science and Management 3, Bethesda, Maryland.
- Caldarone, E. M., C. M. Clemmesen, T. J. Miller, A. Folkvord, E. Berdalet, G. J. Holt, I. M. Suthers. 2006. Intercalibration of four spectrofluorometric methods for measuring RNA-DNA ratios in larval and juvenile fish. Limnology & Oceanography Methods 4:153-163. [UMCES Contribution No. 3956]
- Brylawski, B. J. and T. J. Miller. 2006. Temperature-dependent growth of the blue crab (*Callinectes sapidus*), a molt process approach. Canadian Journal of Fisheries and Aquatic Sciences. 63:1298-1308. [UMCES Contribution No. 3918]
- Frisk, M. G. and T. J. Miller. 2006. Age, growth, and latitudinal patterns of two Rajidae species in the northwestern Atlantic: little skate (*Leucoraja erinacea*) and winter skate (*Leucoraja ocellata*). Canadian Journal of Fisheries and Aquatic Sciences. 63:1078-1091 [UMCES Contribution No. 3916]

- Jensen, O. P., M. C. Christman and T. J. Miller. 2006. Landscape-based geostatistics: A case study of the distribution of blue crab in Chesapeake Bay. *Environmetrics*.17:605-621. [UMCES Contribution No. 3886]
- Fulford, R. S., J. A. Rice, T. J. Miller, F. P. Binkowski, J. M. Detmers and B. Belonger. 2006. Foraging selectivity by larval yellow perch (*Perca flavescens*): Implications for understanding recruitment in small and large lakes. *Canadian Journal of Fisheries and Aquatic Sciences*.63:28-42.
- Fulford, R. S., J. A. Rice, T. J. Miller and F. P. Binkowski. 2006. Elucidating patterns of size-dependent predation on larval yellow perch (*Perca flavescens*) in Lake Michigan: an experimental and modeling approach. *Canadian Journal of Fisheries and Aquatic Sciences*. 63:11-27.
- Jensen, O. P. and T. J. Miller. 2005. Geostatistical analysis of blue crab (*Callinectes sapidus*) abundance and winter distribution patterns in Chesapeake Bay. *Transactions of the American Fisheries Society*. 134:1582-1598. [UMCES Contribution No. 3877]
- Bunnell, D. B. and T. J. Miller. 2005. An individual-based modeling approach to per-recruit models: blue crabs (*Callinectes sapidus*) in the Chesapeake Bay. *Canadian Journal of Fisheries and Aquatic Sciences*. 62:2560-2572. [UMCES Contribution No. 3862]
- Jensen, O. P., R. Seppelt, L. A. Bauer and T. J. Miller. 2005. Winter distribution of blue crab (*Callinectes sapidus*) in Chesapeake Bay: application of a two-stage generalized additive model (GAM) . *Mar. Ecol. Progr. Ser.* 299:239-255. [UMCES Contribution No. 3847]
- Alvarado Bremer, J. R., M. G. Frisk, T. J. Miller, J. Turner, J. Viñas and K. Kwil. 2005. Genetic identification of the cryptic juveniles of little skate and winter skate. *Journal of Fish Biology*. 66:1177-1182. [UMCES Contribution No. 3840]
- Frisk, M. G., N. K. Dulvy and T. J. Miller. 2004. Life history and vulnerability to exploitation of elasmobranchs: Inferences from elasticity, perturbation and phylogenetic analyses. *Journal of the Northwest Atlantic Fisheries Organization*. 35:27-45. [UMCES Contribution No. 3779]
- Yellow Perch Task Group. 2004. Yellow perch research and management in Lake Michigan: Evaluating progress in a cooperative effort, 1997-2001. *Fisheries*. 29(11): 11- 19.
- Fogarty, M. J. and T. J. Miller. 2004. Impact of a change in reporting systems in the Maryland blue crab fishery. *Fisheries Research*. 68: 37-43.
- Miller, T. J., M. G. Frisk and M. J. Fogarty. 2003. Comment on Mollet and Caillet: Confronting models with data. *Marine & Freshwater Research*. 54:737-738. [UMCES Contribution No. 3714]
- Brylawski, B. J. and T. J. Miller. 2003. The bioenergetic modeling of the blue crab (*Callinectes sapidus*) using the computer-based Wisconsin model. *Bulletin of Marine Science*. 72:491-504. [UMCES Contribution No. 3683]
- Miller, T. J. 2003. Incorporating space into models of blue crab populations. *Bulletin of Marine Science*. 72:567-588. [UMCES Contribution No. 3423]
- Miller, T. J. and S. G. Smith. 2003. Modeling crab growth and population dynamics: Insights from the blue crab conference. *Bulletin of Marine Science*. 72:537-541. [UMCES Contribution No. 3424]
- Salice, C. J. and T. J. Miller. 2003. Population-level responses to long-term cadmium exposure in two strains of the freshwater gastropod *Biomphalaria glabrata*: Results from a life-table response experiment (LTRE). *Environmental Toxicology and Chemistry* 22:678-688. [UMCES Contribution No. 3591]
- Miller, T. J. 2002. Assemblages, communities, and species interactions. Chapter 8 In L. A. Fuiman and R. G. Werner (Eds.). *Concepts in Fishery Science: The Unique Contributions of Early Life Stages*. Blackwell Sciences. [UMCES Contribution No. 2970]
- Frisk, M. G., T. J. Miller and M. J. Fogarty. 2002. The population dynamics of little skate, *Leucoraja erinacea*, winter skate, *Leucoraja ocellata* and barndoor skate *Dipturus laevis*:

- predicting exploitation limits using matrix analyses. *ICES Journal of Marine Science*. 59:576-586. [UMCES Contribution No. 3584]
- Miller, T. J. 2001. Matrix-based modeling of blue crab population dynamics with applications to the Chesapeake Bay. *Estuaries* 24:535-544. [UMCES Contribution No. 3455]
- Heyer, C. J., T. J. Miller, F. P. Binkowski, E. M. Calderone and J. A. Rice. 2001. Understanding maternal effects as a recruitment mechanism in Lake Michigan yellow perch (*Perca flavescens*). *Canadian Journal of Fisheries and Aquatic Sciences*. 58:1477-1487. [UMCES Contribution No. 3453]
- Frisk, M. G., T. J. Miller and M. J. Fogarty. 2001. Estimation and analysis of biological parameters in elasmobranch fishes: a comparative life history study. *Canadian Journal of Fisheries and Aquatic Sciences*. 58: 969-981. [UMCES Contribution No. 3408]
- Brewster-Geisz, K. K., and T. J. Miller. 2000. Management of sandbar shark (*Carcharhinus plumbeus*): implications from a stage-based model. *Fishery Bulletin*. 98(2):236-249. [UMCES Contribution No. 3264]
- Quinlan, J. A., B. O. Blanton, T. J. Miller and F. E. Werner. 2000. From spawning grounds to the estuary: Using linked individual-based and hydrodynamic models to interpret patterns and processes in the oceanic phase of Atlantic menhaden *Brevoortia tyrannus* life history. *Fisheries Oceanography* 8 (suppl. 2):224-246.
- Miller, T. J., T. Herra and W. C. Leggett. 1999. The relationship between larval size and otolith size at hatch in Atlantic cod, *Gadus morhua*. *Fishery Bulletin*. 99(2):294-305.
- Bertram, D. F., T. J. Miller and W. C. Leggett. 1997. Individual variation in growth and development during the early life stages of winter flounder. *Fish. Bull.* 95:1-10.
- Miller, T. J. 1997. The use of field studies to investigate selective processes in fish early life history. Chapter 7 In R. C. Chambers and E. Trippel (eds). *The Role of Early Life History Studies in Understanding Fish Biology*. Chapman and Hall, New York, NY
- Dower, J. F., T. J. Miller and W. C. Leggett. 1996. The role of microscale turbulence in the feeding ecology of larval fish. *Advances in Marine Biology*. 31:169-220.
- Landry, F. P., T. J. Miller, and W. C. Leggett. 1995. The influence of small-scale turbulence on the ingestion rate of fathead minnow (*Pimphales promelas*) larvae. *Canadian Journal of Fisheries and Aquatic Sciences*. 52:1714-1719.
- Miller, T. J., T. Herra and W. C. Leggett. 1995. An individual-based analysis of the variability of eggs and their newly hatched larvae of atlantic cod (*Gadus morhua*) on the Scotian shelf. *Canadian Journal of Fisheries and Aquatic Sciences*. 52:1083-1093.
- Chambers, R.C and T. J. Miller. 1995. Statistical analysis of reconstructed life histories from otoliths: Special properties of longitudinal data. pp 155 -175 In D. H. Secor, J. M. Dean and S. E. Campana (eds.). *Recent Developments in Otolith Research*. University of South Carolina Press, Columbia, S.C.
- MacKenzie, B. R., T. J. Miller, W. C. Leggett and S. Cyr. 1994 Evidence for a dome-shaped relationship between turbulence and larval fish ingestion rates. *Limnology and Oceanography*. 39:1790-1799.
- Miller, T. J., L. B. Crowder and J. A. Rice. 1993. Ontogenetic changes in behavioural and histological measures of visual acuity in three species of fish. *Env. Biol. Fish.* 37:1-8.
- Pepin, P. and T. J. Miller. 1993. Potential use and abuse of general empirical models of early life history processes in fish. *Canadian Journal of Fisheries and Aquatic Sciences*. 50:1343-1345.
- Rice, J. A., T. J. Miller, K. A. Rose, L. B. Crowder, E. A. Marschall, A. Trebitz, and D. L. DeAngelis. 1993. Growth rate variation and larval survival: Inferences from an individual-based size-dependent predation model. *Canadian Journal of Fisheries and Aquatic Sciences*. 50:133-142.
- Miller T. J., L. B. Crowder, J. A. Rice and F. P. Binkowski. 1992. Body size and the ontogeny of the functional response in fishes. *Canadian Journal of Fisheries and Aquatic Sciences*. 49:805-812.
- Crowder, L. B., J. A. Rice, T. J. Miller and E. A. Marschall. 1992. Empirical and theoretical approaches to size-based interactions and recruitment variability in fishes. p 237-255. In:

