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Pronouns: He, him, his

Education:

Ph.D. – Fisheries and Wildlife, Michigan State University, 2005
M.S. – Natural Resources, University of Wisconsin-Stevens Point, 2000
B.S. – Fisheries and Wildlife, Michigan State University, 1997

Experience:

Professor, 2017 – present, Chesapeake Biological Laboratory (CBL), University of Maryland Center for Environmental Science (UMCES), Solomons, MD.
Associate professor, 2012 – present, CBL, UMCES, Solomons, MD.
Assistant professor, 2006 – 2012, CBL, UMCES, Solomons, MD.
Visiting assistant professor, 2005 – 2006, Department of Fisheries and Wildlife, Michigan State University, East Lansing, MI.

Awards and Honors:

2020. UMCES President's Award for Excellence in Application of Science
2020-present. Vice Chair of the Mid-Atlantic Fishery Management Council's Scientific and Statistical Committee
2019. Finalist for a University System of Maryland Board of Regents Faculty Award for Service (for efforts to improve oyster management in Maryland)
2018. American Fisheries Society Tidewater Chapter Excellence in Fisheries Education Award.
2015. Mercer Patriarche Best Paper in North American Journal of Fisheries Management Award (Huang et al. 2015)
2014 – present. Associate Editor for Canadian Journal of Fisheries and Aquatic Sciences.
2011. Graduate Education Award for Excellence in Teaching and Dedicated Service, Graduate Student Organization, Marine Estuarine Environmental Sciences Program

Peer-reviewed Publications (**bold** indicates student author, and *italics* indicates post doc author):

1. Nesslage, G.M. R.T. Leaf, M.J. Wilberg, R.M. Mroch III, and A.M. Schueller. In press. A simulation-based evaluation of commercial port sampling programs for the Gulf and Atlantic Menhaden fisheries. North American Journal of Fisheries Management. https://doi.org/10.1002/nafm.10459

2. *Mace, M.M. III*, and M.J. Wilberg. 2020. Using censored regression when estimating abundance with catch-effort data to account for daily catch limits. Canadian Journal of Fisheries and Aquatic Sciences 77(4): 716-722. https://doi.org/10.1139/cjfas-2019-0093

3. Punt, A.E., G. Tuck, J. Day, C. Canales, J. Cope, C. De Moor, M. Dickey-Collas, B. Elvarsson, M. Haltuch, A. Hicks, C.M. Legault, P.D. Lynch, and M.J. Wilberg. 2020. When are model-based stock assessments rejected for use in management and what happens then? Fisheries Research 224: 105465. https://doi.org/10.1016/j.fishres.2019.105465

4. Liang, D., G.M. Nesslage, and M.J. Wilberg. 2020. A Spatial Simulation Approach to Hydroacoustic Survey Design: a Case Study for Atlantic Menhaden. Fisheries Research 222: 105402. https://doi.org/10.1016/j.fishres.2019.105402

5. **Lee, Y.**, M.J. Wilberg, E. Han, K. Choi, W.C. Lee, and C.K. Kang. 2020. Seasonal changes in the gross biochemical composition and scope for growth of the longline-cultured sea squirt *Halocynthia roretzi* in a temperate bay on the south coast of Korea. Aquaculture 516: 734526. https://doi.org/10.1016/j.aquaculture.2019.734526

6. Nesslage, G.M., and M.J. Wilberg. 2019. A performance evaluation of surplus production models with time-varying intrinsic growth in dynamic ecosystems. Canadian Journal of Fisheries and Aquatic Sciences 76: 2245–2255.

7. Wilberg, M.J., R.T. Woodward, **P. Huang**, and D. Tomberlin. 2019. Developing Precautionary Reference Points for Fishery Management Using Robust Control Theory: Application to the Chesapeake Bay Blue Crab Fishery. Marine and Coastal Fisheries 11:177–188.

8. Arlinghaus, R., J. K. Abbott, E. P. Fenichel, S. R. Carpenter, L. M. Hunt, J. Alós, T. Klefoth, S. J. Cooke, R. Hilborn, O. P. Jensen, M. J. Wilberg, J. R. Post, and M. Manfredo. 2019. Governing the recreational dimension of global fisheries. Proceedings of the National Academies of Science 116:5209–5213.

9. **Liljestrand, E.**, M.J. Wilberg, and A. Schueller. 2019. Estimation of Movement and Mortality of Atlantic Menhaden during 1966-1969 Using a Bayesian Multi-State Mark-Recovery Model. Fisheries Research 210:204-213.

10. **Liljestrand, E.**, M.J. Wilberg, and A. Schueller. 2019. Multi-state Dead Recovery Mark-Recapture Model Performance for Estimating Movement and Mortality Rates. Fisheries Research. 210:214-223.

11. *Hutniczak, B.*, D. Lipton, J. Wiedenmann, and M.J. Wilberg. 2019. Valuing Changes in Frequency of Fish Stock Assessments. Canadian Journal of Fisheries and Aquatic Sciences 76: 1640–1652.

12. Goethel, D.R., A.M. Berger, S.K. Gaichas, M.A. Karp, S.M. Lucey, P.D. Lynch, J.F. Walter, J.J. Deroba, S. Miller, and M.J. Wilberg. 2019. Closing the Feedback Loop: On Stakeholder Participation in Management Strategy Evaluation. Canadian Journal of Fisheries and Aquatic Sciences 76: 1895–1913.

13. **Damiano, M.**, and M.J. Wilberg. 2019. Population dynamics of eastern oysters (*Crassostrea virginica*) in the Choptank River Complex, Maryland during 1989 – 2015. Fisheries Research 212:196-207.

14. **Rains, S.M.**, M.J. Wilberg, and T.J. Miller. 2018. Evaluation of fishery-induced sperm limitation in Chesapeake Bay blue crab using an individual based model. Marine Ecology Progress Series 596: 127–142.

15. **Lee, Y.**, E. Han, M.J. Wilberg, W.C. Lee, K. Choi, and C. Kang. 2018. Physiological processes and gross energy budget of the submerged longline-cultured Pacific oyster *Crassostrea gigas* in a temperate bay of Korea. PLoS One 13(7): e0199752. https://doi.org/10.1371/journal.pone.0199752.

16. *Wiedenmann, J.*, M.J. Wilberg, **A. Sylvia**, and T.J. Miller. 2017. An evaluation of acceptable biological catch (ABC) harvest control rules designed to limit overfishing. Canadian Journal of Fisheries and Aquatic Sciences 74: 1028-1040.

17. **Simpson, C.A.**, H. Bi, M.J. Wilberg, A.M. Schueller, G.M. Nesslage, and H. Walsh. 2017. Spawning Locations and Larval Dispersal of Atlantic Menhaden during 1977-2013. ICES Journal of Marine Science 6: 1574–1586.

18. Liang, D., G.M. Nesslage, M.J. Wilberg, and T.J. Miller. 2017. Bayesian Calibration of Blue Crab (*Callinectes sapidus*) Abundance Indices Based on Probability Surveys. Journal of Agricultural, Biological, and Environmental Statistics 22: 481–497.

