

15 February 2016

## **CURRICULUM VITAE**

### **Cindy M. Palinkas**

Horn Point Laboratory  
University of Maryland Center for Environmental Science  
P.O. Box 775  
Cambridge, MD 21613

*E-mail:* cpalinkas@hpl.umces.edu

*Phone:* 410-221-8487

*Fax:* 410-221-8490

#### **I. Education:**

2005 Ph.D., University of Washington, Geological Oceanography

2002 M.S., University of Washington, Geological Oceanography

1999 B.A. (with honors), Johns Hopkins University, Earth and Planetary Science, Phi Beta Kappa

#### **II. Professional Background:**

2013-present Associate Professor, Horn Point Laboratory, University of Maryland  
Center for Environmental Science

2005-2013 Assistant Professor, Horn Point Laboratory, University of Maryland  
Center for Environmental Science

1999-2005 Graduate Research Assistant, School of Oceanography, University of  
Washington

#### **III. Awards and Special Recognition**

Marquis Who's Who of Emerging Leaders, 2007

#### **IV. Research**

##### **A. Areas of Professional Expertise**

Formation and preservation of sedimentary strata in the geologic record; sediment deposition and accumulation in intertidal, fluvial, estuarine and continental-shelf environments; radioisotope geochronology; sediment-vegetation interactions

##### **B. Peer Reviewed Publications (\*=HPL graduate student)**

###### **1. Published papers**

**Total peer-reviewed publications (to date): 16**

**Total first-author peer-reviewed publications (to date): 14**

**Total citations: 246 (ISI, ISI Web of Science), 327 (GS, Google Scholar)**

**Average citations per paper:** 15.4 (ISI), 20.4 (GS)

Palinkas, C.M., N. Barth\*, E.W. Koch, D. Shaffer, in press. The influence of breakwaters on nearshore sedimentation patterns in Chesapeake Bay, USA. *Journal of Coastal Research*. UMCES Contribution #4981. *2014 Impact Factor: 0.98*.

Palinkas, C.M. and K.A.M. Engelhardt, 2016. Spatial and temporal patterns of modern (~100 y) sedimentation in a tidal freshwater marsh: implications for future sustainability. *Limnology and Oceanography* 61: 132-148. UMCES Contribution #5044. *2014 Impact Factor: 3.794*.

Elmore, A.J., D. Cadol, C.M. Palinkas, K.A.M Engelhardt, 2015. Spatial patterns of plant litter in a tidal freshwater marsh and implications for marsh persistence. *Ecological Applications* DOI: 10.1890/14-1970.1. *2014 Impact Factor: 4.093*.

Palinkas, C.M., J.P. Halka, M. Li, L.P. Sanford, P. Cheng, 2014. Sediment deposition from tropical storms in the upper Chesapeake Bay: field observations and model simulations. *Continental Shelf Research* 34:6-16. UMCES contribution #4760 *Citations: 1 (ISI), 2 (GS)*. *2014 Impact Factor: 1.892*.

Palinkas, C.M., 2013. Seasonal and interannual patterns of sedimentation in the Corsica River (MD): evaluating the potential influence of watershed restoration. *Estuarine, Coastal, and Shelf Science* 127: 37-45. UMCES Contribution #4727. *Citations: 1 (ISI), 0 (GS)*. *2014 Impact Factor: 2.057*.

Palinkas, C.M., K. Engelhardt, D. Cadol, 2013. Evaluating physical and biological influences on sedimentation in a tidal freshwater marsh with <sup>7</sup>Be. *Estuarine, Coastal, and Shelf Science* 129: 152-161. *Citations: 4 (ISI), 7 (GS)*. *2014 Impact Factor: 2.057*.

Palinkas, C.M., E.W. Koch, 2012. Sediment accumulation rates and submersed aquatic vegetation (SAV) distributions in the mesohaline Chesapeake Bay, USA. *Estuaries and Coasts* 35: 1416-1431. UMCES Contribution #4634. *Citations: 2 (ISI), 3 (GS)*. *2014 Impact Factor: 2.535*.

Palinkas, C.M., J.C. Cornwell, 2012. A preliminary sediment budget for the Corsica River (MD): improved estimates of nitrogen burial and implications for restoration. *Estuaries and Coasts* 35: 546-558. UMCES Contribution #4550. *Citations: 2 (ISI), 2 (GS)*. *2014 Impact Factor: 2.535*.