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- Miller, T. J., L. B. Crowder and F. P. Binkowski. 1990. The effect of changes in the zooplankton assemblage on growth in bloater and its implications for recruitment success. *Transactions of the American Fisheries Society*. 119:483-491.
- Miller, T. J., L. B. Crowder, J. A. Rice and E. A. Marschall. 1988. Larval size and recruitment mechanisms in fishes: Toward a conceptual framework. *Canadian Journal of Fisheries and Aquatic Sciences*. 45:1678-1670.
2. Papers In Press at Refereed Journals or Books
- Miller, T. J. (*accepted, October 2011*). Application of a spatial model of Atlantic menhaden to assess the effects of localized depletion. *Marine and Coastal Fisheries: Dynamics, Management and Ecosystem Sciences*.
- Wiedenmann, J., M. J. Wilberg and T. J. Miller (*accepted October 2012, revised and resubmitted*). An evaluation of harvest control rules for data-poor fisheries. *North American Journal of Fisheries Management*.
- Peer, A. C. and T. J. Miller (*accepted February 2013, undergoing editorial revision*). Climate change, migration phenology and fisheries management interact with unexpected consequences. *North American Journal of Fisheries Management*.
3. Papers in Review or to be Submitted to Refereed Journals
- Colton, A. R., Wilberg, M. J., V. J. Coles and T. J. Miller (*submitted November 2012*). An evaluation of the synchronization in the dynamics of blue crab populations in the western Atlantic. *Fisheries Oceanography*.
- Karakoylu, E. M., J. Wilkin and T. J. Miller. (*submitted November 2012*). Impact of the distribution of Atlantic menhaden spawning grounds on nursery recruitment patterns in the mid-Atlantic bight. *Fisheries Oceanography*.
- Sagarese, S. R., M. G. Frisk, T. J. Miller, K. A. Sosebee, J. A. Musick and P. J. Rago. (*submitted November 2012*). Influence of environmental and spatial variables on the habitat selection of spiny dogfish (*Squalus acanthias*): Implications for understanding the species life history strategy and management in the northwest Atlantic.
- Wilt, L. A., J. M. Grebmeier, T. J. Miller and L. W. Cooper (*submitted February 2013*). Caloric content of Chukchi Sea benthic invertebrates: modeling spatial and environmental variation.
- Bransome, N., S. Sutton, B. E. Smtih, S. McDermott, J. S. Link and T. J. Miller. (*submitted February 2013*). Quantifying the contribution of diadromous species to the diets of marine predators in the Gulf of Maine.
- Nye, J. A. and T. J. Miller. (*to be submitted in December 2013*). Development and verification of a bioenergetic model of Atlantic croaker *Micropogonias undulatus*. *Trans. Am. Fish. Soc.*
- Wilberg, M. J. and T. J. Miller (*to be submitted in February 2013*). Stock-recruitment models for sex-specific fisheries management.
- C. Technical Reports
1. Peer-reviewed Reports
- Huggett, R. J., J. J. Anderson, M. E. Campana, T. Dunne, J. Gilbert, A. E. Giorgi, C. A. Klein, S. N. Luoma, M.J. McGuire, T. J. Miller, S. G. Monismith, J. Obeysekera, H. W. Paerl, M. J. Pfeffer, D. J. Reed, K. A. Rose and D. D. Tullos, H. J. Vaux. 2012. Sustainable Water

- and Environmental Management in the California Bay-Delta. National Research Council. National Academies Press, Washington, DC. 260p.
- Miller, T. J., M. J. Wilberg, A. R. Colton, G. R. Davis, A. F. Sharov, R. N. Lipcius, E. G. Johnson, and A. G. Kaufman. 2011. Stock Assessment of Blue Crab in Chesapeake Bay. 2011. Final Report. Ref: [UMCES]CBL 11-011. UMCES Tech. Ser. No. TS-614-11-CBL.
- Berkson, J., L. Barbieri, S. X. Cadrin, S. Cass-Calay, P. Crone, M. Dorn, C. Friess, D. Kobayashi, T. J. Miller, W. S. Patrick, S. Pautzke, S. Ralston and M. Trianni. 2011. Calculating Acceptable Biological Catch for Stock That Have Reliable Catch Data Only. NOAA Technical Memorandum NMFS-SEFSC-616. U. S. Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service, Southeast Fisheries Science Center, Miami, FL. 56p.
- Vaux, H. J., M. E. Camapana, J. B. Gilbert, A. E. Giorgi, R. J. Huggett, C. A. Klein, S. N. Luoma, T. J. Miller, S. G. Monismith, J. Obeysekera, H. W. Pearl, M. J. Pfeffer, D. D. Tullos. 2011. A Review of the Use of Science and Adaptive Management in California's Draft Bay Delta Conservation Plan. National Research Council. National Academies Press. Washington, D. C.,
- Huggett, R. J., J. J. Anderson, M. E. Campana, T. Dunne, A. E. Giorgi, P. M. Glibert, C. A. Klein, S. N. Luoma, M.J. McGuire, T. J. Miller, J. Obeysekera, M. J. Pfeffer, D. J. Reed, K. A. Rose and D. D. Tullos. 2010. A Scientific Assessment of Alternatives for Reducing Water Management Effects on Threatened and Endangered Fishes in California's Bay-Delta. National Research Council. National Academies Press, Washington, DC. 93p.
- Bonzek, C. F., E. D. Houde, S. Giordano, R. Latour, T. J. Miller and K. G. Sellner. 2007. Baywide and coordinated Chesapeake Bay fish stock monitoring. Chesapeake Research Consortium Publication 07-163. Edgewater, MD. 70p.
- Miller, T. J., S. J. D. Martell, D. B. Bunnell, G. Davis, L. A. Fegely, A. F. Sharov, C. F. Bonzek, D. Hewitt, J. M. Hoenig, R. N. Lipcius. 2005. Stock Assessment of Blue Crab in Chesapeake Bay. 2005. Final Report. Ref: [UMCES]CBL 05-077. UMCES Tech. Ser. No. TS-487-05-CBL.
- Miller, T. J. and E. D. Houde. 1998. Blue crab target setting. Final Report. Ref: [UMCES]CBL 98-128.
- Houde, E.D., M. J. Fogarty and T. J. Miller. 1998. Multispecies fisheries management: Prospects for sustainability in Chesapeake Bay. Workshop Report. Ref:[UMCES]CBL 98-069.
- Miller, T. J., E. D. Houde, and E. A. Watkins. 1996. Chesapeake Bay fisheries: Prospects for multispecies management and sustainability. Chesapeake Research Consortium Literature Synthesis. Ref [UMCEES]CBL 96-141

2. Non-reviewed Technical Reports

- Stockhausen, W. T., M. Koen-Alonso, K. Holsman, T. J. Miller, T. E. Essington, R. J. Gamble, S. K. Gaichas. (*submitted January 2012*). Taking the final step: Can a full multispecies production model tell us anything a single-species model with covariates can't? ICES. CM 2011 O 07.
- Miller, T. J. 2010. Estimating bycatch limits for American shad and river herrings in the northwest Atlantic. Final Report submitted to MRAG North America. Ref: UMCES CBL 10-089.
- Miller, T. J. 2010. Probing the population structure of Atlantic menhaden. Final Report to NOAA Chesapeake Bay Office. Ref: UMCES Tech. Ser. No. TS-607-10
- Miller, T. J., M. W. Wilberg and D. H. Secor. 2010. FishSmart: Enhancing the sustainability of recreational fisheries through improved management and angling practices. Final Report to Gordon and Betty Moore Foundation. Ref. UMCES Tech. Ser. No. TS-580-09.

- Wilberg, M. J and T. J. Miller 2010. Developing spatially-explicit assessment tools for eastern oyster in Chesapeake Bay. Final Report submitted to the Maryland Department of Natural Resources Fisheries Service. Ref: UMCES Tech Ser No TS-599-10.
- Miller, T. J., M. J. Wilberg, T. F. Ihde and D. H. Secor. 2008. A vision for the king mackerel fishery. Final Report submitted to the South Atlantic Fishery Management Council. Ref:[UMCES]CBL 08-127.
- Miller, T. J. 2008. Impact of correlated recruitments in multispecies models. Final Report to NOAA Chesapeake Bay Office. Ref: [UMCES]CBL 08-032. UMCES Tech Ser No TS-546-08.
- Miller, T. J., J. A. Nye and D. A. Loewensteiner. 2008. Development and implementation of the Chesapeake Bay fishery-independent multispecies survey. Final Report to NOAA Chesapeake Bay Office. Ref: [UMCES]CBL 08-020. UMCES Tech Ser. No. TS-545-08.
- Frisk, M. G., T. J. Miller, R. J. Latour and S. J. D. Martell. 2006. An ecosystem model of Delaware Bay. Final Report for PSE&G Services Corp. Ref:[UMCES]CBL 06-014, UMCES Tech. Ser. No TS-506-06-CBL.
- Miller, T. J., T. F. Ihde, D. H. Secor and M. J. Wilberg. 2007. FishSmart: Enhancing the sustainability of recreational fisheries through improved management and angling practices. Annual Report. Ref:[UMCES]CBL 07-157.
- Miller, T. J. and M. G. Frisk. 2006. Geographic variation in life history traits and population dynamics of western Atlantic skates. Final Report to NMFS / SG Fellowship Program in Population Dynamics. Ref:[UMCES]CBL 06-133, UMCES Tech Ser No TS-558-06.
- Miller, T. J. and D. A. Loewensteiner. 2006. Fishery-independent multispecies assessment of Maryland fish populations: a case study in the Patuxent River. Final Report to Fisheries Service, Maryland Department of Natural Resources. Ref:[UMCES]CBL 06-106 UMCES Tech Ser No. TS-254-06
- Miller, T. J., W. R. Boynton, E. D. Houde, W. C. Boicourt, L. W. Harding, Jr., W. M. Kemp and M. R. Roman. 2006. Ecosystem variability and estuarine fisheries: a synthesis. Final Report to the NOAA Coastal Ocean Program. Ref [UMCES]CBL 06-015. UMCES Tech Ser No TS-508-06-CBL
- Miller, T. J., M. C. Christman, K. L. Curti, E. D. Houde, D. A. Loewensteiner, J. A. Nye, B. Muffley, A. F. Sharov, and J. H. Volstad. 2004. Abundance, distribution and diversity of Chesapeake Bay fishes: Results from CHESFIMS. Extended Abstract submitted to NOAA Chesapeake Bay Office - February 2004. Ref:[UMCES]CBL 04-036 UMCES Tech. Ser. No. TS-434-04-CBL.
- Miller, T. J. 2004. Fishery-independent multispecies assessment of Maryland fish populations: A case study in the Patuxent River. Six-month report to Maryland Department of Natural Resources. March 2004. Ref. No [UMCES]CBL 04-047. UMCES Tech. Ser. No. TS-436-04-CBL.
- Miller, T. J., et al. Ecosystem variability and estuarine fishes: A synthesis. Annual Report. 2003-2004. November 2004. Ref No [UMCES]CBL 04-122. UMCES Tech. Ser. No. TS-458-04-CBL.
- Miller, T. J. et al. 2004. Chesapeake Ecotoxicological Research Program. Quantifying ecological risks of contaminated sediments on living resources in supporting decisions on habitat restoration strategies in the Chesapeake Bay (Maryland Portion). Annual Report to MD Sea Grant. Ref. No. [UMCES]CBL 04-134.
- Miller, T. J., K. Curti, D. Loewensteiner, A. F. Sharov, B. Muffley, M. C. Christman, J. H. Volstad and E. D. Houde. 2003. Abundance, distribution and diversity of Chesapeake Bay fishes: Results from CHESFIMS. Extended Abstract submitted to NOAA Chesapeake Bay Office - February 2003. Ref:[UMCES]CBL 03-023.
- Miller, T. J. 2003. Individual growth and population dynamics of blue crab (*Callinectes sapidus*) in the Hudson River. Final Report to the Hudson River Foundation. September 2003. Ref. No [UMCES]CBL 03-302. UMCES Tech. Ser. No. TS-418-03-CBL.