19. **Siskey, M.**, M.J. Wilberg, R.J. Allman, B.K. Barnett, and D.H. Secor. 2016. Forty years of fishing: changes in age structure and stock mixing in the northwestern Atlantic Bluefin tuna (*Thunnus thynnus*) associated with size-selective and long-term exploitation. ICES Journal of Marine Science 73, 2518–2528.

20. Gaichas, S., R. Seagraves, J. Coakley, G. DePiper, V. Guida, J.A. Hare, P. Rago, and M.J. Wilberg. 2016. A framework for incorporating species, fleet, habitat, and climate interactions into fishery management. Frontiers in Marine Science 3:105.

21. **Simpson, C.A.**, M.J. Wilberg, H. Bi, A.M. Schueller, G.M. Nesslage, and H. Walsh. 2016. Trends in relative abundance and early life survival of Atlantic Menhaden during 1977-2013 from long-term ichthyoplankton programs. Transactions of the American Fisheries Society 145:1139–1151.

22. Houde, E.D., E.R. Annis, L.W. Harding Jr., M.E. Malone, and M.J. Wilberg. 2016. Factors affecting abundance of age-0 Atlantic Menhaden (*Brevoortia tyrannus*) in Chesapeake Bay. ICES Journal of Marine Science 73: 2238-2251.

23. **Rains, S.M.**, M.J. Wilberg, and T.J. Miller. 2016. Sex ratios and average sperm per female Blue Crab in six tributaries of Chesapeake Bay. Marine and Coastal Fisheries: Dynamics, Management, and Ecosystem Science 8:492–501.

24. **Robinson, J.M.**, M.J. Wilberg, J. Adams, and M.L. Jones. 2016. Tradeoff between assessment and control of aquatic invasive species: a case study of Sea Lamprey management in the St. Marys River. North American Journal of Fisheries Management 36:11-20.

25. *Wiedenmann, J.*, M.J. Wilberg, T.J. Miller, and **A. Sylvia**. 2015. Autocorrelated error in stock assessment estimates: Implications for management strategy evaluation. Fisheries Research 172: 325-334.

26. **Buchheister, A.**, M.J. Wilberg, T.J. Miller, and R.J. Latour. 2015. Simulating bottom-up effects on predator productivity and consequences for the rebuilding timeline of a depleted population. Ecological Modelling 311:48-62.

27. **Huang, P.**, R.T. Woodward, M.J. Wilberg, and D. Tomberlin. 2015. Management evaluation for the Chesapeake Bay blue crab fishery: an integrated bio-economic approach. North American Journal of Fisheries Management 35:216-228. 2015 Best Paper in North American Journal of Fisheries Management.

28. Abbott, J., J.L. Anderson, L. Campling, R. Hannesson, E. Havice, M.S. Lozier, M.D. Smith, and M.J. Wilberg. 2014. Steering the Global Partnership for Oceans. Marine Resource Economics 29:1-16.

29. Humphrey, J., M.J. Wilberg, E.D. Houde, and M.C. Fabrizio. 2014. Effects of temperature on young-of-the-year Atlantic menhaden growth in Chesapeake Bay. Transactions of the American Fisheries Society 143:1255–1265.

30. **Robinson, J. M.**, M. J. Wilberg, J. Adams, and M.L. Jones. 2014. Comparing methods for estimating larval sea lamprey (*Petromyzon marinus*) density and abundance for the purposes of control. Journal of Great Lakes Research 40:739-747.

31. **Pincin, J.S.**, M.J. Wilberg, L. Harris, and A. Willey. 2014. Trends in relative abundance of fishes in Maryland's coastal bays during 1972-2009. Estuaries and Coasts 37: 791-800.

32. **Colton, A.R.**, M.J. Wilberg, V. Coles, and T.J. Miller. 2014. An evaluation of the synchronization in the dynamics of blue crab populations in the western Atlantic. Fisheries Oceanography 23:132-146.

33. **Robinson, J.M.**, M.J. Wilberg, J. Adams, and M.L. Jones. 2013. A spatially specific age-structured model for describing sea lamprey (*Petromyzon marinus*) population dynamics. Canadian Journal of Fisheries and Aquatic Science 70:1709-1722.

34. Wilberg, M. J., **J.M. Robinson**, **S.A.M. Rains**, J.L. Humphrey, and R.N. Lipcius. 2013. Effects of location errors on estimates of dredge catchability from depletion based methods. Fisheries Research 148:1-8.

35. Wilberg, M.J., *J. Wiedenmann*, and **J.M. Robinson**. 2013. Sustainable exploitation and management of autogenic ecosystem engineers: application to oysters in Chesapeake Bay. Ecological Applications 23:766-776.

36. *Wiedenmann, J.*, M.J. Wilberg, and T.J. Miller. 2013. An evaluation of harvest control rules for data poor fisheries. North American Journal of Fisheries Management 33:845–860.

37. Nesslage, G.M., and M.J. Wilberg. 2012. Performance of surplus production models with time-varying parameters for assessing multispecies assemblages. North American Journal of Fisheries Management 32:1137-1145.

38. **Woodland, R.**, D.H. Secor, M.C. Fabrizio, and M.J. Wilberg. 2012. Comparing the nursery role of inner continental shelf and estuarine habitats for temperate marine fishes. Estuarine, Coastal, and Shelf Science 99:61-73.

39. **Pincin, J.S.**, and M.J. Wilberg. 2012. Surplus production model accuracy in populations affected by a no-take marine protected area. Marine and Coastal Fisheries 4: 511-525.

40. *Annis, E.R.*, E.D. Houde, L.W. Harding, M.E. Mallonee, and M.J. Wilberg. 2011. Validation of a bioenergetics model linking primary production and Atlantic menhaden *Brevoortia tyrannus* growth in Chesapeake Bay. Marine Ecology Progress Series 437: 253-267.

41. Wilberg, M.J., **M.E. Livings**, **J.S. Barkman (Pincin)**, B.T. Morris, and **J.M. Robinson**. 2011. Overfishing, disease, habitat loss, and potential extirpation of oysters in upper Chesapeake Bay. Marine Ecology Progress Series 436: 131–144.

42. **Fenske, K.H.**, M.J. Wilberg, D.H. Secor, and M.C. Fabrizio. 2011. An age- and sex-structured assessment model for American eels (*Anguilla rostrata*) in the Potomac River, Maryland. Canadian Journal of Fisheries and Aquatic Sciences 68: 1024-1037.

43. *Ihde, T. F.*, M. J. Wilberg, D. H. Secor, and T.J. Miller. 2011. FishSmart: harnessing the knowledge of stakeholders to enhance U.S. marine recreational fisheries with application to the Atlantic king mackerel fishery. Proceedings of the 5th World Recreational Fisheries Conference. American Fisheries Society Symposium 73:75–93.

44. *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.

45. Irwin, B.J., M.J. Wilberg, M.L. Jones, and J.R. Bence. 2011. Applying structured decision making to recreational fisheries management. Fisheries 36:113-122.

46. **Fenske, K.H.**, D.H. Secor, and M.J. Wilberg. 2010. Demographics and parasitism of American eels in Chesapeake Bay, USA. Transactions of the American Fisheries Society 139: 1699–1710.

