

# CURRICULUM VITAE

## Evamaria Wysk Koch

### Horn Point Laboratory

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### I. Education

1984	B.Sc.	Universidade de Rio Grande, Brazil	Oceanography
1988	M.S.	University of South Florida, Tampa	Biology
1993	Ph.D.	University of South Florida, St. Petersburg	Marine Science

### II. Professional Background

1988-1989	Biological Scientist, Florida Marine Research Institute, St. Petersburg, FL
1993-1995	Research Scientist, Department of Marine Sciences, University of Connecticut.
1995-2001	Assistant Professor, Horn Point Laboratory, University of Maryland Center for Environmental Science, Cambridge, MD.
1999	Visiting Scientist, Max Planck Institute for Marine Microbiology, Bremen, Germany (Oct/Nov).
2001-	Associate Professor, Horn Point Laboratory, University of Maryland Center for Environmental Science, Cambridge, MD.
1995-	Courtesy Assistant Professor, College of Arts and Sciences, University of South Florida.

### Awards and Special Recognition

1992	Best Student Presentation Award – XIV <sup>th</sup> International Seaweed Symposium, Brest and Saint-Malo, France
1991-1993	Elsie and William Knight Jr. Fellowship, University of South Florida, St. Petersburg, FL
1994-2002	Who is Who in Science and Engineering
1999	NSF panelist
2001	Thesis examiner, University of Western Australia
2002 - 2005	Marine Ecology Progress Series Staff Reviewer
2005 – 2008	Editorial board of Marine Ecology, Blackwell Verlag
2005	Thesis Examiner, Stockholm University, Sweden
2006	NSF panelist invitation
2006 – 2010	member of the European Science Foundation pool of reviewers
2009	Thesis Referee, Universidade Federal de Pernambuco, Brazil

### III. Research

#### A. Areas of Professional Expertise

Seagrass ecology, hydrodynamically-mediated processes in meadows of aquatic plants, global changes in coastal plant systems, tissue culture of marine macrophytes, ecophysiology of marine plants.

#### B. Peer Refereed Publications

##### 1. Papers in Refereed Journals (last 5 years)

Di Carlo, G., F. Badalamenti, A.C. Jensen, M. Toccaceli, G. Di Stefano and E.W. **Koch** 2005. Colonization process of vegetative fragments of *Posidonia oceanica* (L.) Delile on rubble mounds. *Marine Biology* 147:1261-1270.

**Koch**, E.W., J. Ackerman, M. van Keulen and J. Verduin. 2006. Fluid Dynamics in Seagrass Ecology: from Molecules to Ecosystems. In: Larkum, A.W.D., R.J. Orth and C.M. Duarte (eds), *Seagrasses: Biology, Ecology and Conservation*. Springer Verlag, pp 193-225.

van den Belt, M., O.A. Bianciotto, R. Costanza, S. Demers, S. Diaz, G.A. Ferreyra, E.W. **Koch**, F.R. Momo and M. Vernet. 2006. Mediated Modeling of the Impacts of enhanced UV-B radiation on Ecosystem Services. *Photochemistry and Photobiology* 82:865-877.

Costa, C.S.B., Armstrong, R., Detrés, Y., **Koch**, E.W., M. Bertiller, A. Beeskow, L.S. Neves, G.M. Tourn, O.A. Bianciotto, L.B. Pinedo, A.Y. Blessio, and N. San Roman. 2006. Effect of UV-B radiation on salt marsh vegetation: trends of the genus *Salicornia* along the Americas. *Photochemistry and Photobiology* 82:878-886.

Short, F.T., E.W. **Koch**, J.C. Creed, K.M. Magalhães. 2006. SeagrassNet monitoring across the Americas: case studies of seagrass decline. *Marine Ecology-An Evolutionary Perspective* 27:277-289.

Chen, S.-N., L.P. Sanford, E.W. **Koch**, F. Shi, E.W. North. 2007. A nearshore model to investigate the effects of seagrass bed geometry on wave attenuation and suspended sediment transport. *Estuaries* 30(2):296-310.

van den Belt, M., R. Constanza, S. Demers, S. Diaz, G.A. Ferreyra, S.M.F. Giancesella, E.W. **Koch**, F.R. Momo and M. Vernet. 2007. Mediated modeling for integrating science and stakeholders: Impacts of enhanced ultraviolet-B radiation on ecosystem services. In: Tiessen, H., M. Brklacich, G. Breulmann and R.S.C.

Menezes (eds), Communicating Global Change Science to Society, Island Press, Washington, pp 179-186.