- Tenore, K. R., T. J. Miller et al. 2003. Chesapeake Ecotoxicological Research Program. Quantifying ecological risks of contaminated sediments on living resources in supporting decisions on habitat restoration strategies in the Chesapeake Bay (Maryland Portion). Annual Report to MD Sea Grant. Ref. No. [UMCES]CBL 03-190.
- Miller, T. J. et al. 2003. Ecosystem variability and estuarine fisheries: A synthesis. Annual Report to NOAA Coastal Ocean Program. July 2003. Ref. No. [UMCES]CBL 02-0068B.
- Miller, T. J. 2002. Chesapeake Bay fishery independent multispecies fisheries survey (CHESFIMS). 2001 Annual Report to NOAA-Chesapeake Bay Office, 1 March 2002. Ref. No. [UMCES]CBL 02-0079. UMCES Tech. Ser. No. TS-370-02-CBL.
- Miller, T. J. 2002. Chesapeake Bay fishery independent multispecies fisheries survey (CHESFIMS). 2002 Semi-Annual Progress Report to NOAA-Chesapeake Bay Office, 28 August 2002. Ref. No. [UMCES]CBL 02-0153. UMCES Tech. Ser. No. TS-375-02-CBL.
- Miller, T. J. 2002. The spatial dynamics of blue crab in Chesapeake Bay. 2002 Six-month Report to Maryland Sea Grant. Sept. 2002. Ref. No. [UMCES]CBL 02-0180. UMCES Tech. Ser. No. TS-376-02-CBL.
- Houde, E. D. and T. J. Miller. 2001. Trophic complexity and scaling issues: fish predators in MEERC. MEERC Annual Progress Report, 1 May 2000 - 30 April 2001. Ref. No. [UMCES]CBL 01-0079. UMCES Tech Ser. No. TS-313-01-CBL.
- Miller, T. J. 2001. Improvements to the stock assessment of Chesapeake Bay blue crab (*Callinectes sapidus*): Implications of blue crab size-at-age. Ref. No. [UMCES]CBL 01-0340. UMCES Tech Ser. No. TS-355-01-CBL.
- Miller, T. J. 2001. The precautionary approach to managing blue crab in Chesapeake Bay: Establishing limits and targets. Final Report. Ref. No. [UMCES]CBL 01-0168. UMCES Tech Ser. No. TS-340-01-CBL.
- Houde, E. D. and T. J. Miller. 2000. Trophic complexity and scaling issues: fish predators in MEERC. MEERC Annual Progress Report, 1 May 1999 - 30 April 2000. Ref. No. [UMCES]CBL 00-0077. UMCES Tech Ser. No. TS-250-00-CBL. 13 pp.
- Miller, T. J. 2000. Design of a recreational fishing survey and mark recapture study for the blue crab, *Callinectes sapidus*, in Chesapeake Bay. I. Recreational survey. Draft Report. Ref. No. [UMCES]CBL 00-0334. UMCES Tech Ser. No. TS-299-01-CBL. 72 pp.
- Miller, T. J. 2000. Individual growth and population dynamics of blue crab, *Callinectes sapidus*, in the Hudson River. Annual Report to Hudson River Foundation. Ref. No. [UMCES]CBL 00-0243. UMCES Tech Ser. No. TS-282-00-CBL. 98 pp.
- Miller, T. J. 2000. The spatial dynamics of blue crab in Chesapeake Bay. Annual Report submitted to Maryland Sea Grant. Ref. No. [UMCES]CBL 00-0168. UMCES Tech Ser. No. TS-273-00-CBL. 4 pp.
- Miller, T. J. 2000. The spatial framework of natural resources management: sources, sinks and reserves. Rept. to Maryland Sea Grant. Ref. No. [UMCES]CBL 00-0171. UMCES Tech. Ser. No. TS-280-00-CBL. 3 pp.
- Miller, T. J. and A. Sharov. 2000. Findings and recommendations of the total removals Workgroup. Chesapeake Bay Fisheries Ecosystem Plan Workshop, NOAA Chesapeake Bay Office. Ref. No. [UMCES]CBL 00-0307. UMCES Tech. Ser. No. TS-291-00-CBL.
- Miller, T. J. 1999. Individual growth and population dynamics of blue crab (*Callinectes sapidus*) in the Hudson River. Annual Report to Hudson River Foundation. UMCES Tech. Ser. No. TS-214-99-CBL.
- Miller, T. J. and J. A. Stone. 1998. Chesapeake Bay stock assessment committee: Plans and priorities for research. Final Report. Ref. [UMCES]CBL 98-044.
- Miller, T. J. 1997. Assessment of fish community structure near site 104. Final Report to Maryland Environmental Service, Annapolis, MD. Ref [UMCES]CBL 97-123.
- Miler, T. J., J. Stone and E. A. Sadler. 1997. Assessment of fish community structure in the vicinity of Pooles Island. Final Report to Maryland Environmental Service, Annapolis, MD. Ref [UMCES]CBL 97-124.

- Miller, T. J., and J. McCracken. 1997. Assessment of fishing activity near Pooles Island. Final Report to Maryland Environmental Service, Annapolis, MD. Ref. [UMCEES]CBL 97-011A.
- Miller, T. J., E. D. Houde and J. H. Vølstad. 1996. Stage-based models of blue crab populations in the Chesapeake Bay. Report to U.S. Environmental Protection Agency. Ref [UMCEES]CBL 96-069.

C. Contracts and Grants

1. Pending
2. Current

Intrapopulation biodiversity and recruitment pathways for Chesapeake Bay striped bass.

Maryland Sea Grant. Feb 2008 - Jan 2011. \$200,134.00. (PIs: Miller, T. J., David H. Secor, A. Place, 7% time).

Technical Support for Maryland Chesapeake Bay Oyster Stock Assessment, Monitoring and Management. Maryland Department of Natural Resources. Jan –Dec 2008. \$399,935 (Co-Principal Investigator, 2% time)

Probing the population structure of Atlantic menhaden (*Brevoortia tyrannus*) in the mid-Atlantic. National Oceanic and Atmospheric Administration - Chesapeake Bay Office. Oct. 2005 - Sept. 2008. \$125,549 (Yr 1; Co-Principal Investigator, 7% time).

A survey of the commercial blue crab effort in the Maryland portion of the Chesapeake Bay, 2009-2010. April 2009-March 2011. \$335,967. (Co-Principal Investigator, 7% Time).

Collaborative research: The influence of nursery area diversity and population structure on the population dynamics of marine fishes. National Science Foundation. May 2010 – April 2013. \$390,058. (Co-Principal Investigator, 7% Time).

CAMEO: Patterns of connectivity in northwest Atlantic fishery ecosystems. National Science Foundation. \$676,470. July 2010 – June 2013. (Co-Principal Investigator, 7% time).

3. Former

FishSmart: Enhancing the sustainability of recreational fisheries through improved management and angling practices. Betty and Gordon Moore Foundation. Jan. 2007 – August 2010. \$612,013. (Principal Investigator, 14% time).

Developing spatially-explicit assessment tools for eastern oyster in Chesapeake Bay. Maryland Department of Natural Resources. Jan 2008-December 2009 (Co-Principal Investigator, 7% Time).

Development of bioeconomic models for blue crabs in the Chesapeake Bay. Maryland Sea Grant. Feb. 2005 - Jan 2007. \$61,966. (Principal Investigator, 7% time).

Program Development Funds: Development of genetic tools for recruitment studies of striped bass. Maryland Sea Grant. Jan 2008 - Dec 2008. \$15,000.00. (PIs: Miller, T. J., A. Place, 0% time).

Do environmental conditions in nursery habitats contribute to a mismatch in (growth and) production of young Atlantic menhaden (*Brevoortia tyrannus*) and striped bass (*Morone saxatilis*). Atlantic States Marine Fisheries Commission. Oct. 2005 – May 2010. \$290,596 (Yr 1; Co-Principal Investigator, 7% time).

The impact of correlated recruitments in multispecies models. National Oceanic and Atmospheric Administration - Chesapeake Bay Office. June 2004 - May 2006. \$102,9457 (Principal Investigator, 7% time).

Development and implementation of the Chesapeake Bay fishery-independent multispecies fisheries survey. National Oceanic and Atmospheric Administration - Chesapeake Bay Office. Jan. 2001 - April 2006. \$1,183,754. (Lead Co-Principal Investigator, 7% time).

- Delaware estuary ecosystem reconstruction and enhancement. PSEG Services Corporation. Jan. 2004 - Feb 2006. \$211,371. (Principal Investigator, 3% time).
- Ecosystem variability and estuarine fisheries: a synthesis. National Oceanic and Atmospheric Administration - Coastal Ocean Program. Oct. 2002 - Sept. 2005. \$1,377,218. (Lead Co-Principal Investigator, 7% time).
- Chesapeake Ecotox Research Project: Quantifying ecological risks of contaminated sediments on living resources in supporting decisions on habitat restoration strategies in the Chesapeake Bay. National Oceanic and Atmospheric Administration. Jan. 2000 - Dec. 2005. \$2.5 M. (Co-Principal Investigator, 7% time).
- Graduate Fellowship: Geographic variation in the life history traits and population dynamics of western Atlantic skates. National Sea Grant Program. May 2001 - April 2005. \$95,000. (Principal Investigator, 7% time).
- Quantifying the status of terrapins in Maryland waters of Chesapeake Bay. Maryland Department on Natural Resources - Fisheries Service. April 2003 - Aug. 2004. \$59,830. (Co-Principal Investigator, 7% time).
- Fishery-independent multispecies assessment of Maryland fish populations: A case study in the Patuxent River. Maryland Department of Natural Resources. Sept. 2003 - Aug. 2004. \$97,967. (Principal Investigator, 7% time).
- Assessment of blue crab stock in the Chesapeake Bay. National Oceanic and Atmospheric Administration - Chesapeake Bay Office. Oct. 2003- Sept. 2004. \$187,577 (Lead Co-Principal Investigator, 7% time).
- Winter mortality of Chesapeake Bay blue crabs, *Callinectes sapidus*. Maryland Sea Grant. Feb. 2002 - July 2004. T. J. Miller and A. Hines. \$229,770.
- Spatially-explicit modeling of blue crabs to understand the role of critical habitat. National Sea Grant Office. November 2000 - September 2001. R. M. Lipcius, T. J. Miller et al. \$462,422.
- The spatial dynamics of blue crab in Chesapeake Bay. Maryland Sea Grant. T. J. Miller. Feb. 2000 - Jan. 2002. \$99,981.
- Recruitment mechanisms in yellow perch (*Perca flavescens*): Interactions among growth, condition and predation. University of Wisconsin Sea Grant. F. P. Binkowski, T. J. Miller and J. A. Rice. Feb. 2000 - Jan. 2002. 245,125.
- Individual growth and population dynamics of blue crab (*Callinectes sapidus*) in the Hudson River. Hudson River Foundation. T. J. Miller and D. A. Wright. Sept. 1998 - Aug. 2001. \$206,000.
- Developing blue crab targets. Chesapeake Bay Commission. T. J. Miller. October 2000-September 2001. \$17,350.
- Improvements to the stock assessment of Chesapeake Bay blue crab: implications of blue crab size-at-age. National Oceanic and Atmospheric Administration. T. J. Miller. Oct. 1999 - Sept. 2000. \$ 39,649.
- Design for a recreational fishing survey and mark-recapture study for the blue crab, (*Callinectes sapidus*), in Chesapeake Bay. NOAA Chesapeake Bay Stock Assessment Committee. T. J. Miller and M. J. Fogarty. Oct. 1998 - Mar 2000. \$157,411.
- Augmentation of Blue Crab Pilot Recreational Fishing Survey. Maryland Department of Natural Resources. T. J. Miller and M. J. Fogarty. Oct. 1999 - Jun. 2000. \$25,000.
- The spatial framework of natural resources management: sources, sinks and reserves. Maryland Sea Grant. T. J. Miller, M. J. Fogarty, and C. M. Jones. Jan. 1999 - Dec. 2000. \$3,000
- Design of a whole organism micro-respirometry system to enhance environmental toxicology studies in coastal ecosystems at the Chesapeake Biological Laboratory. National Science Foundation. K. R. Tenore and 7 PIs. Oct. 1999 - Sept. 2000. \$48,854
- Importance of vertical relief to use of oyster reefs by commercially and recreationally important fishes and blue crab. U. S. EPA - CBP. D. L. Breitburg and T. J. Miller. May 1998 - Sept. 1999. \$43,218.