47. Miller, T.J., J. Blair, *T.F. Ihde*, R. M. Jones, D.H. Secor, and M.J. Wilberg. 2010. FishSmart: an innovative role for science in stakeholder-centered approaches to fisheries management. Fisheries 35: 424-433.

48. Wilberg, M.J.., **J.T. Thorson**, B.C. Linton, and J. Berkson. 2010. Incorporating time-varying catchability into population dynamic stock assessment models. Reviews in Fisheries Science 18: 7-24.

49. Wilberg, M.J. 2009. Estimation of recreational bag limit noncompliance using contact creel survey data. Fisheries Research 99: 239-243.

50. Wilberg, M.J., B.J. Irwin, M.L. Jones, and J.R. Bence. 2008. Effects of source-sink dynamics on harvest policy performance for yellow perch in southern Lake Michigan. Fisheries Research 94: 267-281.

51. Irwin, B.J., M.J. Wilberg, J.R. Bence, M.L. Jones. 2008. Evaluation of harvest policy performance for yellow perch in southern Lake Michigan. Fisheries Research 94: 282-289.

52. Wilberg, M.J., and J.R. Bence. 2008. Performance of deviance information criterion model selection criteria in statistical catch-at-age analysis. Fisheries Research 93: 212-221.

53. Wagner, T., D. Hayes, J.R. Bence, M. Bremigan, and M.J. Wilberg. 2007. Regional trends in fish mean length at age: components of variance and the power to detect trends. Canadian Journal of Fisheries and Aquatic Sciences 64: 968-978.

54. Wilberg, M.J., and T.J. Miller. 2007. Comment on "Impacts of biodiversity loss on ocean ecosystem services". Science 316: 1285b.

55. Nesslage, G.M., M.J. Wilberg, and S.J. Riley. 2006. Rates and spatial patterns of decline in historical cougar and wolf populations in Montana. Intermountain Journal of Science 12: 63-76.

56. Wilberg, M.J., and J.R. Bence. 2006. Performance of time-varying catchability estimators in statistical catch-at-age analysis. Canadian Journal of Fisheries and Aquatic Sciences 63: 2275-2285.

57. Wilberg, M.J., J.R. Bence, B. Eggold, D. Makauskas, and D. Clapp. 2005. Dynamics of yellow perch in southwestern Lake Michigan during 1986-2002. North American Journal of Fisheries Management 25: 1130-1152.

58. Wilberg, M.J., and B.P. Dreher. 2004. GENECAP: a program for analysis of multilocus genotype data for non-invasive sampling and capture-recapture population estimation. Molecular Ecology Notes 4: 783-785.

59. Wilberg, M.J., C.R. Bronte, and M.J. Hansen. 2004. Fleet dynamics of the commercial lake trout fishery in Michigan waters of Lake Superior during 1929-1961. Journal of Great Lakes Research 30: 252-266.

60. Wilberg, M.J., M.J. Hansen, and C.R. Bronte. 2003. Historic and modern abundance of wild lean lake trout in Michigan waters of Lake Superior: implications for restoration. North American Journal of Fisheries Management 23: 100-108.

61. Wilberg, M.J., J.R. Bence, and J.E. Johnson. 2002. Survival of juvenile lake trout stocked in western Lake Huron during 1974-1992. North American Journal of Fisheries Management 22: 213-218.

62. Kennedy, V.S., L. Bolognini, J. Dulčić, R.J. Woodland, M.J. Wilberg, and L. A. Harris. *In press*. Fisheries of the Adriatic Sea and the Chesapeake Bay. In T. Malone, A. Malej, and J. Faganeli eds. Vectors of Change in Coastal Ecosystems and the Services They Provide: A Comparative Analysis of the Northern Adriatic Sea and Chesapeake Bay. AGU-Wiley.

Manuscripts Submitted and in Preparation (**bold** indicates student author, and *italics* indicates post doc author)**:**

Sylvia, A., J. Wiedenmann, T.J. Miller, and M.J. Wilberg. In revision. Effects of assessment interval and data-management lag on fishery management performance. Fisheries Research.

Kazyak, D., R. Hilderbrand, M. Sell, A. Heft, and M.J. Wilberg. In review. Brook Trout population dynamics under current and potential future conditions. Canadian Journal of Fisheries and Aquatic Sciences.

Liang, D., G.M. Nesslage, M.J. Wilberg, and T.J. Miller. In review. Ranking ecosystem impacts on Chesapeake Bay blue crab (*Callinectes sapidus*) using empirical Gaussian Graphical Models. Canadian Journal of Fisheries and Aquatic Sciences.

Jesse, J.A., M. V. Agnew, **K. Arai**, **C.T. Armstrong**, **S.M. Hood**, **M.L. Kachmar**, **J.T., Long**, **A.J. McCarty**, **M.O. Ross**, **K.D. Rubalcava**, **J. Shaner**, **S. Tanaka**, **L. Wood**, E. Schott, and

M. J. Wilberg. In review. Effects of infectious diseases on population dynamics of marine organisms in Chesapeake Bay. Estuaries and Coasts.

Mace, M.M., III, **K.L. Doering**, M.J. Wilberg, A. Larimer, F. Marenghi, A. Sharov, and M. Tarnowski. In review. Spatial population dynamics of eastern oyster in the Chesapeake Bay, Maryland. Fisheries Research.

Doering, K.L., M.J. Wilberg, D. Liang, and M. Tarnowski. In review. Patterns in oyster natural mortality in Chesapeake Bay, Maryland using a Bayesian model. Fisheries Research.

Stock Assessments and Simulation Evaluations of Fishery Management Options Conducted in Collaboration with Management Agencies:

Stock Assessments

2020 Maryland Oyster Stock Assessment Update. In collaboration with the Maryland Department of Natural Resources. https://dnr.maryland.gov/fisheries/Documents/SummaryUpdateReport_Oysters.pdf

Development of Ecological Reference Points for Atlantic Menhaden. In collaboration with the Atlantic States Marine Fisheries Commission. Nesslage and Wilberg 2019. https://sedarweb.org/docs/sar/SEDAR%2069%20SAR%20final%20combined%20ERP.pdf

Maryland Oyster Stock Assessment. In collaboration with the Maryland Department of Natural Resources. Mace et al. In review; Doering et al. In review. https://dnr.maryland.gov/fisheries/Documents/StockAssessment_EasternOysterMD.pdf

Assessment of Mississippi River Paddlefish. In collaboration with the Mississippi Interstate Cooperative Resource Association. Sharov and Wilberg 2013 (Final report to the Association of Fish and Wildlife Agencies).

Assessment of Larval Abundance of St. Marys River Sea Lamprey. In collaboration with the Great Lakes Fishery Commission, U.S. Fish and Wildlife Service, and Department of Fisheries and Oceans, Canada. Robinson et al. 2013.

Chesapeake Bay Blue Crab Stock Assessment. In collaboration with the Maryland Department of Natural Resources, Virginia Marine Resources Commission, and the Potomac River Fisheries Commission. http://hjort.cbl.umces.edu/crabs/Assessment.html

Stock Assessment for American Eel in the Potomac River. In collaboration with the Potomac River Fisheries Commission. Fenske et al. 2011.