- Barbier, E.B., E.W. **Koch**, B. Silliman, E. Wolanski, J. Primavera, E. Granek, S. Hacker, S. Polasky, S. Aswani, L.A. Cramer, D. Stoms, C. Kennedy, B. Halpern, D. Bael, C. Kappel, G.M.E. Perillo and D.J. Reed. 2008. Coastal ecosystem-based management with non-linear ecological functions and values. *Science* 319:321-323 (Report).
- Barbier, E.B., E.W. **Koch**, B. Silliman, S. Hacker, E. Wolanski, J. Primavera, E. Granek, S. Polasky, S. Aswani, L.A. Cramer, D. Stoms, C. Kennedy, D. Bael, C. Kappel, G.M.E. Perillo and D.J. Reed. 2008. Response to R.A. Feagin's Letter: Vegetation's role in coastal protection. *Science* 320 (5873): 176b (Letter).
- Crump, B.C. and E.W. **Koch**. 2008. Attached bacteria populations shared by four species of aquatic angiosperms. *Applied and Environmental Microbiology* 74:5948-5957.
- Koch**, E.W., E.D. Barbier, B.R. Silliman, D.J. Reed, G.M.E. Perillo, S.D. Hacker, E.F. Granek, J.H. Primavera, N. Muthiga, S. Polasky, B.S. Halpern, C.J. Kennedy, E. Wolanski, C.V. Kappel. 2009. Non-linearity in ecosystem services: temporal and spatial variability in coastal protection. *Frontiers in Ecology and the Environment* 7:29-37.
- Wicks, E.C., E.W. **Koch**, J.M. O'Neil and K. Elliston. 2009 Sediment organic content and the growth and distribution of *Zostera marina*: hydrodynamic conditions may play a role. *Marine Ecology Progress Series* 378:71-80.
- Smith, K.A., E.W. North, F. Shi, S-N. Chen, R.R. Hood, E.W. **Koch** and R.I.E. Newell. 2009. Modeling the effects of oyster reefs and breakwaters on seagrass growth. *Estuaries and Coasts* 32:748-757.
- Koch**, E.W., M.S. Ailstock, D.M. Booth and D.J. Shafer. (accepted) The role of currents and waves in the dispersal of submersed angiosperm seeds and seedlings in Chesapeake Bay. *Restoration Ecology*
- Barbier, E.B., S. Hacker, E.W. **Koch**, B. Silliman and A.C. Stier. (accepted) Ecological Estuarine and Coastal Ecosystems and Their Services. In: M. van den Belt and R. Costanza (eds) *Treatise on Estuarine and Coastal Science* (Series eds., E. Wolanski, and D. McLusky), Elsevier.
- Granek, E.F., S. Polasky, C.V. Kappel, D.J. Reed, D.M. Stoms, E.W. **Koch**, C.J. Kennedy, L.A. Cramer, S.D. Hacker, E.B. Barbier, S. Aswani, G.M.E. Perillo, B. Silliman, N. Muthiga, D. Bael and E. Wolanski. (accepted). Ecosystem services as a common language for coastal ecosystem-based management. *Conservation Biology*

McKone, K.L., E.W. **Koch**, C. Pickerell, D.M. Booth, A.T. McDonald, K. Petersen and S. Schott (submitted) Going and growing with the flow: linking hydrodynamic conditions, sediment composition and seagrass morphology and biomechanics. *Limnology and Oceanography*

Jordan, T.L., E.W. **Koch** and I.R. Davison. (submitted) Effects of Water Flow-Induced Carbon Limitation on the Physiology of the Brown Alga *Saccharina latissima* (Linnaeus) Lane, Mayes, Druehl and Saunders. *J Phycology*

### Technical Reports

Batiuk, R.A., P. Bergstrom, M. Kemp, E. **Koch**, L. Murray, J.C. Stevenson, R. Bartleson, V. Carter, N. Rybicki, J. Landwehr, C. Gallegos, L. Karrh, M. Naylor, D. Wilcox, K. Moore and S. Ailstock. 2000. Chesapeake Bay Submersed Aquatic vegetation Water Quality and habitat-based requirements and restoration targets: a second technical synthesis. U.S. EPA Chesapeake Bay Program. (<http://www.chesapeakebay.net/pubs/sav/06.pdf>)

Moore, K., M. Naylor, S. Marion, N. Rybicki, E. **Koch**, R. Orth and J. Bortz. 2003. A strategy to accelerate the protection and restoration of submersed aquatic vegetation in the Chesapeake Bay. SAV Taskgroup Report. ([http://www.chesapeakebay.net/info/pressreleases/ec2003/SAV\\_strategy.pdf](http://www.chesapeakebay.net/info/pressreleases/ec2003/SAV_strategy.pdf))

**Koch**, E.W., K.A.M. Englehardt, J.K. Bortz, R.F. Murphy, R.M. Thur, K.A. Yee, and K.G. Sellner. 2004. SAV Restoration Handbook: a guide for restoring SAV on DoD installations; US Department of Defense.

**Koch**, E.W., L.P. Sanford, S.N. Chen, D.J. Shafer and J.M. Smith. 2006. Waves in seagrass systems: review and technical recommendations. US Army Corps of Engineers Technical Report. Engineer Research and Development Center, ERDC TR-06-15, 82 p. (<http://el.erdc.usace.army.mil/elpubs/pdf/tr06-15.pdf>)

Contributed to the report entitled "Mitigating Shore Erosion Along Sheltered Coasts" of the National Research Council. 2006. National Academy Press, Washington, D.C.