Palinkas, C.M., E.W. Koch, N. Barth\*, 2010. Sedimentation adjacent to naturally eroding and breakwater-protected shorelines in Chesapeake Bay. *IOP Conference Proceedings: Earth and Environmental Science* 9: 012012. DOI: 10.1088/1755-1315/9/1/012012. UMCES Contribution #4388. *Citations: 2 (GS)*. Note: This is a

peer-reviewed open-access journal that is not indexed by ISI. No proceedings journals are given impact factors.

Palinkas, C.M., A.S. Ogston, C.A. Nittrouer, 2010. Observations of event-scale sedimentary dynamics with an instrumented bottom boundary-layer tripod. *Marine Geology* 274: 151-164. UMCES Contribution #4371. *Citations: 5 (ISI), 6 (GS). 2014 Impact Factor: 2.71.*

Palinkas, C.M., 2009. The timing of floods and storms as a controlling mechanism for shelf deposit morphology. *Journal of Coastal Research* 25: 1122-1129. UMCES Contribution #4217. *Citations: 5 (ISI), 7 (GS). 2014 Impact Factor: 0.98.*

Palinkas, C.M., C.A. Nittrouer, 2007. Modern sediment accumulation on the Po shelf, Adriatic Sea. *Continental Shelf Research* 27: 489-505. *Citations: 44 (ISI), 48 (GS). 2014 Impact Factor: 1.892.*

Palinkas, C.M., C.A. Nittrouer, 2006. Cliniform sedimentation along the Apennine River shelf, Adriatic Sea. *Marine Geology* 234: 245-260. *Citations: 23 (ISI), 33 (GS). 2014 Impact Factor: 2.71.*

Palinkas, C.M., C.A. Nittrouer, J.P. Walsh, 2006. Inner-shelf sedimentation in the Gulf of Papua, New Guinea: a mud-rich shallow shelf setting. *Journal of Coastal Research* 22: 760-772. *Citations: 15 (ISI), 21 (GS). 2014 Impact Factor: 0.98.*

Palinkas, C.M., C.A. Nittrouer, R.A. Wheatcroft, L. Langone, 2005. The use of <sup>7</sup>Be to identify event and seasonal sedimentation near the Po River delta, Adriatic Sea. *Marine Geology* 222-223: 95-112. *Citations: 59 (ISI), 78 (GS). 2014 Impact Factor: 2.71.*

Walsh, J.P., C.A. Nittrouer, C.M. Palinkas, A.S. Ogston, R.W. Sternberg, G.J. Brunskill, 2004. Cliniform mechanics in the Gulf of Papua, New Guinea. *Continental Shelf Research* 24: 2487-2510. *Citations: 85 (ISI), 118 (GS). 2014 Impact Factor: 1.892.*

## 2. Papers in review and planned for submission in near future

Palinkas, C.M. and K.A.M. Engelhardt, in prep. Response of a tidal freshwater marsh to changes in sea level and suspended-sediment concentrations.

## C. Reports

Palinkas, C.M., 2013. Analysis of cores from Deep Creek Lake. Final Report to Maryland Department of Natural Resources Maryland Geological Survey.

Palinkas, C.M., 2012. Sedimentation following Tropical Storm Lee. Final Report to Maryland Department of Natural Resources Maryland Geological Survey.

Kellogg, M.L., C.M. Palinkas, 2010. Influence of oyster reef restoration on sediment deposition. Final report to Oyster Recovery Partnership.

Palinkas C.M., E.W. Koch, 2009. SAV and its substrate: spatial, temporal, and historical trends. Final Report to NOAA Chesapeake Bay Office.

Wetzel, L.R., K. Bemis, C. Palinkas, J. McDaris, 2009. What kind of continental margin am I: active or passive? NSF MARGINS Mini-lesson. <http://serc.carleton.edu/margins/minilessons/32959.html>.

Boynton, W.R., J.M. Testa, W.M. Kemp, J. Cornwell, C.M. Palinkas, M.T. Brooks, M. Owens, E.M. Bailey. 2009. An ecological assessment of the Corsica River estuary and watershed: scientific advice for future water quality management. UMCES Technical Report Series TS-587-09-CBL.