Stock Assessment of Yellow Perch in Southwestern Lake Michigan. In collaboration with the Lake Michigan Technical Committee, Wisconsin Department of Natural Resources, and Illinois Department of Natural Resources. Wilberg et al. 2005.

Simulation Evaluations for Fishery Management

Maryland Oyster Consensus Process, 2020-present. Maryland Department of Natural Resources.

North Pacific Minke Whale Implementation Review. 2019-present. International Whaling Commission.

Evaluation of Management and Restoration Options for Oysters in the Choptank River Complex. 2018. In collaboration with Maryland Department of Natural Resources, NOAA Chesapeake Bay Office, and the OysterFutures Stakeholder Workgroup. https://oysterfutures.files.wordpress.com/2018/05/oysterfutures_stakeholder_recommendations_report_14may2018.pdf

Evaluation of Spatial Data Collection for Red Porgy in the U.S. South Atlantic. In collaboration with the NOAA Southeast Fisheries Science Center. Wilberg et al. in prep.

Evaluation of Harvest Control Rules for Mid-Atlantic Fishery Management. In collaboration with the Mid-Atlantic Fishery Management Council and the NOAA Northeast Fisheries Science Center. Wiedenmann et al. 2017.

Evaluation of Data Poor Harvest Control Rules for Mid-Atlantic Fishery Management. In collaboration with the Mid-Atlantic Fishery Management Council and the NOAA Northeast Fisheries Science Center. Wiedenmann et al. 2013.

Management Strategy Evaluation for the Summer Flounder Recreational Fishery. In collaboration with the Southern Demersal Working Group (Atlantic States Marine Fisheries Commission and Mid-Atlantic Fishery Management Council). Wiedenmann and Wilberg 2014 (Final report to the Partnership for Mid-Atlantic Fisheries Science).

Evaluation of Assessment and Treatment Options for Sea Lamprey in the St. Marys River. In collaboration with the Great Lakes Fishery Commission, U.S. Fish and Wildlife Service, and Department of Fisheries and Oceans, Canada. Robinson et al. 2014, 2016.

Evaluation of Recreational Fishery Management Options for King Mackerel in the U.S. South Atlantic. In collaboration with the FishSmart Stakeholder Workgroup. Miller et al. 2010; Ihde et al. 2011.

Yellow Perch Decision Analysis for Southern Lake Michigan. In collaboration with the Illinois Department of Natural Resources, Indiana Department of Natural Resources, Michigan Department of Natural Resources, and Wisconsin Department of Natural Resources. Irwin et al. 2008; Wilberg et al. 2008.

Extramural Funding: Total $9.5 million (PI $3.3 million, Co-PI $6.2 million)

Wilberg, M., and R. Latour. *Pending final approval*. Population modeling to explore effects of the environment on Chesapeake Bay species. NOAA. 2020-2023. $359k (PI).

Woodland, R., J. Pierson, and M. Wilberg. Planktonic Omnivores and Stable Isotopes: Developing, Validating and Field-testing a Multi-species Functional Response Model. National Science Foundation. 2020-2023, $897k (co-PI).

Wilberg M., and E. North. Modeling for the Maryland Oyster Consensus Process. Maryland Department of Natural Resources. 2020-2021, $224k (PI).

Nesslage, G., M. Wilberg, A. Schueller, and K. Drew. Evaluating consequences of alternative harvest policies for Atlantic menhaden and the impacts on their predator Atlantic striped bass. Maryland Sea Grant. 2020-2022, $129k (co-PI).

Wilberg, M., and M. Mace III. Support for Maryland oyster stock assessment modeling. Maryland DNR. 2019-2020, $39k (PI).

Wilberg, M., D. Liang, and H. Bi. Design and testing of a combined aerial-hydroacoustics survey to estimate Atlantic menhaden biomass in Chesapeake Bay. Atlantic States Marine Fisheries Commission. 2019-2020, $53k (PI).

Slacum, H.W., M. Wilberg, D. Liang, D. Zaveta, and K. Paynter. Scope #1: Development of a Long-Term Oyster Monitoring Plan (Technical Assistance to Support Chesapeake Bay Program Goals and Outcomes – Fisheries, Habitat, Stewardship, Leadership, and Climate). Chesapeake Bay Trust. UMCES portion $26k (co-PI).

Wilberg, M., and M. Mace III. Work Associated with the Sustainable Oyster Population and Fishery Act of 2016 – Part 2. Maryland Department of Natural Resources. 2018-2019, **$**102k (PI).

Wilberg, M. Work Associated with the Sustainable Oyster Population and Fishery Act of 2016. Maryland Department of Natural Resources. 2017-2018, $170k (PI).

Wilberg, M. and D. Liang. Review and development of ORP's oyster monitoring and assessment program. Oyster Recovery Partnership. 2017-2018, $20k (PI).

North, E., F. Moser, and M. Wilberg. OysterFutures Sea Grant Symposium: learning from other places to improve oyster aquaculture and fisheries in Maryland. Sea Grant. 2016-2017, $20k (co-PI).

Miller, T., D. Liang, G. Nesslage, and M. Wilberg. Scope #2: Evaluation of environmental factors influencing blue crab populations. Chesapeake Bay Trust, 2016-2017, $50k (co-PI).

Miller, T., and M. Wilberg. Scope #4: CBSAC Research Needs – Analysis of blue crab survey data and reproductive output to assess causes of population variability. Chesapeake Bay Trust. 2015. $76k (co-PI).

Wilberg, M. A management strategy evaluation for the Southeast U.S. Atlantic. NOAA. 2015-2016. $78k (PI).

Nesslage, G., and M. Wilberg. Development of a Bayesian approach for estimating ecosystem-based reference points for Atlantic menhaden. Maryland Sea Grant, 2015-2017, $86k (co-PI).

North, E., J. Blair, J. Cornwell, T. Hartley, R. Hood, R. Jones, L. Wainger, and M. Wilberg. Collaborative Proposal: Coastal SEES: Integrating stakeholder objectives with natural system models to enhance the development of sustainable natural resource policy. NSF Coastal SEES program. 2015-2019. $2000k (co-PI).

Linton, B., and M. Wilberg. Development and testing of a new method for selecting among stock assessment models. NOAA, NMFS Stock Assessment Improvement Program. 2014-2015. $21k (co-PI).

Wilberg, M.J., T. McConnell, and J. Holzer. The effect of catch restrictions on recreational catch. NOAA. 2013-2014. $199k (PI)

Wilberg, M., T. Miller, A. Schueller, and J. Smith. Understanding Atlantic menhaden population dynamics through use of data from a large-scale historical tagging study. Maryland Sea Grant. 2014-2016. $92k (PI).

Bi, H., M. Wilberg, A. Schueller, G. Nesslage, and H. Walsh. Estimating early mortality and implications for reference points for the Atlantic menhaden stock. NOAA Fisheries and the Environment. $151k (Co-PI).

Wilberg, M., J. Wiedenmann, and T. Miller. Evaluation of acceptable biological catch control rules. Mid-Atlantic Fishery Management Council, $342k (PI).