Wilson, D.E., C.E. Wazniak, D.M. Boward, T.J.B. Carruthers, R.J. Chalmers, D.H. Clearwater, W.C. Dennison, A.B. Hairston-Strang, M.R. Hall, F.M. Irani, R.V. Jesien, W.M. Knaoo, E.W. **Koch**, K.L. Kyde, A.E. Luscher, M.D. Naylor, R.J. Orth, C.C. Spaur, M.L. Tarnowski, E.C. Wicks and C.S. Zimmerman. 2009. Habitats of the Coastal Bays. In: William C. Dennison, Jane E. Thomas, Carol J. Cain, Tim J.B. Carruthers, Matthew R. Hall, Roman, V. Jesien, Catherine E. Wazniak, and David E. Wilson (eds), *Shifting Sands: Environmental*

and cultural change in Maryland's Coastal Bays, IAN Press

Palinkas, C., Koch, E.W. and N. Barth (submitted) Temporal variations in nearshore sedimentation in Chesapeake Bay. Proceedings of the PAGES meeting in Corvallis

C. Contracts and Grants (last 5 years)

1. Awarded (organized by ending date)

Hood, Koch, Newell and North. Do oyster filtration and wave attenuation associated with oyster reefs and breakwaters improve seagrass habitat? Maryland SeaGrant. 2003-2005. \$190,914. (1 mo/yr).

Short and Koch. SeagrassNet – Western Pacific. Packard Foundation. 07/01/2003 – 06/30/2005. \$19,706. (0.5 mo salary).

Koch and Short. Impact of global changes on seagrasses along the Americas. Inter-American Institute for Global Change Research/NSF, Small Grant Program II. 2004-2005. \$ 29,978. (0.5 mo/yr).

Crump and Koch. Breaking barriers in SAV restoration: using plant-associated bacteria to enhance restoration success. NOAA Chesapeake Bay Studies, 2005. \$66,955.

Sanford, L., E.W. Koch and J. Halka. Interactions between shoreline erosion, suspended solids, and submerged aquatic vegetation in the Potomac River. Maryland Sea Grant. 2005 to 2007. \$ 83,252 (Koch only).

Koch and Fonseca. Wave exposure: an additional parameter for identification of suitable SAV restoration sites. NOAA Chesapeake Bay Studies, 2005- 2006. \$133,129.

Koch. Seagrass habitat engineering: defining the needed balance in wave attenuation. U.S. Army Corps of Engineers, Engineer Research and Development Center. 2005 to 2007. \$ 192,401.

Koch, E.W. and J.C. Stevenson. The contribution of marshes to wave attenuation in living shoreline projects. Chesapeake Bay Trust. 2005 to 2006. \$ 49,769.

Perez, Hernandez, Vergara, Peralta, Benavente, Olive, Garcia, Morris, Bouma, Van Duren and Koch. Integrated study of the effect of physico-chemical and biological variables on the ecology of marine macrophytes in Cadiz Bay natural park: applications for management. Spanish Ministry of Education and Science. 10/2005 to 9/2008. No direct funds but HPL will host Spanish students who will pursue their research at HPL.

- Koch, E.W. and J.C. Stevenson. Elevated temperature: an artifact of some living shorelines? Chesapeake Bay Trust. 2006 to 2007. \$ 49,886.
- Granek, E., E.W. Koch, E. Barbier, D. Stoms, S. Aswani-Canela. Measuring Ecological, Economic and Social Values of Coastal Habitats to Inform Ecosystem-based Management of Land-Sea Interfaces. National Center for Ecological Analysis and Synthesis (NCEAS) 2006-2007. \$190,400.
- Koch, E.W. Shoreline stabilization and the modification/loss of land-margin habitats in the Maryland Coastal Bays. Maryland Coastal Bays Program. 2007. \$ 22,060.
- Koch. Seagrass habitat engineering: defining the needed balance in wave attenuation (year 3). U.S. Army Corps of Engineers, Engineer Research and Development Center. 2007 to 2008. \$ 79,111.
- Koch and Ailstock. Effects of Currents and Waves on the Distribution of Seeds of *Ruppia maritima*, *Potamogeton perfoliatus* and *Stuckenia pectinata*. U.S. Army Corps of Engineers Engineer Research and Development Center. 2007-2009. \$253,457.
- Palinkas, C. and E.W. Koch. SAV and its substrate: spatial, temporal and historical trends. NOAA Chesapeake Bay Program. 2007-2009. \$175,800.
- Jordan, T. et al. Predicting impacts of stressors at the land-water interface. NOAA. 2009-2014. \$3,066,560; \$267,051 (Koch portion).

## 2. Submitted

### D1. Invited Seminars and Presentations (last 5 years)

- Koch, E.W. 2000. Linking marshes and seagrasses: an example of macroecology. Semianr Series Marine Science Consortium, Wallops Island, VA.
- Koch, E.W. 2000. Impact of boat-generated waves on water quality in a SAV habitat. Personal Watercraft and Small Boat Impacts on Shallow Water Systems Workshop. Rutgers University, NJ.
- Koch, E.W. 2000. The effect of UV-B radiation on salt marsh vegetation along a latitudinal gradient. IAI Scientific Advisory Committee Meeting, NSF, Arlington, VA.
- Koch, E.W. 2001. Boat-generated waves and SAV habitat quality. SAV Taskgroup, Chesapeake Bay Program.