Cornwell, J.C., C. Palinkas, M. Owens, 2008. Nutrient Balance in Corsica River Sediments: Improved Estimates of Nutrient Burial and Denitrification. Chapter 6 *in* E.M. Bailey, M.A.C. Ceballos, and W.R. Boynton (Eds.), Maryland Chesapeake Bay Water Quality Monitoring Program Ecosystem Processes Component: Level One Report No. 25 Interpretive Report. Maryland Department of Natural Resources. UMCES Technical Report TS-565-08.

Cornwell, J.C., M. Owens, C. Palinkas, 2007. Denitrification and nutrient balance in Corsica River sediments, Maryland. Chapter 5 *in* W.R. Boynton, J.C. Cornwell, W.M. Kemp, C. Palinkas, et al., Targeted Watershed Measurement Program and Key Process Evaluation Year 1: Corsica River Estuary Data Report. Maryland Department of Natural Resources. UMCES Technical Report TS-531-07-CBL.

#### D. Research Grants and Contracts

**Total funding awarded:** \$3,223,774 (all to UMCES)

**Total funding awarded to CP:** \$1,048,752

##### 1. Active

Palinkas, C.M., E. Russ (student). Coastal Resiliency Fellowship 2015. MD Sea Grant. 2015-2017. \$45,000 (0 mo/y; student funding)

Palinkas, C.M. Sedimentary history of Conowingo Pond. Grayce B. Kerr Fund. 2015-2016. \$100,000 (Principle Investigator, 1 mo/y)

Cornwell, J., L. Sanford, J. Testa, W.M. Kemp, M. Li. UMCES support of integrated sediment monitoring program. Maryland Department of Natural Resources from Exelon. 2015-2017. \$1,250,000 (\$154,345 to CP; Co-Principle Investigator, 2 mo/y)

Kemp, W.M., J.C. Stevenson, C.M. Palinkas, K.A.M. Engelhardt, L. Wainger. Chesapeake Bay submerged aquatic vegetation restoration targets, climate-change effects, ecosystem services and knowledge gaps: A third technical synthesis. Maryland Department of Natural Resources. 2014-2016. \$27,500 (\$5,500 to CP; Co-Principle Investigator, 0.3 mo/y)

Sanford, L.P., C.M. Palinkas. Role of a resilient submersed plant bed in mitigating the effects of increasing river-borne particulate inputs to Chesapeake Bay: sediment dynamics. NOAA Sea Grant. 2014-2017. \$216,286 (\$78,329 to CP; Co-Principle Investigator, 1.0 mo/y).

## 2. Past

Palinkas, C.M, K. Engelhardt. The dynamic feedback between sediments and vegetation in natural and restored marshes. Grayce B Kerr Fund. 2013-2015. \$66,758 (\$53,195 to CP; Principle Investigator, 1 mo/y).

Sanford, L.P, E.W. Koch, C.M. Palinkas, J.P. Halka, J.C. Stevenson. Long-term impacts of different techniques for shoreline stabilization in the Maryland Chesapeake Bay. NOAA Sea Grant. 2012-2015. \$254,540 (\$50,537 to CP; Co-Principal Investigator, 1 mo/y).

Engelhardt, A., R. Gardner, A. Elmore, C. Palinkas. The role of sediments in the maintenance of biodiversity in freshwater marshes: implications for global environmental change. National Science Foundation. 2009-2014. \$682,608 (\$221,031 to CP; Co-Principal Investigator, 1.5 mo/y).

Palinkas, C.M. Analysis of cores for NOAA STEER project. TDI-Brooks International. 2014. \$3724. (Principle Investigator, 0 mo/y).

Palinkas, C.M. Analysis of cores from Deep Creek Lake. Maryland Department of Natural Resources, Maryland Geological Survey. 2013. \$3126 (Principle Investigator, 0.25 mo).

Palinkas, C. Sediment dynamics in the Corsica River, Maryland. Grayce B. Kerr Fund. 2008-2012. \$80,000 (Principal Investigator, 1 mo/y).

Palinkas, C. Analysis of cores from Tropical Storm Lee. Maryland Department of Natural Resources, Maryland Geological Survey. 2012. \$7,500 (Principle Investigator, 0.5 mo).

Palinkas, C., E.W. Koch. SAV and its substrate: spatial, temporal, and historical trends. NOAA Chesapeake Bay Office. 2007-2009. \$101,828 (\$76,613 to CP; Principal Investigator, 2 mo/y).

Harris, L., W. Boynton, C. Palinkas, J. Cornwell. Measurement of sedimentation rates and nutrient burial in the Potomac estuary and continued support of monthly monitoring. DC Water and Sewer Authority. 2012. \$76,348 (\$18,683 to CP; Co-Principle Investigator, 0.75 mo).