Miller, T., E. Houde, R. Latour, H. Townsend, and M. Wilberg. Development of candidate ecosystem-based reference points, Maryland Sea Grant, 2012, $14k (co-PI).

Woodward, R., M. Wilberg, J. Wiedenmann, and D. Tomberlin. Robust ecosystem-based management of the Chesapeake Bay blue crab fishery. Maryland Sea Grant, 2011-2012, $86k (co-PI).

Wilberg, M. Developing Biological Reference Points and Identifying the Status of the Stock for Fishery Management of Paddlefish (*Polyodon spathula*) in the Mississippi River Basin. Association of Fish and Wildlife Agencies, 2012-2013, $33k. (PI)

Wilberg, M., T. Miller, and W. Slacum. Enhancing science to support blue crab management: commercial effort and reproductive potential. Maryland DNR, 2011-2012, $252k. (PI).

Wilberg, M. A management strategy evaluation for the summer flounder recreational fishery. Partnership for Mid-Atlantic Fisheries Science. 2011-2012, $222k. (PI)

Miller, T., J. Link, J. Collie, M. Frisk, R. Latour, H. Townsend, and M. Wilberg. CAMEO – Patterns of connectivity in northwest Atlantic fishery ecosystems. NSF and NOAA, project dates 2010-2013, $676k. (co-PI).

Houde, E., D. Secor, and M. Wilberg. Recruitment of Atlantic Menhaden: Dynamics and Ecology of the Larval-Juvenile Transition in Chesapeake Bay. NOAA Chesapeake Bay Office and Maryland DNR. 2009-2010, $200k. (Co-PI).

Wilberg, M. A creel survey for early spring fisheries of Maryland's Chesapeake Bay tributaries. Maryland DNR, 2009, $149k. (PI).

Wilberg, M., T. Miller, and W. Slacum. A survey of commercial blue crab effort in the Maryland portion of the Chesapeake Bay, 2009. Maryland DNR, 2009-2010, $337k. (PI).

Miller, T., J. Hoenig, E. Johnson, R. Lipcius, and M. Wilberg. Assessment and research activities in support of management of the blue crab stock in Chesapeake Bay. NOAA Chesapeake Bay Office. 2009-2011, $715k. (co-PI).

Wilberg, M., T. Miller, and W. Slacum. A survey of commercial blue crab effort in the Maryland portion of the Chesapeake Bay, 2010. Maryland DNR, 2010-2011, $333k. (PI).

Wilberg, M., and T. Miller. Evaluation of Acceptable Biological Catch (ABC) Control Rules. Mid-Atlantic Fishery Management Council. 2009-2010, $170k. (PI).

Wilberg, M., M. Jones, and J. Adams. Improving sea lamprey control through use of historical data to inform selection of sites for lampricide treatment. Great Lakes Fishery Commission, 2008-2011, $184k. (PI).

Houde, E., D. Secor, and M. Wilberg. Temporal and spatial variability in larval influx, production & recruitment of young-of-the-year Atlantic menhaden in Chesapeake Bay. NOAA Chesapeake Bay Office and Maryland DNR, 2008-2009, $143k. (Co-PI).

Wilberg, M. A creel survey for early spring fisheries of Maryland's Chesapeake Bay tributaries. Maryland Department of Natural Resources, 2008-2009, $129k. (PI).

Miller, T., W. Richkus, and M. Wilberg. Technical support for Maryland Chesapeake Bay oyster stock assessment, monitoring, and management including completion of the programmatic environmental impact statement (EIS) to evaluate alternative approaches to increasing oyster populations into the Chesapeake Bay. Maryland DNR, 2007-2008, $100k. (co-PI).

Wilberg, M., T. Miller, and W. Slacum. A survey of commercial blue crab effort in the Maryland portion of the Chesapeake Bay. Maryland DNR, 2008-2009, $216k. (PI).

Secor, D., and M. Wilberg. Assessment of local abundance, demographics, health and exploitation of Chesapeake Bay American eel. NOAA Chesapeake Bay Office, 2007-2008, $144k. (co-PI).

Miller, T., D. Secor, and M. Wilberg. FishSmart: Enhancing the sustainability of recreational fisheries through improved management and angling practices. Gordon and Betty Moore Foundation, 2007-2008, $618k. (co-PI).

Bence, J., and M. Wilberg. Michigan Agricultural Experiment Station technology grant, 2005, $26k. (co-investigator).

Invited Presentations (2015-present; **bold** student, *italics* post doc):

Wilberg, M. Oyster population dynamics in Chesapeake Bay: Implications for fishery sustainability. North Carolina State University CMAST invited seminar, 2/7/2020. Morehead City, NC.

Wilberg, M. Some recent CBL blue crab research. Chesapeake Bay Stock Assessment Committee and Fishery Goal Implementation Team meeting. 10/14/2019. Colonial Beach.

Wilberg, M. Analysis of Mississippi and Ohio River paddlefish data. Lower Mississippi River Conservation Coordinating Committee meeting, 9/17/2019, Memphis.

Wilberg, M. Oyster population dynamics in Chesapeake Bay: Implications for fishery sustainability. Long Term Marine Environmental Research (LTMER) Symposium. 6/5/2019. Gwangju Institute of Science and Technology, Gwangju, Republic of Korea.

Wilberg, M. Improving fisheries management with collaborative modeling: an example with Maryland oysters. Tidewater Chapter of the American Fisheries Society Annual Meeting, 2/8/2019. Salisbury, MD. Keynote address.

Wilberg, M. Maryland Oyster Stock Assessment. Fisheries Goal Implementation Team (GIT) meeting. 12/18/2018. Newport News, VA.

North, E., and M. Wilberg. Status and Management of Oysters in the Choptank. CHOPtalks 2, 12/10/2018, Cambridge, MD.

Wilberg, M. Dynamics of Oysters in Maryland's Chesapeake Bay. Fisheries and Wildlife Department seminar. Michigan State University. 11/30/2018. East Lansing, MI.

Wilberg, M. Maryland Oyster Stock Assessment. Maryland Oyster Advisory Commission meeting. 11/19/2018. Annapolis, MD.

Wilberg, M. OysterFutures: A Collaborative Process for Developing Oyster Management Recommendations in Maryland. Warnell School of Forestry and Natural Resources invited seminar. 9/6/2018, University of Georgia, Athens, GA.

Wilberg, M. So you want to do a collaborative modeling project… Collaborative Modeling in Coastal and Marine Resource Management. 7/19/2018, Gloucester Point, VA.

Wilberg, M. Collaborative modeling. Collaborative Modeling in Coastal and Marine Resource Management. 7/19/2018, Gloucester Point, VA.

Wilberg, M., and E. North. Collaborative modeling – OysterFutures - overview and lessons learned. Association for Conflict Resolution, 6/14/2018, Arlington, VA.

Wilberg, M. Maryland Oyster Stock Assessment Update. Maryland Oyster Advisory Committee, 6/11/2018, Annapolis.

North, E., and M. Wilberg. Oyster Futures: Testing a Consensus-driven Process. OneNOAA Science Seminar Series. 4/25/2019, Silver Spring.