- Recruitment mechanisms in yellow perch (*Perca flavescens*): Interactions among growth, condition and predation. University of Wisconsin Sea Grant. F. P. Binkowski, T. J. Miller and J. A. Rice. Feb. 1998 - Jan. 2000. 245,125.
- Design for a recreational fishing survey and mark-recapture study for the blue crab, *Callinectes sapidus*, in Chesapeake Bay. NOAA/NMFS. M. J. Fogarty and T. J. Miller. Oct. 1997 - Sept. 1998. \$34,833.
- Chesapeake Bay stock assessment committee: plans and priorities for research. National Oceanic and Atmospheric Administration. T. J. Miller. Jan. 1997 - Dec. 1997. \$14,985.
- Laboratory studies on the influence of small-scale turbulence on encounter and ingestion rates of planktonic predators. National Science Foundation. T. J. Miller, L. Sanford and V. S. Kennedy. Oct. 1996- Mar. 1998. \$49,495
- An assessment of the fishing activity around Poole's Island dredge material placement sites. Maryland Environmental Services. T. J. Miller. Oct. 1996 - Sept. 1997. \$20,688.
- Pre-disposal survey of fish community structure around Site 104. Maryland Environmental Services. T. J. Miller. Jul. 1996 - Oct. 1997. \$166,451.
- Fish community structure around Poole's Island dredge spoil placement sites. Maryland Environmental Services. T. J. Miller. May 1996 - Oct. 1997. \$56,956.
- Development of an outdoor seawater facility to increase research capabilities. National Science Foundation. K. T. Tenore and 7 co-PI's. Apr. 1996 - Mar. 1999. \$83,594.
- Chesapeake Bay fisheries: prospects for multispecies management and sustainability. United States Environmental Protection Agency - Chesapeake Bay Program Office Scientific and Technical Advisory Panel. E. D. Houde and T. J. Miller. May 1995- Dec. 1995. \$5,000.
- Blue crab target setting. U.S. Environmental Protection Agency. E. D. Houde, T. J. Miller and J. Volstad. May 1995 - Apr. 1998. \$73,300.
- On the size-dependent mechanisms regulating recruitment dynamics in fishes. Electric Power Research Institute/Sport Fishing Institute. T. J. Miller and L. B. Crowder. Jan. 1989 - Dec. 1990. \$29,908.
- Integrating factors controlling recruitment dynamics in fishes: A synthesis based on larval size. University of Wisconsin Sea Grant Program. F. P. Binkowski. Sept. 1988-Aug. 1992. \$154,775.
- The role of drag in controlling net site selection in net-spinning caddis larvae. Department of Zoology. North Carolina State University. T. J. Miller. Jul. 1986 - Jul. 1987. \$495.

D. Invited Seminars and Presentations

1. Seminars
 - FishSmart: A stakeholder-centered approach to recreational fisheries management. School of Public and Environmental Affairs, Indiana University. November 2010.
 - Blue crab studies at CBL: Continuity, collaboration and conservation. Chesapeake Biological Laboratory, University of Maryland Center for Environmental Science, Solomons, MD. September 2009.
 - FishSmart: A stakeholder-centered approach to recreational fisheries management. U.S. Environmental Protection Agency. NOAA. Silver Spring, MD. Apr 2009.
 - FishSmart: Empowering marine recreational anglers in management. U.S. Environmental Protection Agency. Ecosystem Services Research Program. Washington DC. Jan 2009.
 - Ecology of blue crab in Chesapeake Bay: If King Charles I had only known. McDaniel College, Westminster, MD. Feb 2008.
 - Scales of recruitment processes in fish: the role of physical processes. Center for Coastal Physical Oceanography. Old Dominion University, Norfolk, VA. March 2006.
 - Ecology of blue crab in Chesapeake Bay: If King Charles I had only known. Horn Point Laboratory, Cambridge, MD. Feb 2006.

- Ecology of blue crab in Chesapeake Bay: If King Charles I had only known. Department of Evolution, Ecology and Organismal Biology. Ohio State University, Columbus OH. May 2005.
- Ecology of blue crab in Chesapeake Bay: If King Charles I had only known. Chesapeake Biological Laboratory, Solomons, MD. Feb 2006.
- Ecosystem-based fishery management: Lessons and Needs. Department of Natural Sciences. University of Maryland-Eastern Shore, March 2005.
- Precautionary management of blue crab. Chesapeake Biological Laboratory. September 2002.
- Ecology and management of blue crab in Chesapeake Bay. St. Mary's College of Maryland. November 2001.
- Biophysical interactions in the feeding of young fish. Chesapeake Biological Laboratory. September 1999.
- Biophysical interactions in the feeding of young fish. Virginia Institute of Marine Sciences. Gloucester Point, VA. November 1998.
- Application of stage-based approaches to understanding the population dynamics of marine organisms. Virginia Institute of Marine Sciences. Gloucester Point, VA. November 1998.
- Does physics control feeding in young fish? Academy of Natural Sciences, Estuarine Research Laboratory. Benedict, MD. May 1998.
- The feeding ecology of larval fish. Department of Biology, Old Dominion University, Norfolk, VA. February 1998.
- The feeding ecology of larval fish. Department of Biology, Queen Mary and Westfield College, University of London, U. K. July 1997.
- Biology, physics and the ecology of fish larvae. Institut Maurice-Lamontagne, Department of Fisheries and Oceans, Canada. March 1997.
- From individuals to populations: unraveling recruitment mechanisms in Atlantic cod. Department of Biology. Horn Point Environmental Laboratory, University of Maryland. March 1996
- From individuals to populations: unraveling recruitment mechanisms in Atlantic cod. Department of Biology. St. Mary's College of Maryland. October 1995
- From individuals to populations: unraveling recruitment mechanisms in Atlantic cod. Department of Biology. Towson State University. October 1995.
- Unraveling recruitment in Atlantic cod: An OPEN perspective. Department of Biology, Queen's University, Kingston, Ont, Canada. March 1995.
- Variability during early life history of fish: A case study with Atlantic cod, (*Gadus morhua*). Chesapeake Biological Laboratory, University of Maryland. April. 1994.
- Linking individual variability and survival in larval fishes. Northwest Atlantic Fisheries Centre, Department of Fisheries and Oceans, St Johns, Newfoundland. January 1994.
- The feeding ecology of larval fishes. Department of Biological Sciences. University of Bristol. September 1993.
- The role of small-scale turbulence in regulating feeding during early life history of fishes. Department of Biology, McGill University. Montreal, PQ, Canada. September 1992.
- Size-based interactions between zooplankton and bloaters in Lake Michigan: Implications for year class strength. Department of Biology, McGill University. Montreal, PQ, Canada. Nov 1991.
- The role of body size in regulating feeding success in larval and juvenile fishes. Department of Zoology, North Carolina State University. Raleigh, N.C., Sept 1990.
- The role of current in net-site selection in net-spinning caddisflies. Department Entomology, North Carolina State University. Raleigh, N.C., Oct 1986.

2. Published Abstracts

- Gamble, R. J., J. S. Link, A. Buchheister, C. M. Martinez, J. S. Collie, M. G. Frisk, T. J. Miller, H. M. Townsend and R. Latour. Features and patterns within and across northeast US

- estuarine, coastal and oceanic ecosystems: an empirical analysis. American Fisheries Society Meeting, St. Paul, MN. Sept 2012.
- Karaköylü, E. and T. J. Miller. Impact and distribution of Atlantic menhaden spawning grounds on nursery recruitment patterns in the mid-Atlantic Bight. American Fisheries Society Meeting, St. Paul, MN. Sept 2012.
- Loewensteiner, D. A. and T. J. Miller. Patterns in structure and function of northwest Atlantic coastal shelf ecosystems. American Fisheries Society Meeting, St. Paul, MN. Sept 2012.
- Martinez, C. M., D. E. Duplisea, V. M. Trenkel, T. J. Miller and M. G. Frisk. Environmental and anthropogenic factors affecting community structure within and among northwest Atlantic ecosystems. American Fisheries Society Meeting, St. Paul, MN. Sept 2012.
- Miller, T. J., D. A. Loewensteiner and A. R. Colton. Spatial dynamics among fishery ecosystems in the northwest Atlantic coastal shelf (NWACS) large marine ecosystem. American Fisheries Society Meeting, St. Paul, MN. Sept 2012.
- Peer, A. C. T. J. Miller, A. Place and E. P. Miller. Tracking maternal influences in the field: does selection on maternal phenotype exist in a pelagic spawning fish. American Fisheries Society Meeting, St. Paul, MN. Sept 2012.
- Rains, S., M. J. Wilberg, T. J. Miller and J. L. Humphrey. Latitudinal trends in sex ratio and sperm counts of blue crabs in the Chesapeake Bay. American Fisheries Society Meeting, St. Paul, MN. Sept 2012.
- Sagarese, S., M. G. Frisk, T. J. Miller, K. K. Sosebee and P. Rago. Influence of environment and spatial variables on the habitat selection of spiny dogfish: implications for understanding the species life history strategy and management in the northwest Atlantic. American Fisheries Society Meeting, St. Paul, MN. Sept 2012.
- Wilberg, M. J., A. Buchheister, R. Latour and T. J. Miller. Effects of predation refugia on the sustainability of linked predator-prey fisheries. American Fisheries Society Meeting, St. Paul, MN. Sept 2012.
- Zaveta, D. R. and T. J. Miller. Estimating uncertainty in stock management reference points for Chesapeake Bay blue crabs. American Fisheries Society Meeting, St. Paul, MN. Sept 2012.
- Wilberg, M. J., A. Buchheister, R. L. Latour and T. J. Miller. Effects of predation refugia on the sustainability of linked predator-prey fisheries. World Fisheries Congress, Edinburgh, UK. May 2012.
- Colton, A. R. and T. J. Miller. An evaluation of the synchronization in the dynamics of blue crab populations along the Atlantic coast using landings and survey data. American Fisheries Society. Seattle, WA. Sept 2011.
- Loewensteiner, D. A., M. J. Wilberg and T. J. Miller. A model for predicting commercial fishing effort for blue crab in Chesapeake Bay tributaries. American Fisheries Society. Seattle, WA. Sept 2011.
- Lucey, S. M., R. J. Gamble, T. J. Miller, W. T. Stockhausen, J. L. Boldt, D. O. Hjermann, J. S. Link. Comparison of surplus production estimates with and without environmental and ecological co-variables: Patterns for functionally aggregated groups across 11 large marine ecosystems in the northern hemisphere. American Fisheries Society. Seattle, WA. Sept 2011.
- Martinez, C., M. G. Frisk, D. E. Duplisea, V. M. Trenkel and T. J. Miller. Temporal and spatial patterns of interspecific abundance-occupancy relationships across western Atlantic fishery ecosystems. American Fisheries Society. Seattle, WA. Sept 2011.
- Mehaffie, N. C., J. S. Link and T. J. Miller. Quantification of the contribution of diadromous species to the diets of marine predators in the Gulf of Maine. American Fisheries Society. Seattle, WA. Sept 2011.
- Miller, T. J., S. M. Lucey, R. J. Gamble, H. Liu, W. T. Stockhausen, M. Koen-Alonso, J. S. Link. Comparison of surplus production estimates with and without environmental and ecological co-variables: Patterns for functionally analogous species across 11 large marine ecosystems in the northern hemisphere. American Fisheries Society. Seattle, WA. Sept 2011.