Engelhardt, A., R. Gardner, A. Elmore, C. Palinkas. RET Supplement: The role of sediments in the maintenance of biodiversity in freshwater marshes: implications for global environmental change. National Science Foundation. 2010-2011. \$30,750 (\$0 to CP; Co-Principal Investigator, 0 mo/y).

Kellog, M.L., C. Palinkas. Influence of oyster reef restoration on sediment deposition. Oyster Recovery Partnership. 2010. \$4,992 to CP (Co-Principal Investigator, 0.25 mo/y).

Koch, E.W., C. Palinkas. The suitability of breakwaters for SAV habitat engineering and large scale restoration. Army Corps of Engineers. 2008-2011. \$253,297 (\$136,177 to CP; Co-Principal Investigator, 1 mo/y).

Cornwell, J.C., C. Palinkas. Denitrification and nutrient balance in Corsica River sediments, Maryland. Maryland Department of Natural Resources. 2007-2008. \$20,000 (\$10,000 to CP; Co-Principal Investigator, 1 mo/y).

E. Seminars and Presentations since 2005 (first author and student presentations(\*) only)

Palinkas, C. and K. Engelhardt. Response of a tidal freshwater marsh to changes in sea level and suspended-sediment concentrations. AGU Ocean Sciences Meeting. February 2016.

Palinkas, C. and E. Russ\* (invited). Short-term sedimentation in Conowingo Reservoir and the upper Chesapeake Bay, May-December 2015. STAC Workshop on "Conowingo Infill Influence on Chesapeake Water Quality" and Chesapeake Bay Program Quarterly Review, both in January 2016.

Palinkas, C., E. Russ\*, L. Sanford, D. Hinkle. Examining the record of geomorphological change in upper Chesapeake Bay. Biannual Meeting of the Coastal and Estuarine Research Federation. November 2015.

Palinkas, C., K. Engelhardt. Response of tidal freshwater marshes in Chesapeake Bay tributaries to short-term variability in sea level and suspended sediment concentrations. Geological Society of America Annual Meeting. October 2015.

Palinkas, C., K. Engelhardt. Sediment-vegetation interactions in natural and restored marshes: lessons learned and implications for future marsh resiliency. Society of Wetland Scientists Annual Meeting. June 2015.

Castro, S.\*, C. Palinkas. Geochronological analysis of sediments in tidal freshwater marsh in the Patuxent River, MD. ASLO Aquatic Sciences Meeting. February 2015. *Awarded Best Student Poster.*

Palinkas, C., K. Engelhardt. Sediment and vegetation dynamics at Dyke Marsh Preserve. National Park Service George Washington Memorial Parkway Headquarters; National Park Service Center for Urban Ecology. December 2014 and January 2015.

Palinkas, C., L. Sanford, J.C. Stevenon, R. Ortt. Impact of shoreline stabilization structures on Chesapeake Bay nearshore habitats. AGU Fall Meeting, December 2014.

Palinkas, C. Teaching the ethical aspects of environmental science. AGU Fall Meeting, December 2014.

Palinkas, C., K. Engelhardt, G. Sanders, P. Delgado, M. Milton. The role of sediment and vegetation feedbacks in tidal freshwater marsh restoration. Joint Aquatic Sciences Meeting, May 2014.

Palinkas, C. (invited). Ecogeomorphic feedbacks in natural and restored tidal freshwater marshes. Old Dominion University, March 2014.

Palinkas, C. E. Koch, L. Sanford, J.C. Stevenson. Anthropogenic influence on sediment delivery and deposition in nearshore Chesapeake Bay through shoreline modifications. AGU Ocean Sciences Meeting, February 2014.

Palinkas, C., K. Engelhardt. Ecogeomorphological feedbacks in a tidal freshwater marsh. AGU Fall Meeting, December 2013.

Palinkas, C., J. Halka, M. Li, P. Cheng, L. Sanford. Storm-driven sediment transport and deposition in the upper Chesapeake Bay: field observations and model simulations. CERF Biannual meeting, November 2013.

E. Koch, C. Palinkas (presenting), L. Sanford, J. Halka, J.C. Stevenson, L. Staver. Development of a shore protection index to guide the selection of ecologically advantageous shore-stabilizing methods in Chesapeake Bay. CERF Biannual meeting, November 2013.