Wilberg, M. Modeling oyster dynamics and nitrogen removal in the Choptank River, U.S.A., Long-term Marine Research Symposium, 11/22/2017, Busan, Republic of Korea.

North, E., M. Wilberg, J. Blair, J. Cornwell, T. Hartley, R. Hood, R. Jones, L. Wainger, *R. Gawde*, **C. Hayes**, **M. Jackson**, **T. Goelz**, **M. Damiano**, D. Taillie, E. Nastase. OysterFutures. Oyster Advisory Commission Meeting, 9/11/2017, Annapolis.

Wilberg, M. Using population models to estimate abundance of oyster and sustainable fishing mortality rates in Chesapeake Bay. Center for Discrete Mathematics and Theoretical Computer Science, 8/29/2017, St. Leonard, MD.

Wilberg, M., OysterFutures: a stakeholder-centric process for developing a sustainable oyster fishery in Chesapeake Bay. Invited seminar, 3/4/2016, NOAA Beaufort Laboratory, Beaufort, NC.

Wilberg, M. Management Strategy Evaluation for Mid-Atlantic Fisheries. Mid-Atlantic Fishery Management Council Meeting, 6/8/2015, Virginia Beach.

Wilberg, M. How well (or not) do ABCs include ecosystem effects? Mid-Atlantic Fishery Management Council Meeting, 6/8/2015, Virginia Beach.

Wilberg, M. Management Strategy Evaluation on the East Coast. East Coast Fishery Forum, 5/8/2015, Beaufort, NC.

Wilberg, M. Performance of alternative ABC control rules. National Scientific and Statistical Committee Meeting, 2/24/2105, Honolulu.

Contributed Presentations and Posters (2017-present; **bold** student, *italics* post doc):

North, E., M. Wilberg, J. Blair, J. Cornwell, **M. Damiano**, *R. Gawde*, **T. Goelz**, R. Jones, T. Hartley, **C. Hayes**, R. Hood, **M. Jackson**, E. Nastase, D. Taillie, J. Thomas, L. Wainger. OysterFutures: Testing a collaborative modeling process to enhance fisheries and ecosystem health. AGU Ocean Sciences Annual Meeting, 2/18/2020. San Diego.

Mace, M., and M. Wilberg. Using censored regression when estimating abundance and exploitation rate with catch-effort data to account for daily catch limits. Tidewater Chapter of the American Fisheries Society Annual Meeting, 2/9/2019. Salisbury, MD.

Doering, K., M. Wilberg, D. Liang, and M. Tarnowski. Spatial and temporal patterns of natural mortality of eastern oyster in Chesapeake Bay, Maryland during 1990 -2015. National Shellfisheries Association Annual Meeting, 4/20/2018, Seattle. Poster.

Wilberg, M., **M. Damiano**, E. North, R. Gawde, **M. Jackson**, R. Hood, L. Wainger, and **C. Hayes**. Modeling oyster dynamics and nitrogen removal in the Choptank River, U.S.A., Tidewater Chapter of the American Fisheries Society Annual Meeting, 1/27/2018, Beaufort.

Doering, K., M. Wilberg, D. Liang, and M. Tarnowski. Spatial and temporal patterns of natural mortality of eastern oyster in Chesapeake Bay, Maryland during 1990 -2015. Tidewater Chapter of the American Fisheries Society Annual Meeting, 1/26/2018, Beaufort.

North, E., M. Wilberg, J. Blair, J. Cornwell, T. Hartley, R. Hood, R. Jones, L. Wainger, *R. Gawde*, **C. Hayes**, **M. Jackson**, **T. Goelz**, **M. Damiano**, D. Taillie, E. Nastase. OysterFutures: applying a spatially-explicit model and testing a collaborative process for developing oyster fishing regulations in Chesapeake Bay. ICES Annual Science Conference, 9/19/2017, Fort Lauderdale. Poster. *Winner of best poster.

Liang, D., G. Nesslage, M. Wilberg, and T. Miller. Bayesian Calibration of Blue Crab (*Callinectes sapidus*) Abundance Indices Based on Probability Surveys. ICES Annual Science Conference, 9/20/2017, Fort Lauderdale. Poster.

Gaichas, S., R. Seagraves, J. Coakley, G. DePiper, V. Guida, J.A. Hare, P. Rago, M.J. Wilberg. The Mid-Atlantic Fishery Management Council's Framework for Incorporating Species, Fleet, Habitat, and Climate Interactions into Fishery Management: Initial Risk Assessment. American Fisheries Society Annual Meeting, 8/23/2017, Tampa.

Doering, K., M. Wilberg, D. Liang, and M. Tarnowski. Spatial and Temporal Trends in Natural Mortality of Eastern Oyster in Chesapeake Bay, Maryland. American Fisheries Society Annual Meeting, 8/25/2017, Tampa.

Wilberg, M., **M. Damiano**, E. North, *R. Gawde*, **M. Jackson**, R. Hood, Lisa Wainger, and **C. Hayes**. Incorporating ecosystem services, fisher behavior, and spatial recruitment complexity in a management strategy evaluation for Chesapeake Bay oysters. American Fisheries Society Annual Meeting, 8/23/2017, Tampa.

Wilberg, M., J. Blair, R. Jones, E. North, **M. Damiano**, *R. Gawde*, **C. Hayes**, R. Hood, **M. Jackson**, J. Cornwell, L. Wainger, T. Hartley, and **T. Goelz**. Facilitating success: using a stakeholder workgroup process to develop management recommendations for Chesapeake Bay oysters, American Fisheries Society Annual Meeting, 8/24/2017, Tampa.

Doering, K., M. Wilberg, and M. Tarnowski. Improving a natural mortality estimator for the Eastern Oyster: application to the Patuxent River, MD. Tidewater Chapter of the American Fisheries Society Annual Meeting, 3/9/2017, Virginia Beach. *2nd place best student poster.

Damiano, M., and M. Wilberg. Population dynamics of eastern oysters in the Choptank River, Maryland during the 1988/89 through 2014/15 fishing seasons. Tidewater Chapter of the American Fisheries Society Annual Meeting, 3/10/2017, Virginia Beach.

Liljestrand, E., M. Wilberg, and A. Schueller. Estimating migration and mortality of adult Atlantic menhaden with data from a large-scale mark-recapture study. ICES/PICES Symposium on Drivers of dynamics of small pelagic fish resources, 3/8/2017, Victoria, Canada. *Winner of the best student presentation.

Goelz, T., T. Hartley, E. North, J. Cornwell, R. Hood, T. Miller, L. Wainger, M. Wilberg, J. Blair, and R. Jones. Scientists and Local Ecological Knowledge in Participatory Oyster Management. AAAS Annual Meeting, 2/16/2017, Boston. Poster.

Teaching: (all Marine, Estuarine, and Environmental Science (MEES) classes are taught via interactive video)

Effects of Diseases on Population Dynamics of Marine Organisms (2 credits, co-taught), Fall 2019, UMD-MEES

Advanced Population Dynamics and Stock Assessment (4 credits), Spring 2008, 2009, 2011, 2013, 2015, 2017, 2019, UMD-MEES.