- Peer, A. C. and T. J. Miller. Interannual variation in female reproductive energetics: the importance of energy reserves on Chesapeake Bay striped bass reproductive potential. American Fisheries Society. Seattle, WA. Sept 2011.
- Stockhausen, W. T., T. J. Miller, M. Koen-Alonso, S. M. Lucey, R. J. Gamble, J.S. Link. Taking the final step: Can a full multispecies production model tell us anything a single-species model with covariates can't? American Fisheries Society. Seattle, WA. Sept 2011.
- Ciotti, B. J., T. E. Targett and T. J. Miller. Growth limitation of juvenile fish in shallow habitats in late summer. Larval Fish Conference, Wilmington, NC. May 2011.
- Peer, A. C. and T. J. Miller. Interannual variation in female reproductive energetics: the importance of energy reserves on Chesapeake Bay striped bass reproductive potential. . Larval Fish Conference, Wilmington, NC. May 2011.
- Lane, H., A. Michaelis, V. Politano, S. T. Alexander, E. Vlahovich, H. Koopman, D. Meritt, T. J. Miller and K. T. Paynter. Having an egg-ceptional time: modeling overall fecundity in *Crassostrea virginica* females from the Chesapeake Bay using both egg quantity, lipid content and fatty acid composition. National Shellfish Association. Baltimore, MD. March 2011.
- Colton, A. R., and T. J. Miller. An evaluation of the synchronization in the dynamics of blue crab populations in the western Atlantic using fishery dependent data. Tidewater Section of the American Fisheries Society. Gloucester Point, VA. February 2011.
- Megrey, B. A., J. S. Link, T. J. Miller, T. E. Essington, R. I. Perry, A. Bundy, K. F. Drinkwater and E. Moksness. Can production models be used as a tool to examine factors that influence productivity in marine ecosystems. PICES Annual Science Meeting. Portland, OR. Oct. 2010.
- Megrey, B. A., J. S. Link, T. J. Miller, T. E. Essington, R. I. Perry, A. Bundy, K. F. Drinkwater and E. Moksness. Using production models as a tool to support EBFM: A comparative analysis of indicators among 11 northern hemisphere ecosystems. Wakefield Symposium. Anchorage, AK. Nov 2010.
- Link, J. S., B. A. Megrey, T. J. Miller, T. E. Essington, R. I. Perry, A. Bundy, E. Moksness and K. F. Drinkwater. Application of production models as a tool to determine what factors influence fisheries productivity within and between ocean basins: A comparative analysis. Integrated Marine Biogeochemistry and Ecosystem Research Conference. Crete, Greece. October 2010.
- Megrey, B. A., J. S. Link, T. J. Miller, T. E. Essington, R. I. Perry, A. Bundy, E. Moksness and K. F. Drinkwater. Using production models as a tool to examine factors that influence productivity of marine systems: a comparative analysis among 10 northern hemisphere ecosystems. ICES Annual Science Meeting. Nantes, France. Sept 2010.
- Megrey, B. A., J. S. Link, T. J. Miller, T. E. Essington, R. I. Perry, A. Bundy, K. F. Drinkwater and E. Moksness. A comparative analysis of 11 northern hemisphere ecosystems: Quantifying differences in productivity. Ecosystems of the Subarctic Seas Annual Science Meeting. Reykjavick, Iceland. Sept 2010.
- Berkson, J., L. Barbieri, S. Cadrin, S. Cass-Calay, A. Cooper, P. Crone, M. Dorn, C. Friess, D. Kobayashi, T. Miller, W. Patrick, S. Pautzke, S. Ralston, and M. Trianni. Guidance on setting ABC's when only average catch is known. American Fisheries Society. Pittsburgh, PA, Sept 2010.
- Peer, A. C., T. J. Miller, and M. Selckmann. 2010. Interannual variation in female reproductive energetics: The importance of energy reserves on Chesapeake Bay striped bass reproductive potential. American Fisheries Society. Pittsburgh, PA, Sept 2010.
- Peer, A. C. and T. J. Miller. The importance and consequences of maternal energetic condition on larval growth and survival in two Atlantic coast striped bass populations. American Fisheries Society. Pittsburgh, PA, Sept 2010.
- Colton, A and T. J. Miller. Coherence in abundance of the blue crab populations along the Atlantic coast. American Fisheries Society. Pittsburgh, PA, Sept 2010.

- Schaffler, J. J., C. M. Jones and T. J. Miller. Nursery wide contribution of the coastwide Atlantic menhaden population. American Fisheries Society. Pittsburgh, PA, Sept 2010.
- Williams, E., A. Place, A. Peer, T. J. Miller and D. H. Secor. Genotyping mismatches between generations of striped bass due to mitochondrial heteroplasmy. American Fisheries Society. Pittsburgh, PA, Sept 2010.
- Berkson, J., L. Barbieri, S. X. Cadrin, S. Cass-Calay, A. Cooper, P. Crone, M. Dorn, C. Friess, D. Kobayashi, T. J. Miller, S. Pautzke, S. Ralston, M. Trianni. Setting allowable biological catch for stocks with reliable catch data only. National Stock Assessment Workshop. New Orleans, LA, April 2010.
- Ihde, T. F., T. J. Miller, M. J. Wilberg and D. H. Secor. Project FishSmart: Harnessing the knowledge and insights of fisheries stakeholders through a model-informed decision making process. End-to-End Modeling Workshop. Woods Hole, MA April 2010.
- Wilberg, M. J., T. F. Ihde, D. H. Secor and T. J. Miller. FishSmart: a stakeholder-centered approach to improve fisheries conservation and management. ICES Annual Science Conference. Berlin, Germany. Sept 2009.
- Peer, A., and T. J. Miller. The importance and consequences of striped bass maternal condition on reproductive potential. American Fisheries Society. Nashville, TN, Sept 2009.
- Ihde, T. F., M. J. Wilberg, D. H. Secor and T. J. Miller. Project FishSmart: complementing fisheries management with the knowledge, insights and preferences of informed fishery stakeholders: results & lessons learned. American Fisheries Society. Nashville, TN, Sept 2009.
- Miller, T. J. Tools and Expectations: Bridging the divide from single-species to ecosystem-based approaches to management. Keynote Address. NEMow II. Annapolis, MD. August 2009.
- Ihde, T. F., M. J. Wilberg, D. H. Secor and T. J. Miller. Project FishSmart: Harnessing the knowledge and insight of fishery stakeholders. 5th World Recreational Fishing Conference. Dania Beach, FL. Nov. 2008.
- Wilberg, M. J., T. F. Ihde, T. J. Miller and D. H. Secor. Enhancing sustainability in marine recreational fisheries: A stakeholder driven process for evaluating angling practices and management options for king mackerel in the U.S. ICES Annual Science Conference. Halifax, NS Canada. Sept 2008.
- Edwards, J. E. and T. J. Miller. An RNA:DNA-based index for estimating growth rate in juvenile Atlantic menhaden. American Fisheries Society. Ottawa, Ontario. Aug. 2008.
- Sosebee, K, M. G. Frisk, T. J. Miller and J. A. Musick. Adult, juvenile and neonate habitat preferences of spiny dogfish, *Squalus acanthias*: density, temperature and neonate range expansion in the western Atlantic. American Fisheries Society. Ottawa, Ontario. Aug. 2008.
- Alade, L., S. X. Cadrin, T. J. Miller and E. B. May. A simulation-based approach for assessing the performance of a yellowtail flounder (*Limanda ferruginea*) movement-mortality model. American Fisheries Society. Ottawa, Ontario. Aug. 2008.
- Ihde, T. F., T. J. Miller, D. H. Secor and M. J. Wilberg. Comparative dynamics of commercial and recreational sectors of marine fisheries. American Fisheries Society. Ottawa, Ontario. Aug. 2008.
- Nye, J. A. and T. J. Miller. Variability in the diet of Atlantic croaker and its consequences to the Chesapeake Bay fisheries ecosystem. American Fisheries Society. Ottawa, Ontario. Aug. 2008.
- Peer, A. and T. J. Miller. The importance and consequences of striped bass maternal condition on reproductive potential. American Fisheries Society. Ottawa, Ontario. Aug. 2008.
- Ihde, T. F., T. J. Miller, M. Nussman, D. H. Secor and M. J. Wilberg. Project FishSmart: Harnessing the knowledge and insights of fishery stakeholders. American Fisheries Society. Ottawa, Ontario. Aug. 2008.
- Edwards, J. E. and T. J. Miller. Estimation of temporal response (latency) of RNA:DNA ratio to changes in the feeding regime of juvenile Atlantic menhaden. American Fisheries Society. San Francisco, CA. Sept. 2007.

- Alade, L. S. X. Cadrin, T. J. Miller and E. B. May. A simulation approach to evaluating the yellowtail flounder movement-mortality model. American Fisheries Society. San Francisco, CA. Sept. 2007.
- Miller, T. J. Recruitment processes in an ecosystem framework. Keynote Address. International Conference on Ecosystem Dynamics in the Norwegian Sea and Barents Seas. Tromso, Norway. March 2007
- Miller, T. J. Contribution of individual-based, coupled physical-biological models to understanding fish recruitment. Plenary address - Larval Fish Conference, Lake Placid. NY September 2006.
- Miller, T. J. Status and trends of blue crabs in Chesapeake Bay. American Fisheries Society, Lake Placid. NY September 2006.
- Nye, J. A. and T. J. Miller. Application of a bioenergetic model of Atlantic croaker in Chesapeake Bay. American Fisheries Society, Lake Placid. NY September 2006.
- Peer, A., and T. J. Miller. The utility of mitochondrial DNA markers to quantify the role of maternal effects on recruitment in the field. American Fisheries Society, Lake Placid. NY September 2006.
- Alade, L., S. X Cadrin and T. J. Miller. Performance of a movement mortality model on simulated Yellowtail flounder data. American Fisheries Society, Lake Placid. NY September 2006.
- Miller, T. J. Contributions of coupled physical biological models to understanding fish recruitment: a review and prognosis. Workshop on Advancements in Modelling Physical-Biological Interactions in fish Early-Life History: Recommended Practices and Future Directions. Nantes, France April 2006.
- Ostrowski, A. and T. J. Miller. The effects of food availability on the RNA:DNA ratio of juvenile Atlantic menhaden (*Brevoortia tyrannus*) in the Patuxent River system. American Society of Limnology and Oceanography Meeting. Honolulu, HI, February 2006.
- Bunnell, D. B. and T. J. Miller. An individual-based modeling approach for blue crab in Chesapeake Bay: merging economics with biology. All-USGS Modeling Conference. Port Angeles, WA. November 2005.
- Bauer, L. and T. J. Miller. Integrating the effects of sediment and temperature in models of blue crab overwintering mortality. American Fisheries Society Meeting. Anchorage, AK, Sept. 2005.
- Caldarone, E. M., C. M. Clemmesen, T. J. Miller, A. Folkvord, E. Derdalet, G. J. Holt and I. M. Suthers. Intercalibration of four spectrofluorometric methods for measuring RNA-DNA ratios in larval and juvenile fish. American Fisheries Society Meeting. Anchorage, AK, Sept. 2005.
- Davis, D. D., and T. J. Miller. Effects of maternal contaminant exposure to sediment and food on the larval mummichog, *Fundulus heteroclitus*. American Fisheries Society Meeting. Anchorage, AK, Sept. 2005.
- Frisk, M. G. and T. J. Miller. An age-structured model of winter skate abundance in the western Atlantic: Sustainability and uncertainty. American Fisheries Society Meeting. Anchorage, AK, Sept. 2005.
- Miller, T. J., and S. J. D. Martell. Development and application of a catch-multiple survey model to assess the blue crab in Chesapeake Bay. (Invited paper). American Fisheries Society Meeting. Anchorage, AK, Sept. 2005.
- Nye, J. A. and T. J. Miller. Evaluation and application of a bioenergetic model of Atlantic croaker, *Micropogonias undulatus*, in Chesapeake Bay. American Fisheries Society Meeting. Anchorage, AK, Sept. 2005.
- Nye, J. A., D. L. Loewensteiner and T. J. Miller. Biotic and abiotic factors influencing the distribution and diet of Atlantic croaker in Chesapeake Bay. American Fisheries Society Meeting. Anchorage, AK, Sept. 2005.