- Koch, E.W. 2001. What can sediments tell us about seagrass habitats? International Seagrass-Watch Volunteers Forum Queensland Fisheries Service, Northern Fisheries Centre, Cairns, Australia. (declined due to Sept 11, 2001 events)
- Koch, E.W. 2002. What is limiting the distribution of seagrasses in the coastal bays? Workshop on 'Understanding the Role of Macroalgae in Shallow Estuaries'. Maryland Department of Natural Resources, Annapolis, MD. (declined due to car accident)
- Koch, E.W. 2002. Seagrass-induced transport of particulate matter into permeable sediments. Invited speaker at ASLO Ocean Science Meeting – Special Session on 'Biophysical Factors Affecting the Growth and Survival of Aquatic Organisms', Hawaii.
- Koch, E.W., R. Newell and R. Hood. 2003 Understanding the relationship between bivalve molluscs and seagrass habitat: new tools for restoration planning. Invited talk at the 4th annual Chesapeake Bay Restoration Workshop, Baltimore, MD.
- Koch, E.W, R.R. Hood, M.W. Radcliffe and R.I.E. Newell. 2003. Modeling the influence of filtration by restored bivalve stocks on seagrass growth via sediment dynamics and turbidity in shallow waters. Invited presentation at the Restore America's Estuaries Conference, Baltimore, MD.
- Newell, R., E.W. Koch, and R. Hood. 2003 The effects of man-made and biogenic breakwaters on adjacent seagrasses. Invited talk at the special session "Impacts of shoreline modifications on the estuarine nearshore habitat and functions", Invited talk at the ERF meeting, Seattle, WA.
- Koch, E.W. and J.C. Stevenson. 2003. Linking sea level rise and seagrass distribution via marsh retreat. Invited talk at the "Impacts of Shoreline Modifications on the Estuarine Nearshore" special session at the ERF meeting, Seattle, WA.
- Koch, E.W. and M. Huettel. 2003. Hydrodynamics in Seagrass Ecology: from Molecules to Ecosystems. Distinguished Guest Lecturer at the University of Maine's Estuary and Coastal Process seminar series
- Koch, E.W. 2003. Seagrasses in Flowing Water: from Molecules to Ecosystems. Invited speaker at EPA, Newport, Oregon.
- Koch, E.W. 2004. Linking adjacent plant and animal communities in Chesapeake Bay: a case study for marshes, seagrasses and oysters. Seminar Series Department of Ocean, Earth and Atmospheric Sciences, at Old Dominion University.
- Koch, E.W. 2004. Water flow in seagrass ecology: from molecules to ecosystems. Invited speaker at the Stazione Zoologica di Napoli (Italy) Seminar Series.
- Koch, E.W. 2005. Key note speaker at the BioFlow workshop in Sylt, Germany. Declined due to personal conflicts.

- Koch, E.W. 2006. SAV habitat requirements other than light. Invited speaker at the Chesapeake Bay Sediment Workgroup meeting, June 29, 2006.
- Koch, E.W. and D. Shaffer. 2006. Sediment dynamics and sediment composition: the key to healthy habitats shoreward of wave-attenuating structures? Invited speaker at the Living Shorelines Summit, Williamsburg, VA, December 2006.
- Koch, E.W. 2006. "Living shorelines: design considerations". Invited speaker and panel member at the "Design and Technical Considerations for Living Shorelines" session at the Living Shorelines Summit, Williamsburg, VA, December 2006.
- Koch, E.W. 2007. SAV habitat requirements other than light. Scientific and Technical Advisory Committee Workshop on: An Introduction to Sedimentsheds: Sediment and Its Relationship to Chesapeake Bay Water Clarity Chesapeake Bay, Annapolis, January 2007.
- Sanford, L., E.W. Koch and J. Halka. 2008. Shore erosion, nearshore habitat quality and (the other) vegetation. Estuarine Design and Research Needs: Navigation Channels, Estuarine Vegetation, Placement of Dredged Sediments, and Long-term Estuary Evolution Workshop, U.S. Army Corps of Engineers, Sarasota, FL, Jan 28-30.
- Koch, E.W. 2008. Sun, Sand and Waves: but no surf please! Invited speaker at the Semi-annual SAV workgroup meeting. Gloucester Point, VA, February 2008.
- Koch, E.W. 2008. Linking biological, physical and geological processes in coastal ecosystems. US Army Corps of Engineers, Vicksburg, MS, November.
- Koch, E.W. 2009. Chesapeake Bay SAV in a globally changing world. Chesapeake Bay maritime Museum.
- Koch, E.W., D. Booth, S. Ailstock and D. Shafer. 2009. Dispersal of seeds and seedlings of *Ruppia maritima*, *Potamogeton pectinatus* and *Stuckenia pectinata*. SAV workgroup Meeting. Annapolis, MD, May.
- Koch, E.W.<sup>1</sup>, D.M. Booth<sup>1</sup> and L. Karrh. 2009. Shoreline hardening and the future of seagrasses in the Mid-Atlantic (USA). Ecosystem Based Management Conference,

## D2. Presentations at conferences (since 2007)

- Palinkas and Koch. 2010. Spatial and temporal variations in nearshore Chesapeake Bay sedimentation and potential impacts to SAV. ASLO, Ocean Sciences Meeting, Portland, OR