Fisheries Science and Management (3 credits, co-taught), Fall 2008, 2010, 2012, 2014, 2016, 2018, UMD-MEES.

Ecosystems Complexity (1 credit seminar, co-taught), Spring 2012, UMD-MEES.

Statistical Estimation (2 credits), Fall 2011, UMD-MEES.

Bayesian Statistics in Ecology (1 credit seminar), Fall 2007, UMD-MEES.

Tropical Ecology and Management in the Bahamas (6 credits, co-taught), Summer 2006, MSU.

Computer Programming for Natural Resources Professionals (1 credit), Fall 2003, MSU.

Short courses taught/co-taught:

Introduction to population dynamics for Mississippi River paddlefish. Short course for agency biologists in coordination with the Mississippi Interstate Cooperative Resource Association, Solomons, MD. 1/8/2018-1/11/2018.

Introduction to AD Model Builder, Solomons, MD. Chesapeake Biological Laboratory. 1/12/2015-1/15/2015.

Introduction to AD Model Builder (co-taught with P. Sullivan), Providence, RI. Atlantic States Marine Fisheries Commission sponsored short course. 7/18/2011-7/21/2011.

Introduction to AD Model Builder, Chesapeake Biological Laboratory, 10/16/2009-10/18/2009.

Maximum likelihood estimation in fisheries, Baltimore, MD. Atlantic States Marine Fisheries Commission sponsored short course. 7/9/2007-7/13/2007.

Advanced catch-at-age modeling (co-taught), East Lansing, MI. Michigan Sea Grant sponsored short course. 1/6/2003-1/10/2003.

Introduction to catch-at-age modeling short course (co-taught), East Lansing, Michigan Sea Grant sponsored short course. 12/17/2002-12/20/2002.

AD Model Builder programming workshop (co-taught), Seattle, WA. National Marine Fisheries Service, Northwest Fisheries Science Center sponsored short course. 5/12/2002-5/17/2002.

Online courses developed:

Model-based inference in ecology and natural resources. This is an on-line graduate-level course in nonlinear model fitting using maximum likelihood and Bayesian techniques. 5/1/2005-9/15/2006.

Students Advised: (in the MEES program unless otherwise noted)
Current graduate students:
Samara Nehemiah, Ph.D. (Advisor)
Samantha Schiano, M.S. (Co-advisor)
Ben Frey, M.S. (Committee member)
Christopher Hayes, Ph.D. (Committee member)
Jason Spires, Ph.D. (Committee member)
Reed Brodnick, Ph.D. (Committee member)
Cassidy Peterson, Ph.D., Virginia Institute of Marine Science (Committee member)

Past graduate students (major advisor):
Kathryn Doering, M.S.
Emily Liljestrand, M.S.
Matthew Damiano, M.S.
Cara Simpson, M.S. (Co-Advisor with H. Bi)
Andrea Sylvia, M.S.
Sarah Rains, M.S.
Jason Robinson, Ph.D.
Maude Livings, M.S.
Jennifer Barkman (Pincin), M.S.
Kari Fenske, M.S. (Co-advisor with D. Secor)

Past graduate students (committee member)
Jerelle Jesse, M.S.
Wilmelie Cruz, Ph.D.
Aimee Neely, Ph.D.
Noelle Olsen, M.S.
Young-Jae Lee, Ph.D., Gwangju Institute of Science and Technology, Republic of Korea
Stephen Gray Redding, M.S.
Jake Goodwin, Ph.D.
David Kazyak, Ph.D.
Andrew Keppel, M.S.
Danielle Zaveta, M.S.
Matthew Siskey, M.S.
Amanda Colton, M.S.
Ryan Woodland, Ph.D.
Virginia Clark, M.S.
Michael O'Brien, M.S.
Deanna Hanks, M.S.

Undergraduate internships:
James Fiorendino. MD Sea Grant REU Program, 5/2014-8/2014.
Carlos Disla. University of Maryland – College Park Sustainable Development and Conservation Biology Program, 1/2014-5/2014.
Andrew Mealor. MD Sea Grant REU Program, 5/2013-8/2013.
Cara Simpson. St. Marys College, 9/2012-5/12/2013.
Joshua Epstein. MD Sea Grant REU Program, 5/2012-8/2012.
Jared Steed. MD Sea Grant REU Program, 5/2009-8/2009.
Emily Hutchinson. MD Sea Grant REU Program, 5/2008-8/2008.
Lisa Wilt. MD Sea Grant REU Program, 5/2007-8/2007.

Postdoctoral researchers supervised
Dr. Marvin (Trey) Mace III, 2017-2020
Dr. John Wiedenmann, 2010-2012

Faculty research assistants supervised
Jerelle Jesse 2020-present
Jennifer Humphrey 2008-2013
Brian Morris 2009-2010

Symposia Organized/Chaired:

Co-organizer (with E. Liljestrand, A. Schueller, and J. Bence) Stock Assessment Methodology: Past, Present, and Future. American Fisheries Society Annual Meeting, 2020, Virtual Conference.

Co-organizer (with O. Jensen and R. Arlinghaus) Coupled Social-Ecological Dynamics. American Fisheries Society Annual Meeting, 8/23/2018, Atlantic City, NJ.

Co-organizer (with T. Hartley, T. Goelz, J. Blair, R. Jones, E. North, F. Moser, and S. Lake) Collaborative Modeling in Coastal and Marine Resource Management, Virginia and Maryland Sea Grant Symposium, 7/29/2018, Gloucester Point, VA.

Co-organizer (with E. North and F. Moser) OysterFutures Sea Grant Symposium: learning from other places to improve oyster aquaculture and fisheries in Maryland, 10/23/2016.

Moderator for Management Strategy Evaluation session at the 7th World Fisheries Congress, 2/24/2016, Busan, Republic of Korea.

Co-organizer (with O. Jensen and R. Arlinghaus) of a SESYNC workshop, Managing Recreational Fisheries as Complex Adaptive Socio-Ecological Systems, June 18-20, 2014, Annapolis, Maryland.

Co-organizer (with J. Thorson and J. Bence) Parameters that aren't: Time-varying effects in stock assessment. American Fisheries Society Annual Meeting, 9/6/2011, Seattle.

Co-organizer (with J. Bence and B. Irwin) Performance of alternative harvest policies. American Fisheries Society Annual Meeting, 9/5/2007-9/6/2007, San Francisco.

Service:

International

2020-present – Advisor for the International Task Force on Crustacean Fishery Management

2019 – International Stock Assessment Peer Review panel member, 12/2/2020-12/6/2020, Capetown, South Africa.

2019-present – Invited participant for the North Pacific Minke Whale Implementation Review.

2018-present – Invited participant for the International Whaling Commission Annual Science Committee.

2014-present – Associate editor for Canadian Journal of Fisheries and Aquatic Science. Handle approximately 20 manuscripts per year.

2010-2015 – Member of the American Fisheries Society Publications Overview Committee.

2014 – Panel member for Lake Erie Yellow Perch Stock Assessment and Management Strategy Evaluation, 10/1/2014-10/2/2014.

2012 – Guest editor for Ecological Applications.

National

2020-present – Vice Chair of the Mid-Atlantic Fishery Management Council Scientific and Statistical Committee.