- Peer, A., and T. J. Miller. Incorporating climate-induced correlated recruitments in coupled age-structured models: a case study in the Chesapeake Bay. American Fisheries Society Meeting. Anchorage, AK, Sept. 2005.
- Caldarone, E. M., C. M. Clemmesen, T. J. Miller, A. Folkvord, E. Derdalet, G. J. Holt and I. M. Suthers. Intercalibration of four spectrofluorometric methods for measuring RNA-DNA ratios in larval and juvenile fish. Annual Larval Fish Conference. Barcelona, Spain. July 2005.
- Miller, T. J. Lessons from studies of blue crab population dynamics in Chesapeake Bay: assessments and theory. (Invited paper). Benthic Ecology Meeting. Williamsburg, VA. April 2005
- Kuzmick, D. M., C. L. Rowe, T. J. Miller and W. A. Hopkins. Effect of solid coal combustion residue on grass shrimp population dynamics. Society for Environmental Toxicology and Chemistry. Portland, OR. November 2004.
- Bauer, L. and T. J. Miller. Winter mortality of the blue crab (*Callinectes sapidus*) in the Chesapeake Bay. American Fisheries Society Meeting. Madison, WI. August 2004.
- Curti, K. L. and T. J. Miller. Patterns in the distribution, size and age structure of the hogchoker, *Trinectes maculatus*, in the Chesapeake Bay. American Fisheries Society Meeting. Madison, WI. August 2004.
- Davis, D. D. and T. J. Miller. Contamination and the population dynamics of the mummichog, *Fundulus heteroclitus*. American Fisheries Society Meeting. Madison, WI. August 2004.
- Frisk, M. G. and T. J. Miller. Age and growth of little skate *Leucoraja erinacea* and winter skate *Leucoraja ocellata* in the western Atlantic from Cape Hatteras to the Gulf of Maine. American Fisheries Society Meeting. Madison, WI. August 2004.
- Nye, J. A. and T. J. Miller. Interspecific interactions between Atlantic croaker (*Micropogonias undulatus*) and weakfish (*Cynoscion regalis*) in Chesapeake Bay. American Fisheries Society Meeting. Madison, WI. August 2004.
- Curti, K. L., and T. J. Miller. Patterns in the abundance, size structure and distribution of the hogchoker, *Trinectes maculatus*, in the Chesapeake Bay, USA. Annual Meeting of the Tidewater Section of the American Fisheries Society Meeting. Salisbury, MD. Jan. 2004.
- Nye, J. A., T. J. Miller and D. D. Davis. Maternal effects in *Fundulus heteroclitus* larvae exposed to contaminated sediment. Larval Fish Conference, Santa Cruz, CA. August 2003.
- Curti, K. L., T. J. Miller and E. D. Houde. Patterns in the abundance, size structure and distribution of the hogchoker, *Trinectes maculatus*, in the Chesapeake Bay, USA. American Fisheries Society Meeting, Quebec Cité, PQ, Canada. August 2003.
- Davis, D. D., and T. J. Miller. Population level effects of contaminated sediments on an estuarine fish, *Fundulus heteroclitus*. American Fisheries Society Meeting, Quebec Cité, PQ, Canada. August 2003.
- Frisk, M. G. and T. J. Miller. Annual fecundity and the reproductive biology of little skate *Leucoraja erinacea* and winter skate *L. ocellata* in the western Atlantic from Cape Hatteras to the Gulf of Maine. American Fisheries Society Meeting, Quebec Cité, PQ, Canada. August 2003.
- Jensen, O.P., R. Seppelt, and T. J. Miller. A two-stage generalized additive model (GAM) for Chesapeake Bay blue crab winter habitat. American Fisheries Society Meeting, Quebec Cité, PQ, Canada. August 2003.
- Vanisko, J. M. and T. J. Miller. Modeling individual eastern oysters (*Crassostrea virginica*) growth in Chesapeake Bay. American Fisheries Society Meeting, Quebec Cité, PQ, Canada. August 2003.
- Volstad, J. H., M. C. Christman and T. J. Miller. Comparison And combination of spatially-overlapping transect and stratified random surveys of finfish abundance in the Chesapeake Bay. American Fisheries Society Meeting, Quebec Cité, PQ, Canada. August 2003.

- Jensen, O. P. R. Seppelt and T. J. Miller. A two-stage generalized additive model (GAM) for Chesapeake Bay blue crab winter habitat. Crustacean Society Meeting, Williamsburg, VA. May 2003.
- Jensen, O. P. and T. J. Miller. Distribution, abundance, and density-dependent habitat use of Chesapeake Bay blue crab. Crustacean Society Meeting, Williamsburg, VA. May 2003.
- Vanisko, J. M. and T. J. Miller. Modeling individual eastern oysters (*Crassostrea virginica*) growth in Chesapeake Bay. National Shellfish Association Meeting. New Orleans, LA, April 2003.
- Frisk, M. G., N. K. Dulvy and T. J. Miller. Combining elasticity analyses and life history traits of elasmobranchs as indicators of vulnerability to exploitation. North Atlantic Fisheries Organization. Santiago de Compostela, Spain. Sept 2002.
- Jensen, O. P., G. Moglen, M. Christman and T. J. Miller. Application of Geostatistics to for Estimating Stock Size in Estuaries: A Non-Euclidean Approach to Variogram Calculation and Kriging. 2nd International Conference on GIS and Fisheries. Brighton, UK. September 2002.
- Christman, M. C., K. Donaldson and T. J. Miller. Spatial distribution of biodiversity of juvenile finfish. American Fisheries Society, Baltimore, MD August 2002.
- Jensen, O. P. and T. J. Miller. Geostatistical analysis of blue crab. American Fisheries Society, Baltimore, MD August 2002.
- Heyer, C. J. and T. J. Miller. Factors affecting nutritional condition in larval fish. American Fisheries Society, Baltimore, MD August 2002.
- Dower, J. F., and T. J. Miller. Waking up in an inertial world: Linking small-scale physics and metamorphosis in larval fish. (Invited paper). American Society for Limnology and Oceanography, Victoria, BC. June 2002.
- Salice, C. J., R. Roesijadi and T. J. Miller. Cadmium Adaptation and Costs of Adaptation in Two Strains of the Freshwater Gastropod, *Biomphalaria glabrata*. Society of Environmental Toxicology and Chemistry. Baltimore, MD, November, 2001.
- Caceres, V. and T. J. Miller. The Impact of small-scale turbulence on the swimming behavior of larval fishes. 25th Annual Larval Fish Conference. Sandy Hook, NJ. August 2001.
- Caceres, V. and T. J. Miller. The role of small scale turbulence in the feeding ecology of fish larvae. 24th Annual Larval Fish Conference, Gulf Shores, AL. November 2000.
- Miller, T. J. Understanding the role of spatial-explicit life histories in blue crab population dynamics. International Symposium on Blue Crabs. Wilmington, NC March 2000.
- Brylawski, B. J., and T. J. Miller. A flexible approach to the bioenergetic modeling of the Chesapeake Bay Blue Crab (*Callinectes sapidus*). International Symposium on Blue Crabs. Wilmington, NC March 2000.
- Salice, C.J., T. J. Miller, and G. Roesijadi. Ecological consequences of long-term Cd exposure in parasite susceptible and resistant strains of the freshwater gastropod, *Biomphalaria glabrata*. Society of Environmental Toxicology and Chemistry. Philadelphia, PA., October, 1999.
- Heyer, C. J., T. J. Miller, J. A. Rice and F. P. Binkowski. The influence of maternal effects on the recruitment dynamics of Lake Michigan yellow perch (*Perca flavescens*). American Fisheries Society. Charlotte, NC. Sept 1999.
- Heyer, C. J. and T. J. Miller. The effect of maternal condition on the performance and condition of larval yellow perch (*Perca flavescens*). 23rd Annual Larval Fish Conference. Beaufort, NC. April 1999.
- Ginn, J.A., T. J. Miller and L. P. Sanford. Effects of small-scale turbulence on ingestion rates and swimming speed of *Mnemiopsis leidy*. American Society for Oceanography and Limnology. Santa Fe, NM. Feb. 1999.
- Miller, T. J. and J. F. Dower. Biological-physical interactions in the feeding ecology of larval fish. American Society for Oceanography and Limnology. Santa Fe, NM. Feb. 1999.
- Dower, J. F, T. J. Miller and F. Juanes. Biophysical coupling in the feeding ecology of larval fish. Canadian Conference for Fisheries Research. University of Edmonton, Edmonton, Alberta. Jan 1999.