- McKone, Koch and Tanner. 2009. Trade-offs in seagrasses exposed to varying hydrodynamic conditions: applications for protection and restoration. CERF, Portland, OR
- Koch. 2009. Non-linearity in ecosystem functions: wave attenuation at the land-sea interface. IMCC Arlington, VA
- Koch. 2008. Seagrass habitat engineering: defining the needed balance in wave attenuation. Restore America's Estuaries, Providence, RI
- Booth, Koch, Ailstock and Shafer. 2008. Going with the flow: the effect of currents and waves on SAV seed distribution. Benthic Society Meeting (poster)
- Jordan, Koch and Davison. 2006. The effect of water flow induced carbon limitation on the physiology of *Laminaria saccharina*. Journal of Phycology 42:9, Abstract 27.
- Koch, Fonseca, Malhotra and Karrh. Maximum Wave Energy Tolerated By SAV In Chesapeake Bay. ERF 2007, Providence, RI (oral presentation)
- Short, Cole, Freeman, Koch and Fortes. Seagrass Ecosystems in Trouble: A Global Report Card from SeagrassNet. ERF 2007, Providence, RI (oral presentation)
- Wicks and Koch. Do retreating marshes create seagrass habitat? The importance of sand, plant morphology, and hydrodynamics. ERF 2007, Providence, RI (oral presentation)
- Orth, Marion, Moore, Carruthers, Dennison, Kemp, Koch, Stevenson, Williams, Weinberg, Batiuk, Naylor, Bergstrom and Rybicki. Annual and Decadal Trends in Distribution and Abundance of Chesapeake Bay Submersed Aquatic Vegetation: 1984-2004. ERF 2007, Providence, RI (oral presentation)
- Jordan, Koch and Davison. Hydrodynamically Mediated Carbon Uptake in *Zostera marina* Grown in Two Sediment Types. ERF 2007, Providence, RI (poster)
- McKone and Koch. Going and Growing with the Flow: Linking Water-flow Induced Seagrass Morphology, Shoot Density, and Light Availability. ERF 2007, Providence, RI (poster)
- Wazniak, Koch, Karrh, Wells and Orth. 2009. Development of a quantifiable seagrass goal for the Maryland Coastal Bays. AERS Meeting, Ocean City (talk)

#### E. Symposia Organized/Chaired for Professional Meetings

- Organizer, Bi-annual Marine Science Consortium Board of Directors Meeting, Horn Point Laboratory, April 4, 1998.
- Organizer, 1<sup>st</sup> International Workshop on the Effect of UV-B Radiation on Salt Marsh

vegetation, Horn Point Laboratory, October 29 – September 4, 1999.  
 Chair, Seagrass/SAV growth session, Estuarine Research Federation Meeting, New Orleans, September 29, 1999.  
 Co-Chair (Beer and Koch), Biology Session, 4<sup>th</sup> International Seagrass Biology Workshop, Corsica, France, September 26 – October 1, 2000.  
 Co-Organizer (MacIntyre and Koch) of a special session on Processes at the Benthic Interface, American Society for Limnology and Oceanography meeting, Albuquerque, February 2001.  
 Co-Organizer (Koch and Stevenson) of a special session on Processes Linking Seagrasses and Adjacent Plant and Animal Communities, Estuarine Research Federation Meeting, St. Petersburg, November 2001.  
 Member of organizing committee of the 7<sup>th</sup> International Seagrass Biology Workshop, Zanzibar, Tanzania, September 2006.  
 Co-Organizer (Koch and Shafer) of a special session on “The Role of Sediments in Seagrass Ecology, management and restoration”, Coastal and Estuarine Research Federation meeting, Portland, OR, November 2009.  
 Co-Organizer (Harris and Koch) of a special session on “Ecosystem Engineers in the Coastal and Estuarine Environment”, Coastal and Estuarine Research Federation meeting, Portland, OR, November 2009.

#### F. Active Membership in Professional Societies

Estuarine Research Federation  
 American Society of Limnology and Oceanography  
 American Geological Union  
 Sigma Xi Scientific Research Society

#### IV. Teaching and Training

1995- Member, Graduate Faculty, University of Maryland, MEES.  
 1995- Affiliate Member, Graduate Faculty, University of Maryland, UMCEES.

##### A. University of Maryland Courses Taught

Course No.	Title	Institution	Semester	Enrollment	Credit Hrs	Co-Instructors	No. Lectures
MEES 608W	Wetlands Systems Seminar	HPL	Fall '95	14	1	Kana	2
MEES 698D	Benthic Ecology	HPL	Fall '95	16	3	Tenore, Newell	3
			Fall '97	12	3	Tenore, Newell	4