2008-present – Mid-Atlantic Fishery Management Council Scientific and Statistical Committee.

2020-present – Member of the Summer Flounder Technical Working Group (to conduct a management strategy evaluation).

2020 – Chair of the 2020 Management Track Peer Review Committee (Atlantic herring, butterfish, Atlantic surfclam, longfin squid), 6/22/2020-6/25/2020.

2019 – Invited participant for the Northern Shortfin Squid Population Ecology and Fishery Summit. 11/25/2019-11/26/2019,

2018-2019 – Member of the Summer Flounder management strategy evaluation conceptual model committee.

2019 – Peer reviewer for the Bluefish, Black Sea Bass, Scup, and Monkfish Operational Assessments 8/5/2019-8/7/2019.

2018 – Member of the Review Committee for the NEFSC Clam Survey Redesign, 4/2018-6/2018.

2018 – National SSC workshop participant, Representative of the Mid-Atlantic SSC, San Diego, 1/16/2018-1/19/2018.

2016 – Chair of the Stock Assessment Review Committee for Atlantic Surfclam, NOAA Northeast Fisheries Science Center, Woods Hole, MA, 7/19-21/2016.

2015 – Management Strategy Evaluation Expert for the East Coast Fisheries Forum, 5/8/2015, Beaufort, NC.

2012, 2015 – Panel member for the National Marine Fisheries Service Sea Grant Population Dynamics Fellowship.

2013-2015 – Technical advisor to NOAA for International Convention for the Conservation of Atlantic Tunas stocks.

2009-2016 – Chair of Scientific Uncertainty Subcommittee of the Mid-Atlantic Fishery Management Council Scientific and Statistical Committee.

2014 – Peer reviewer for Gulf of Maine Atlantic cod stock assessment. New England Fishery Management Council, 8/28/2014-8/29/2014.

2014 – Peer reviewer for the black sea bass pot survey, Mid-Atlantic Fishery Management Council, 8/30/2014.

2013 – Advised the Atlantic States Marine Fisheries Commission and the Mid-Atlantic Fishery Management Council on recreational regulations for the summer flounder fishery.

2011 – Reviewer for management reference points for spiny dogfish. Mid-Atlantic Fishery Management Council, 8/19/2011.

2010 – National SSC workshop participant, Representative of the Mid-Atlantic SSC, Charleston, 10/19/2010-10/21/2010.

2010 – Southeast Data Assessment and Review workshop on implementing scientific uncertainty for federally managed U.S. fish stocks, participant, 2/23/2010-2/25/2010.

2009 – Southeast Data Assessment and Review workshop on modeling time-varying catchability in stock assessment models, co-leader, 2/9/2009-2/12/2009.

2009 – National SSC workshop participant, Representative of the Mid-Atlantic SSC, St. Thomas, U.S. Virgin Islands, 11/10/2009-11/13/2009.

2006 – Stock Assessment Review panel member for NMFS Northwest Fisheries Science Center yelloweye rockfish stock assessment, Alaska Fisheries Science Center.

Regional

2014-present – Chesapeake Bay Stock Assessment Committee member.

2018-2020 – Peer reviewer for the New Jersey Delaware Bay Oyster Stock Assessment.

2019 – Assisted with development and implementation of the Horseshoe crab stock assessment for ASMFC and Delaware.

2017 – Peer reviewer for the Spot and Croaker stock assessment, Atlantic States Marine Fisheries Commission, 4/17/2017-4/20/2017.

2014-2015 – Past-President, Tidewater Chapter of the American Fisheries Society.

2012-present – Consulting scientist for the NOAA Chesapeake Bay Office Restoration Center, Oyster Restoration Program.

2013-2014 – President, Tidewater Chapter of the American Fisheries Society, 3/2013-3/2014.

2012-2013 – President-elect, Tidewater Chapter of the American Fisheries Society.

2009-2012 – Ecosystem-based Management in Chesapeake Bay, Stock Assessment Quantitative Ecosystem Team.

2006 – Catfish Harvest Evaluation Program, Missouri Department of Natural Resources.

Maryland

2020-present – Oyster Consensus Process Lead for UMCES.

2020 – Maryland Oyster Stock Assessment Update (lead PI).

2020 – Frequently provide advice on natural resource management issues to Maryland DNR and members of the Maryland General Assembly

2019 – Testified and participated in hearings and briefings on oysters for the Maryland Senate and House of Delegates.

2016-2018 – Co-leader (with L. Fegley) of the Maryland Oyster Stock Assessment

2008 – Maryland Department of Natural Resources Stock Monitoring and Assessment Task Force

University System of Maryland (USM)

2020-present – Institute of Marine and Environmental Technology Program Committee member

2018-present – Faculty Senate Chairs Committee representative of UMCES to USM

2018-present – UMCES representative to the Council of University System Faculty (CUSF)

2010-2016, 2017-2018 – Marine Estuarine and Environmental Sciences (MEES) multi-institution graduate program committee member

2010-2018 – Co-chair of the MEES Fisheries Area of Specialization (AOS)

2006-2018 – MEES graduate program, Fisheries Area of Specialization committee member

UMCES

2018-present – UMCES Faculty Senate Chair

2020-present – Member of the UMCES COVID Response Committee

2020-present – Member of the UMCES Research and Education Reactivation Committee

2020-presnet – Chair of the UMCES awards committee for Outstanding Support Science

2019-present – Member of the Steering Committee and working group for Standard VII of the UMCES reaccreditation

2019 – Co-chair of the UMCES Committee on improving awareness of mental healthcare options

2018 – Member of the UMCES tenure and promotion appeals committee

2017-2018 – Member of faculty promotion committee

2017-2018 – Member of the UMCES Program and Curriculum Committee

2014-2015, 2019 – present – Chair of faculty tenure and promotion committee

2014-2015 – Chair of the CBL Graduate Education Committee

2014-2015 – Chair of Working Group 3 (student retention and support), member of the Steering Committee and Working Group 6 (assessment) for UMCES accreditation

2013-2015, 2017-2018 – CBL representative on the UMCES Graduate Faculty Council (GFC)

2013-present – Advisor for the University of Maryland student subunit of the Tidewater Chapter of the American Fisheries Society

2013-2015, 2018 – Member of the ad hoc subcommittee of the GFC on awarding competitive UMCES graduate fellowships

2013 – Co-Chair (with M. Li) for the Outcomes Assessment subcommittee to prepare the UMCES Accreditation Readiness Report for the Middle States Commission on Higher Education

2013 – Member of the ad hoc committee to revise the Policy for UMCES graduate faculty status

2013 – Member of the ad hoc committee to revise the Policy for UMCES emeritus faculty status

2012-2013, 2013-2014 – Search committee chair for faculty positions

2011 – CBL facilities planning committee member

2011 – Search committee member for IT specialist

2011-2014 – CBL computer committee chair

2009 – CBL faculty search committee member

2008, 2009 – Selection committee for Maryland Sea Grant Research Experience for Undergraduates

2006-2007 – Committee on CBL faculty teaching of MEES courses.

Professional Societies:

American Fisheries Society

Ecological Society of America

American Association for the Advancement of Science