- Breitburg, D. and T. J. Miller. Are oyster reefs essential fish habitat? Use of oyster reefs by ecologically and commercially important species. (Invited paper). International Conference on Shellfish Restoration. Hilton Head, SC. Nov. 1998
- Miller, T. J., J. F. Dower and F. Juanes. Biological-physical interactions in the feeding ecology of young fish. 22nd Annual Larval Fish Conference. University of Michigan, Ann Arbor, MI. July 1998.
- Brewster-Geisz, K. K. and T. J. Miller. A comparison of a stage-based model and a yield per recruit model of the sandbar shark (*Carcharhinus plumbeus*). Annual Meeting of the American Elasmobranch Society and the American Society of Ichthyologists and Herpetologists. Guelph, Ont, Canada. July 1998
- Miller, T. J., F. Juanes and J. Dower. Prey selection in young fishes: selecting fact from fiction. ICES Recruitment Symposium. Baltimore, MD. Sept 1997.
- Miller, T. J., F. Juanes and J. Dower. Prey selection in young fishes: selecting fact from fiction. Fisheries Society of the British Isles Annual International Symposium. Galway Ireland, July 1997.
- Brewster-Geisz, K. K., and T. J. Miller. The application of a stage-based model to the sandbar shark (*Carcharhinus plumbeus*): Implications for management. American Society of Ichthyologists and Herpetologists. Seattle, WA. June 1997.
- Miller, T. J. and J. Dower. Small-scale turbulence and planktonic predators: An overview of hypotheses. (Invited paper). American Society for Limnology and Oceanography. Santa Fe, NM. February 1997.
- Miller, T. J., T. Herra and W. C. Leggett. Phenotypic selection in cohorts of cod larvae *Gadus morhua* in different spawning seasons and its implications for survival. 20th Annual Larval Fish Conference. New Orleans, LA. June 1996.
- Herra, T., T. J. Miller and W. C. Leggett. Somatic and otolith growth of cod larvae (*Gadus morhua*) in different spawning seasons, and its implications for survival. Canadian Conference for Fisheries Research. Montreal, Quebec, Canada. January 1996.
- Leggett, W. C., J. F. Dower and T. J. Miller. Turbulence enhanced feeding in larval fishes: Dare we assume population level effects. (Invited Keynote Address). International Conference on Fish Early Life History. Sydney, Australia. June 1995.
- Miller, T. J. The utility of individual-based models of fish populations. (Invited paper) Southeast Region Oceanographic Research Conference. Seabrook Island, South Carolina, USA. November 1994.
- Miller, T. J., T. Herra, W. C. Leggett and D. F. Bertram. Inferring size-selective processes from back-calculated data. (Invited paper). American Fisheries Society, Halifax, Nova Scotia, Canada. August 1994.
- Miller, T. J. Inferring selective processes in fish early life history from empirical observations. 18th Annual Larval Fish Conference. St Andrews, New Brunswick, Canada. June 1994.
- Miller, T. J., and eleven others. From individuals to cohorts - from aquaria to oceans. An overview of results from the OPEN cod recruitment programme. (Invited paper). American Fisheries Society, Portland, Oregon, USA. August 1993.
- MacKenzie, B. R., T. J. Miller, W. C. Leggett and S. Cyr. The influence of small-scale turbulence on the ingestion rate of larval fish. International Conference for the Exploration of the Seas Conference on Cod and Climate Change, Reykjavik, Iceland. August 1993.
- Miller, T. J., T. Herra and W. C. Leggett. Phenotypic variability in cod (*Gadus morhua*) eggs and larvae on the Scotian Shelf. The Fisheries Society of the British Isles Annual Symposium. Conwy, Wales. July 1993.
- Miller, T. J., B. R. MacKenzie, W. C. Leggett and S. Cyr. The influence of small-scale turbulence on the ingestion rate of larval fish. 17th Annual Larval Fish Conference. Austin, Texas, USA. May 1993.
- Chambers, R.C and T. J. Miller. Statistical analysis of reconstructed life histories from otoliths: Special properties of longitudinal data. Fish Otolith Research and Application Symposium. Hilton Head, South Carolina, USA. January 1993.

- Chaumillon, G., L. J. Natanson, L. Fortier, C. Quinonez-Velazquez, and T. J. Miller. Early growth of yellowtail flounder, *Limanda ferruginea*, on the Scotian Shelf. Fish Otolith Research and Application Symposium. Hilton Head, South Carolina, USA. January 1993.
- Landry, F. P., T. J. Miller and W. C. Leggett. The effects of micro-scale turbulence on the ingestion rate of fathead minnow (*Pimphales promelas*) larvae. Canadian Conference for Fisheries Research. Peterborough, Ontario, Canada. January 1993.
- Crowder, L. B., J. A. Rice and T. J. Miller. Size-dependence and the importance of individual variability in size and growth of larval fishes: Implications for recruitment and characteristics of survivors. (Invited Paper). Ecological Society of America, Honolulu, Hawaii, USA. August 1992.
- Miller, T. J., T. Herra and W. C. Leggett. Distribution and characteristics of individual cod (*Gadus morhua*) larvae on the Scotian Shelf. 16th Annual Larval Fish Conference. University of Rhode Island, Kingston, Rhode Island, USA. June 1992.
- McClatchie, S., G. L. Maillet, T. J. Miller, T. Herra, C. T. Taggart, K. T. Frank and W. C. Leggett. Variability of lipid and morphometric condition indices of larval cod (*Gadus morhua*) forced by feeding regime in the laboratory. Canadian Meteorological and Oceanographic Society. Quebec City, Quebec, Canada. June 1992.
- McClatchie, S., G. L. Maillet, T. J. Miller, T. Herra, C. T. Taggart, K. T. Frank and W. C. Leggett. Variability of lipid and morphometric condition indices of individual cod larvae (*Gadus morhua*). Canadian Society of Zoology Conference. Antigonish, New Brunswick, Canada. May 1992.
- Miller, T. J., L. B. Crowder and J. A. Rice. Implications of individual variability on year class strength and characteristics of survivors. (Invited Paper). Canadian Conf. Fisheries Research. Halifax, Nova Scotia, Canada. Jan 1992.
- Miller, T. J. The importance of non-random foraging in individual-based models of feeding in larval and juvenile fishes. (Invited Paper). American Fisheries Society. San Antonio, Texas, USA. Sept 1991.
- Miller, T. J. Does visual ability limit early feeding in larval fish? 15th Annual Larval Fish Conference. Los Angeles, California, USA. June 1991.
- Miller, T. J. and L. B. Crowder. Size-based differences in foraging ability in young fish and its implications for recruitment. (Invited Paper). American Fisheries Society. Pittsburgh, Pennsylvania, USA. Sept. 1990.
- Rice, J. A. and T. J. Miller. Implications of hatching size for survival in a size-dependent world. American Fisheries Society. Pittsburgh, Pennsylvania, USA. Sept. 1990.
- Miller, T. J., J. A. Rice and L. B. Crowder. Effects of fish hatching size and predator size on cohort survival and the characteristics of survivors. Ecological Society of America. Snowbird, Utah, USA. August 1990.
- Crowder, L. B., J. A. Rice, T. J. Miller, and E. A. Marschall. Empirical and theoretical approaches to size-based interactions, with emphasis on recruitment. (Invited Paper). Workshop on Populations, Communities and Ecosystems: An Individual Perspective. Knoxville, Tennessee, USA. May 1990.
- Crowder, L. B., T. J. Miller and J. A. Rice. Size-based models of larval fish recruitment : some fish are more equal than others. Fisheries Oceanography Modelling Workshop, Fisheries Oceanography Coordinated Investigations Program. Seattle, Washington, USA. Feb 1990.
- Rice, J. A., D. E. DeAngelis, T. J. Miller, K. A. Rose, A. S. Trebitz and L. B. Crowder. Growth rate variation and larval survival: Implications of a size-dependent model. American Fisheries Society. Anchorage, Alaska, USA. Sept 1989.
- Miller, T. J., L. B. Crowder, J. A. Rice and E. A. Marschall. Larval size and recruitment mechanisms. ICES Symposium on the Early Life History of Fish. Bergen, Norway. Oct 1988.

- Miller, T. J., L. B. Crowder and F. P. Binkowski. Zooplankton size and the development of size selectivity as factors in regulating recruitment in bloaters. 12th Annual Larval Fish Conference. Ann Arbor, Michigan, USA. May 1988.
- Miller, T. J. and S. E. Yeo. Zooplankton size and growth in bloaters. 49th Midwest Fish and Wildlife Conference. Milwaukee, Wisconsin, USA. Dec 1987.
- Crowder, L. B., J. A. Rice, E. A. Marschall and T. J. Miller. Larval Size and recruitment constraints in pelagic fishes: larval bloaters don't fit the northern anchovy model. (Invited Paper). 10th Annual Larval Fish Conference. Miami, Florida, USA. May 1986.
- Miller, T. J. The role of net site selection and current velocity in the selection of net sites in Hydropsychoidea. Southeastern Mathematical Ecology Conference. Raleigh, North Carolina, USA. March 1986.

E. Symposia Organized/Chaired for Professional Meetings

- Crustaceans fisheries and assessment. American Fisheries Society. Anchorage AK Sept. 2005
- Larval growth, feeding and recruitment in relation to patterns and activity in plankton communities. ICES Annual Science Conference, Vigo, Spain. Sept. 2004.
- Small-scale biophysical coupling in plankton ecology . American Society of Limnology and Oceanography. Victoria, British Columbia, Canada. June 2002.
- Physics and biology of plankton feeding ecology. American Society of Limnology and Oceanography. Santa Fe, NM. February 1999.
- Turbulence and biological-physical interactions. American Society of Limnology and Oceanography, Santa Fe, NM. February 1997.
- Process dynamics in the early life history of fishes. 124th Annual Meeting of the American Fisheries Society. Halifax, Nova Scotia. August 1994.

F. Active Membership in Professional Societies

- Ecological Society of America
- British Ecological Society
- American Fisheries Society - Early Life History Section

V. Teaching and Training

- 1995 - 1997 UMCES Graduate Faculty
- 1997 - present Member, USM Inter-Institutional Graduate Faculty

A. University System of Maryland Courses Taught (1999- present)

Course No.	Title	Institution	Semester	Enrollment	Credit Hrs.	Co-Instructors	No. Lectures
MEES 608V	Experimental Ecology	UMCP	Spring 1999	10	1	Tenore/Ulanowicz	14 - discussion course
MEES 631	Fish Ecology	UMCP	Fall 1999	23	3	Secor	14
MEES 608C	Multispecies Fisheries Management	UMCP	Fall 1999	10	1	Secor	14 - discussion course
MEES 621	Biological Oceanography	UMCP	Spring 2000	Unknown	4	Hood et al.	4
MEES 608V	Philosophy of Ecology	UMCP	Spring 2000	13	1	Ulanowicz/Boynton	14 - discussion course
MEES 698C	Bioenergetics and Population Dynamics	UMCP	Fall 2000	12	3	Rowe	14
MEES 608C	Ecosystem Management	UMCP	Spring 2001	Unknown	1	Houde/Secor/Hamilton/Mihursky	14 - discussion course
MEE S699	Special Topics - Dynamics	UMCP	Spring 2001	6	3	—	14

Course No.	Title	Institution	Semester	Enrollment	Credit Hrs.	Co-Instructors	No. Lectures
	of exploited marine resources						
MEES 621	Biological Oceanography	UMCP	Spring 2001	Unknown	4	Hood et al.	4
MEES 631	Fish Ecology	UMCP	Fall 2001	17	3	Secor	14
MEES 608C	Fish Conservation	UMCP	Fall 2001	Unknown	1	Secor	6
MEES 621	Biological Oceanography	UMCP	Spring 2002	Unknown	4	Hood et al.	4
MEES 608C	Spatial aspects of fisheries science	UMCP	Fall 2002	13	1	---	14
MEES 698C	Bioenergetics and Population Dynamics	UMCP	Fall 2002	14	3	Rowe	8
MEES 698B	Dynamics of Exploited Marine Populations	UMCP	Spring 2003	8	3	●	24
MEES 634	Bioenergetics and Population Dynamics	UMCP	Fall 2003	6	3	Rowe	9
MEES 621	Biological Oceanography	UMCP	Fall 2003	Unknown	4	Hood et al.	4
MEES 608	Larval Fish Ecology	UMCP	Fall 2003	Unknown	1	Houde, Folkvord, Secor	
MEES 631	Fish Ecology	UMCP	Spring 2004		3	Secor	14
MEES 621	Biological Oceanography	UMCP	Fall 2004	Unknown	4	Hood et al.	4
MEES 608C	Crustacean Fisheries	UMCP	Fall 2004	8	1	Secor	14
MEES608C	Parameter Estimation	UMCP	Fall 2005	4	1	■	18
MEES 634	Introduction to Bioenergetics and Population Dynamics	UMCP	Fall 2005	14	3	Rowe	14
MEES 631	Fish Ecology	UMCP	Spring 2006	8	3	Secor	14
MEES 634	Introduction to Bioenergetics and Population Dynamics	UMCP	Fall 2007	11	3	Rowe	12
MEES 631	Fish Ecology	UMCP	Spring 2008	14	3	-	26
MEES 607	Quantitative Methods	UMCP	Fall 2008	4	3	Sanford	12
MEES 631	Fish Ecology	UMCP	Spring 2010	16	3	Secor	19
MEES 608D	Body Size in Aquatic Ecosystems	UMCP	Spring 2010	9	1	-	20

B. Graduate Students Supervised

1. Degrees Completed

Ph.D.