			Fall '99	11	3	Tenore, Newell	4
			Fall '01	4	3	Marinelli	2
			Spring '04		3	Marinelli	2
MEES 621	Biological Oceanography	HPL	Spring '96	21	3	Fisher, Stoecker	2
			Spring '97	17	3	Stoecker, Hood	6
			Spring '98	21	3	Hood, Stoecker	4
			Spring '99	13	3	Hood, Stoecker	5
			Spring '00	19	3	Hood, Stoecker	7
			Spring '01	11	3	Hood, Stoecker	3
			Spring '02	20	3	Hood, Stoecker	3
			Fall '03	34	3	Hood, Stoecker	4
			Fall '04	8	3	Hood, Stoecker	4
			Fall '05	8	4	Hood, Stoecker	4
			Fall '06	11	4	Hood, Stoecker	4
			Fall '08	11	4	Hood, Stoecker	4
MEES 622	Biological Oceanographic Methods	HPL	Spring '99	5	1	Hood, Stoecker	1
			Spring '00	6	1	Hood, Stoecker	1
			Spring '01	3	1	Hood, Stoecker	1
			Spring '02	6	1	Hood, Stoecker	1
MEES 645	Ecol. Manag. Wetland SAV Systems	HPL	Spring '96	22	3	Stevenson, Cornwell	2
			Fall '98	8	3	Stevenson	5
			Spring '01	5	3	Stevenson	5
			Fall '04	6	3	Stevenson, Cornwell	2
MEES 608J	Fluid Dynamics	HPL	Spring '97	11	1	Sanford	15

	in Ecology		Spring '02	3	1	Sanford	14
MEES 608G	Current Topics in Seagrass and Marsh Ecology	HPL	Spring '98	11	1		16
MSCI 656	Seagrass Ecosystems	VIMS	Spring '05	6	2	Orth, Moore	1

## B. Graduate Students Supervised as Major Advisor

### 1. Degrees Completed

Guarraci, Meredith J. 1999. M.S.; Ecology, Horn Point Laboratory. "Interaction between epiphyte biomass and resuspended inorganic material on leaves of natural and artificial submersed aquatic vegetation."

Kluenenberg, Alycia. 2000. M.S.; Ecology, Horn Point Laboratory. "The effect of UV-B radiation on salt-marsh vegetation."

Chiscano, Carina. 2000. M.S.; Environmental Science, Horn Point Laboratory. "The effects of wave exposure on submersed aquatic vegetation."

Huber, Caroline. 2003. M.S.; Technische Universität Hamburg-Harburg, Germany. "Wave attenuation in canopies of *Zostera marina*." Co-advisor with Dr. Pasche. Award: best graduate thesis in 2003.

Magalhães, Karine. 2004. Ph.D.; Universidade Federal Rural de Pernambuco, Brazil. "Habitat requirements of the seagrass *Halodule wrightii* in Pernambuco, Brazil." Co-advisor with Dr. Sonia Barreto Pereira)

Wicks, Elinor Caroline. 2005. M.S. Environmental Science, Horn Point Laboratory. "The effect of sea level rise on seagrasses: is sediment adjacent to retreating marshes suitable for seagrass growth?"

Jordan, Terry. 2008. M.S. Environmental Science, Horn Point Laboratory. "Hydrodynamically mediated acclimation in marine macrophytes."

McKone, Katie. 2009. M.S. Environmental Science, Horn Point Laboratory. "Light available to the seagrass *Zostera marina* when exposed to currents and waves" Awards: best student presentation at the 8<sup>th</sup> International Seagrass Biology Workshop and at the Atlantic Estuarine Research Society meeting in 2008.

DiCarlo, Giuseppe. 2006. Post-doctoral fellow.

### 2. Students Currently Supervised

Lara, Miguel. 2009. Ph.D. Student at the University of Cadiz (Spain), pursuing part of his research in my lab.

Eduardo Infantes. 2010. Ph.D. Student at the Instituto Mediterraneo de Estudios Avanzados (Spain), pursuing part of his research in my lab.

### 3. Current Graduate Student Committee Memberships

#### Past

William Severn	M.S.	MEES	Horn Point Laboratory
Sean Crawford	M.S.	MEES	Horn Point Laboratory
Tonna-Marie Surgeon	M.S.		University of Connecticut
Xiping Ma	M.S.	MEES	Horn Point Laboratory
Elden Hawkes	M.S.	MEES	U. Maryland Eastern Shore
Todd Chadwell	M.S.	MEES	Appalachian Laboratory
Roberth Murphy	M.S.	MEES	Chesapeake Biological Lab
Steven Engstrom	M.S.	MEES	Chesapeake Biological Lab
Kristin Mielcarek	M.S.	MEES	Horn Point Laboratory
Todd Beser	M.S.	MEES	Appalachian Laboratory
Chung-Chi Chen	Ph.D.	MEES	Horn Point Laboratory
Marjan van der Belt	Ph.D.	MEES	U. Maryland at College Park
Tina N. Yamonte	Ph.D.	MEES	U. Maryland at Baltimore
Monica Grasso	Ph.D.	MEES	U. Maryland at College Park
Heidi Hertler	Ph.D.		Drexel University
Shou-Chung Huang	Ph.D.	MEES	Horn Point Laboratory
Teresa Coley	Ph.D.	MEES	Horn Point Laboratory
Jill Rooth	Ph.D.	MEES	Horn Point Laboratory
Richard Bartleson	Ph.D.	MEES	Horn Point Laboratory

#### Current

Lauren McChesney	M.S.	MEES	Appalachian Laboratory
Renee Gruber	M.S.	MEES	Horn Point Laboratory
Nicole Barth	M.S.	MEES	Horn Point Laboratory
Lori Staver	Ph.D.	MEES	Horn Point Laboratory