Matthew Kendall. 2009. Influence of map resolution on seascape ecology on reef fish. MEES. University of Maryland College Park. May 2009.

Janet A. Nye, 2008. Bioenergetic and ecological consequences of diet variability in Atlantic croaker *Micropogonias undulatus* in Chesapeake Bay. MEES, University of Maryland College Park. December 2008.

Larry Alade 2008 "Effects of yellowtail flounder stock structure on assessment of abundance and population dynamics." MEES, University of Maryland Eastern Shore. Co-supervised with E. B. May. May 2008.

Michael G. Frisk. 2004. Biology, life history and conservation of Elasmobranchs with an emphasis on western Atlantic skates. MEES, University of Maryland College Park. September 2004.

MS

- Edwards, Jason. 2009. Quantification of relative habitat productivities for juvenile menhaden in Chesapeake Bay. MEES, University of Maryland College Park. August 2009.
- Laurie J. Bauer. 2006. Winter mortality of the blue crab (*Callinectes sapidus*) in the Chesapeake Bay. MEES, University of Maryland College Park. April 2006.
- Kiersten. L. Curti. 2005. Biology of hogchoker in Chesapeake Bay. MEES, University of Maryland College Park. April 2005.
- Olaf P. Jensen. 2004. Spatial ecology of blue crab (*Callinectes sapidus*) in Chesapeake Bay. MEES, University of Maryland College Park. September 2004.
- Jessica M. Coakley. 2004. Growth of Eastern oyster, *Crassostrea virginica* in Chesapeake Bay. MEES, University of Maryland College Park. May 2004.
- Mary A. Chenery. 2002. Population dynamics of blue crab (*Callinectes sapidus*) in the Hudson River, New York. MEES, University of Maryland College Park. December 2002.
- Bryce J. Brylawski. 2002. The individual-based growth modeling of the Chesapeake Bay blue crab (*Callinectes sapidus* Rathburn). MEES, University of Maryland College Park.. May 2002.
- Veronica Caceres Chomorro. 2001. The effects of small scale turbulence in the feeding ecology and swimming speed of fathead minnow larvae (*Pimephales promelas*), inland silverside larvae (*Menidia beryllina*) and the lobate ctenophore (*Mnemiopsis leidyi*). MEES, University of Maryland College Park. May 2001.
- Edith A. Evarts. 2001. Analysis of juvenile striped bass, *Morone saxatilis*, abundance and growth in the Nanticoke River, Maryland using otolith back-calculation methods. MEES, University of Maryland College Park. May 2001.
- Michael G. Frisk. 2000. Estimation and analysis of biological parameters in elasmobranch fishes and the population dynamics of little skate *Raja erinacea*, winter skate *R. ocellata* and barndoor skate *R. laevis*. MEES, University of Maryland College Park. Co-supervised with M. J. Fogarty. December 2000.
- Karyl K. Brewster-Geisz. 2000. The effect of various management strategies on the recovery of the sandbar shark (*Carcharinus plumbeus*): implications from stage-based and yield per recruit models. MEES, University of Maryland College Park. December 2000.
- Christopher J. Heyer. 2000. Understanding maternal effects as a recruitment mechanism in Lake Michigan yellow perch (*Perca flavescens*). MEES, University of Maryland College Park. May 2000.

2. Students Currently Supervised

- Colton, Amanda, M.S. MEES, UMCP. Population dynamics of blue crab along the Atlantic coast. Matriculated August 2009.
- Kauffman, Anthony, M.S. MEES, UMCP. Recruitment dynamics of blue crab in the Chesapeake Bay. Matriculated August 2009. Co-supervised with E. Johnson (SERC). August 2009.
- Mehaffie, Nicole, M.S. MEES, UMCP. Contribution of diadromous species to the trophodynamics of northwest Atlantic marine ecosystems. August 2010.
- Peer, Adam. Ph.D. MEES; UMCP. Maternal influences on recruitment success of striped bass in the Patuxent River, MD. Matriculated Sept 2005.

3. Current Graduate Student Committee Memberships

Jennifer Barkman	MS	MEES	UMCP, CBL
Andre Bucheister	Ph.D.	Oceanogr.	VIMS
Ben Ciotti	Ph.D.	Oceanogr	U.Del

Bill Connelly	Ph.D.	MEES	UMCP- CBL
Christian Conroy	MS	MEES	UMCP-CBL
Christopher Kelly	PhD	MEES	UMCP -HPL
Maude Livings	MS	MEES	UMCP-CBL
Eric Newberger	Ph.D.	MEES	UMCP
Jason Robinson	Ph.D.	MEES	UMCP

4. Research Internships Supervised

a. Undergraduate

Aisha Rawlinson	UMES	June - Aug 1999	MDSG – REU	Feeding ecology of ctenophores
Ariel Settles	Morgan State	June - Aug 1999	Truitt Fellow	Blue crab growth
Hind Eloukkal	Southampton College	Jan. - May 1999	Intern	Yellow perch ecology
Vanessa Javor	Southampton College	Jan. - May 2000	Intern	Yellow perch ecology
Holly Abeels	Southampton College	Jan. - May 2001	Intern	Multispecies fisheries
Andrew Fields	Southampton College	Jun. - Aug. 2001	Intern	Multispecies fisheries
Philip Pollitis	Southampton College	Feb - May 2002	Intern	Multispecies fisheries
Tonya Reissenauer	Southampton College	June - Aug 2003	Intern	Elasmobranch ecology
Curtis Anderson	Southampton College	June - Aug 2004	Intern	Multispecies fisheries
Jennifer Hurt	UW - Stevens Point	June - Aug 2004	MDSG –REU	Multispecies fisheries
Morton Limborg	U. Copenhagen	Sept - Dec 2004	Intern	Multispecies fisheries
Andy Ostrowski	UNC-Wilmington	June- Aug 2005	MDSG-REU	Menhaden production
Eloy Martinez	University of Puerto Rico	June- August 2006	MDSG REU	Blue crab RNA:DNA ratios
Megan Gluth	UMBC	June – August 2007	Intern	Croaker bioenergetics
Jamie Smith	McDaniel College	June – August 2008	Intern	Menhaden production
Mike Selkmann	St. Mary’s College	June – August 2010	Intern	Striped bass recruitment
Brendan Runde	Virginia Tech	June – August 2010	Intern	Crab effort survey

b. High School

Lynna Kierre	Patuxent HS	Jan - Mar 2004	Calvert County Mentoring Program	Growth and distribution of spot in Chesapeake Bay
Kayley Snyder	Calvert HS	Jan - Mar 2005	Calvert County Mentoring Program	Growth and distribution of croaker in

David Kent	Northern HS	Sept-Dec 2006	Calvert County Mentoring Program	Chesapeake Bay Modeling striped bass- menhaden interactions
Sarah Michaels	Patuxent High School	June – Aug 2007	Research Assistant	Menhaden growth
Michelle Schrieber	Northern High School	Jan- April 2010	Calvert County Mentoring Program	Growth and diet of croaker in Chesapeake Bay
Daniel Carroll	Calvert High School	Jan – August 2010	Research assistant	Striped bass energetics
Megan Bethge	Northern High School	Oct – Dec 2010	Calvert County Mentoring Program	Conservation of turtles

V. Outreach and Service

A. Editorships

Transactions of the American Fisheries Society, Associate Editor (1999-2008)
 Blue crab biology symposium proceedings ■ Bulletin of Marine Science, Associate Editor (2000-2001)

B. Public Service (2010)

Edited and advised *Bay Journal* on several issues regarding crabs.
 Featured on NPR's "All Things Considered" (12/23/2009)
 Calvert County Recorder (September 2010).

C. Federal/State/Local Government

National Research Council. Bay Delta Conservation Plan Review Panel (2010 – present)
 National Research Council. Panel of San Francisco Bay and Delta (2010 – present)
 Chair, NEFSC Data Poor Stock Assessment Committee (2008)
 Science Advisor to Potomac River Fisheries Commission (2005- present)
 Chair ASMFC Tautog stock assessment review team (2005)
 Member ASMFC Management Committee (2006- present)
 Member NOAA Chesapeake Bay Fishery Ecosystem Plan Workgroup (2000-present).
 Member Scientific and Technical Committee, Mid-Atlantic Fishery management Council, 2001-present, Vice-chair 2009- present).
 Member South East Data Assessment and Review Team for NOAA Southeast Fisheries Science Center's stock assessments of Atlantic croaker and Atlantic menhaden (2003 - present).
 Member Chesapeake Bay Stock Assessment Committee (1999-present).
 Member Technical Subcommittee of the Bi-State Blue Crab Advisory Committee (1999-2003).
 Stock Assessment Review Committee for the NEFSC, Summer 1997

D. International

Co-chair International Council for the Exploration of the Seas (ICES) Working Group on Recruitment Processes (April 2002 - 2009).
 International Council for the Exploration of the Seas (ICES) Working Group on Physical-Biological Interactions (April 2006 - present).

E. University System of Maryland

Fisheries AOS Committee (MEES Program, Univ. System of Maryland, 1994 – present, Co-chair
2003 - present)
Ecology AOS Committee (MEES Program, Univ. System of Maryland, 1994 - 2002)
MEES Director Search Committee (1999)

F. UMCES and Laboratory

Chair, CBL Graduate Education Committee (1998-Present)
Fisheries Science Faculty Search Committee 1999
Fisheries Faculty Search Committee in Stock Assessment 2000-2002
Toxicologist Faculty Search Committee 2000
Ecologist Faculty Search Committee 2008
CBL FRA Promotions Committee (2000-2007)
UMCES Faculty Senate (2003 - Present, Vice Chair 2005)
UMCES Five-year faculty review committee (2006/2007)
CBL Promotions and Tenure Committees (2003-present)
CBL Director's search (2004)
CBL Senate Representative (2004- 2007)
Chair, CBL Faculty Search Committee 2010

Organized informal brown bag seminar series. 1994-2005.

G. Other Professional Service

Promotion review for Colorado State University, 2007
Simon Fraser University, 2008
Proposal Review panel Member, Virginia Sea Grant, 2002- current
Proposal Review panel Member, Hudson River Foundation, 2002
Manuscripts reviewed for CJFAS, Estuarine, Coastal and Shelf Science, Fishery Bulletin
Fisheries Oceanography, Journal of Experimental Marine Biology & Ecology, Marine
Ecology Progress Series, Transactions of the American Fisheries Society,
Proposals reviewed for NOAA, Michigan Sea Grant, North Carolina Sea Grant, Hudson River
Foundation, Great Lakes Foundation, National Science Foundation