#### 4. Research Internships Supervised

Chris Raleigh	undergraduate student, Kutztown University	Summer 1996	REU Fellow	The effect of UV-B on marsh vegetation
Julie Vecchio	undergraduate student, Albion College	Summer 1998	REU Fellow	Resuspension of microphytobenthos
Randy Lee	undergraduate student, California State Univ.	Summer 1999	REU Fellow	Interaction between seagrass epiphytes and water flow
Jennifer Sallee	undergraduate student Roger Williams Univ.	Summer 2000	REU Fellow	The effect of sedimenta- tion on the growth of SAV meadows and canopies
Leslie Brandt	undergraduate student Gustavus Adolphus Coll.	Summer 2001	REU Fellow	Epiphytic layers as UV-B filters on seagrass leaves
Sarah R. Stein	undergraduate student University of Vermont	Summer 2002	REU Fellow	The demise and recovery of a seagrass habitat due to a barrier island overwash
Christina Geirman	undergraduate student Michigan State University	Summer 2003	REU Fellow	The effect of a breakwater on a seagrass habitat
Sarah Keating	high school student St. Margareth's School	Spring 2009	Intern	Adhesion of SAV roots

#### V. Outreach and Service

##### A. Editorships

###### Articles Reviewed (last 5 years)

- 2000 Aquatic Botany (1)  
Canadian Journal of Fisheries and Aquatic Sciences (1)  
Colleague reviews (3)  
Estuaries (2)  
Estuarine Coastal and Shelf Science (1)  
Limnology and Oceanography (1)  
Restoration Ecology (1)
- 2001 AMBIO (1)  
American Journal of Botany (1)  
Aquatic Botany (2)  
Bulletin of Marine Sciences (3)  
Gordon Conference (1)  
Journal of Coastal Research (1)

- Journal of Experimental Marine Biology and Ecology (1)
- Limnology and Oceanography (1)
- Marine Biology (1)
  
- 2002 Aquatic Sciences (1)
- Estuaries (4)
- Estuarine Coastal and Shelf Science (1)
- Journal of Marine Systems (1)
- Marine Ecology Progress Series (4)
  
- 2003 Estuarine, Coastal and Shelf Science (1)
- Journal of Phycology (1)
- Limnology and Oceanography (3)
- Marine Ecology Progress Series (5)
- Wetlands (1)
  
- 2004 Aquatic Botany (4)
- Botanica Marina (1)
- Estuaries (1)
- Harmful Algae (1)
- Journal of Plant Ecology (1)
- Marine Biology (2)
- Marine Ecology Progress Series (1)
- Restoration Ecology (1)
  
- 2005 Botanica Marina (1)
- Bulletin of Marine Science (1)
- Continental Shelf Research (2)
  
- 2006 EPA (1)
- Estuaries (1)
- Journal of Experimental Biology (1)
- Journal of Experimental Marine Biology and Ecology (1)
- Marine Ecology Progress Series (2)
  
- 2007 Estuaries (1)

Proposals Reviewed (last 5 years)

- 2000 Jersey Sea Grant College Program – MERP (1)
- Research Corporation (1)
- Gordon Conference (1)
- US EPA Long Island Sound Program (1)

- 2001 Inter-American Institute for Global Change Research (1)  
National Science Foundation (2)  
National SeaGrant Office (1)  
Rhode Island Sea Grant (2)  
US EPA Oregon (2)
- 2002 NOAA-NOS (2)  
NSF (2)  
CICEET (1)
- 2004 US EPA (1)  
NOAA (1)  
NSF (2)  
Maine Agricultural and Forest Experimental Station (1)
- 2005 CICEET (1)  
European Science Foundation (ESF) (1)  
Netherlands Foundation for the Advancement of Tropical Research (1)  
NSF (2)
- 2006 National Fish and Wildlife Foundation (1)  
New York Sea Grant (1)  
NSF (3)
- 2007 Louisiana Sea Grant (1)

## B. Public Service

- 1999 Dorchester County Teachers Inservice Seminars (2), Americans for the Competitive Enterprise System.  
SAV in Chesapeake Bay – presentation for the REU Summer Students.  
The impact of wave energy on SAV habitats in Chesapeake Bay – SAV Workgroup Presentation, Gloucester Point, VA.  
SAV Problems in the Smith Island Area – Public Information Meeting, Tylerton, MD.  
SAV and dredging in Chesapeake Bay – Coordination Meeting, US Corps of Engineers, Baltimore, MD.
- 2004 Guest lecturer in the course entitled “Perspectives on the Chesapeake Bay” taught at Washington College – “Submerged Aquatic Vegetation – Keystone for habitat, bellweather for healthy systems.”

## C. Federal/State/Local Government

- 1996 SAV Workgroup - Chesapeake Bay Program (CBP)  
SAV Habitat Requirements Review Workgroup/Technical Synthesis II (CBP)

- Workshop on using a risk-based approach to consider dispersant use in the upper 10 meters of coastal waters - Scientific Environmental Associates, Inc., VA.
- 1997 SAV Workgroup (CBP)  
SAV Habitat Requirements Review Workgroup/Technical Synthesis II (EPA-CBP)  
Workshop on SAV restoration in Chesapeake Bay (MD DNR)  
SAV exclusion zone taskforce (CBP)
- 1998 NSF Scientific Advisory Committee, Inter-American Institute for Global Change Research (declined the invitation due to conflict in scheduled activities)  
SAV Workgroup (Chesapeake Bay Program – CBP)  
SAV Habitat Requirements Review Workgroup/Technical Synthesis II (EPA-CBP)  
SAV/Claming Taskforce (MD DNR)  
Tangier Sound SAV Workgroup (Chesapeake Bay Foundation)
- 1999 NSF Panel, GEO - Professional Opportunities for Women in Research and Education  
SAV Workgroup (Chesapeake Bay Program – CBP)  
SAV Habitat Requirements Review Workgroup/Technical Synthesis II (EPA-CBP)  
Tangier Sound SAV Workgroup (Chesapeake Bay Foundation)  
SAV and Dredging Workgroup (US Corps of Engineers)
- 2000 Chesapeake Bay SAV Task Group  
Chesapeake Bay Tidal Habitat Steering Committee  
Chesapeake Bay Tidal Habitat Workgroup  
SAV Workgroup for the Coastal Bays (Coastal Bays Program)  
SAV Workgroup for the Coastal Bays Comprehensive Management Plan
- 2001 Chesapeake Bay SAV Task Group  
Chesapeake Bay Tidal Habitat Steering Committee  
Chesapeake Bay Tidal Habitat Workgroup
- 2002 Chesapeake Bay SAV Task Group  
Chesapeake Bay Tidal Habitat Steering Committee  
Development of new SAV restoration strategy for the Chesapeake Bay
- 2003 Chesapeake Bay SAV Task Group
- 2004 Maryland Coastal Bays STAC  
Chesapeake Bay SAV Task Group
- 2005 Maryland Coastal Bays STAC  
Chesapeake Bay SAV Task Group
- 2006 Maryland Coastal Bays STAC  
Chesapeake Bay SAV Task Group  
SAV Seed Ecology Workshop Steering Committee
- 2007 Maryland Coastal Bays STAC  
Chesapeake Bay SAV Task Group
- 2008 Maryland Coastal Bays STAC  
Chesapeake Bay SAV Task Group
- 2009 Co-Organizer with Lora Harris of special session “Ecosystem Engineers in the Coastal and Estuarine Environment” at the Coastal and Estuarine Research Foundation meeting, Portland, OR  
Organizer with Debbie Shafer of special session “The role of sediments in seagrass ecology, management and restoration” at the Coastal and Estuarine Research Foundation meeting, Portland, OR

#### D. International

- 1996 Seagrass Ecology and Physiology Course at the University of Dar es Salaam, Zanzibar, Tanzania.
- 1997 Training of Brazilian and Argentinian scientists in studies on the effect of UV radiation on salt-marsh vegetation.
- 1998 Development of the Global Seagrass Network, initiated in the Philipinnes.
- 1999 Organized the 1<sup>st</sup> Workshop on the Effect of UV-B on Salt Marshes, held at Horn Point in August/September 1999
- 1999 Global Seagrass Network (SeagrassNet) Steering Committee
- 2000 World Seagrass Association (member-at-large)
- 2001 World Seagrass Association (member-at-large)
- 2001 Thesis examiner, University of Western Australia.
- 2001 Invited member of the Seagrass Working Group for the creation of a report on the Global Status of Seagrass Ecosystems, World Conservation Monitoring Centre.
- 2002 World Seagrass Association (member-at-large)
- 2003 World Seagrass Association (member-at-large)
- 2004 World Seagrass Association (member-at-large)
- 2005 World Seagrass Association (member-at-large)  
International representative of the organizing committee for the 7<sup>th</sup> International Seagrass Biology Workshop to take place in Zanzibar, Africa in 2006.
- 2006 Training Course in Seagrass Research Methods, Zanzibar, September 2006
- 2007 World Seagrass Association Steering Committee
- 2008 World Seagrass Association Steering Committee

University System of Maryland

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D. UMCES and Laboratory (last 5 years)

- 2000 Scuba-diving committee (Chair)  
UMCES Dive Safety Board  
Marine Science Consortium Board of Directors  
UMCES Forum on Restoration Ecology
- 2001 UMCES Graduate Faculty Council  
Scuba-diving committee (Chair)  
UMCES Dive Safety Board  
Post-doctoral Search Committee (Chair)  
Marine Science Consortium Board of Directors  
UMCES Forum on Wetlands
- 2002 Scuba-diving committee (Chair)  
UMCES dive safety board  
Post-doctoral search committee (Chair)  
Open House committee
- 2003 Scuba-diving committee (Chair)  
UMCES dive safety board
- 2004 Scuba-diving committee (Chair)  
UMCES dive safety board  
Education committee  
Boating committee  
Ecology AOS selection committee  
Restoration section of the UMCES strategic plan (discussion and write up)  
Tenure evaluation committee  
Recycling team
- 2005 Scuba-diving committee (Chair)  
UMCES dive safety board  
Education committee  
Boating committee  
Ecology AOS selection committee  
Tenure evaluation committee  
Coastal Sedimentologist search committee  
Recycling team
- 2006 Ecology AOS selection committee  
Recycling team
- 2007 Education committee (chair)  
Senator
- 2008 Education committee (chair)  
Senator
- 2009 Education committee

Senator

E. Other Professional Services

1999 Judge at the Estuarine Research Federation Meeting, New Orleans.