Palinkas, C. Transfer of terrestrial sediment to the aquatic environment: lessons learned from a small Coastal Plain river and potential application to larger systems. ASLO Aquatic Sciences Meeting, February 2013.

Green, B.\*, C. Palinkas. Sedimentation in the lower Potomac River and its influence on nitrogen burial. ASLO Aquatic Sciences Meeting, February 2013.

Palinkas, C. Sediment dynamics in Chesapeake Bay intertidal and fluvial-estuarine environments. UMCES Horn Point Lab, Chesapeake Biological Lab, Appalachian Lab, IMET, January 2013.

Palinkas, C., J. Halka, M. Li, L. Sanford, P. Cheng. Sediment deposition from Tropical Storm Lee in the upper Chesapeake Bay: field observations and model simulations. AGU Fall Meeting, December 2012.

Palinkas, C., K. Engelhardt, D. Cadol (invited). Dynamic feedbacks between sediment and vegetation in a tidal freshwater marsh. AGU Chapman Conference on Hydrogeomorphic Feedbacks and Sea Level Rise in Tidal Freshwater River Ecosystems, November 2012.

Palinkas, C. (invited). Connections between Stormy Weather and Muddy Waters: Lessons from Tropical Storms Irene and Lee. Lecture to Honeywell Institute for Ecosystem Education@HPL, July 2012.

Palinkas, C., K. Engelhardt, D. Cadol. Spatial and temporal variability of marsh sedimentation in Dyke Marsh Preserve (VA, USA): potential controlling factors and relevance for models. Chesapeake Modeling Symposium, May 2012.

Palinkas, C., J. Halka (invited.) Where did all that sediment go? USGS 2011 Storm Effects Meeting, April 2012.

Palinkas, C. (invited) Connections between Stormy Weather and Muddy Waters: Lessons from Tropical Storms Irene and Lee. HPL Bay 101 Seminar Series, April 2012.

Palinkas, C., N. Barth\*, E. Koch, D. Shafer. The influence of breakwaters on nearshore sedimentation in Chesapeake Bay, USA. AGU Ocean Sciences Meeting, February 2012.

Englinton, A.\*, C. Palinkas, E. Koch. Potential sediment exchange between marshes and adjacent submersed aquatic vegetation (SAV) beds in Chincoteague Bay (MD). AGU Ocean Sciences Meeting, February 2012.

Palinkas, C., J.C. Cornwell. Identifying drivers of interannual variability in seasonal sedimentation patterns in the Corsica River (MD). AGU Fall Meeting, December 2011.



Palinkas, C., K. Engelhardt, A. Elmore. Spatial variability of marsh sedimentation processes in Dyke Marsh Preserve (VA, USA). CERF Biannual meeting, November 2011.

Palinkas, C., D. Walters\*. Sediment dynamics over multiple time scales in Dyke Marsh Preserve (Potomac River, VA). AGU Fall Meeting, December 2010.

Palinkas, C., E. Koch, N. Barth\*. Nearshore sedimentation in Chesapeake Bay: potential effects on SAV distributions and anthropogenic modifications. GSA NE/SE Section Meeting, March 2010

Barth, N.\* , C. Palinkas, E. Koch. Impact of breakwaters on sedimentation rates and submerged aquatic vegetation biomass in Chesapeake Bay. AGU Ocean Sciences Meeting, February 2010.

Palinkas, C., E. Koch, N. Barth\*. Spatial and temporal variations in nearshore Chesapeake Bay sedimentation and potential impacts to SAV. AGU Ocean Sciences Meeting, February 2010.

Palinkas, C., J. Cornwell, M. Owens. Sediment dynamics in the Corsica River estuary. Coastal and Estuarine Research Federation Meeting, November 2009.

Palinkas, C., E. Koch, N. Barth\*. Anthropogenic impacts on ecosystem dynamics in nearshore Chesapeake Bay environments. Past Global Changes (PAGES) 1st Young Scientist Meeting and 3rd Open Science Meeting (2 different meetings), July 2009.

Palinkas, C. (invited). Seagrasses and the sediment on which they grow: Friend or Foe? Izaak Walton League, October 2008.

Palinkas, C., A. Ogston. Linkage of seabed and water-column observations to quantify event-scale sediment deposition and erosion. AGU Ocean Sciences Meeting, March 2008.

Palinkas, C., M. Wright\*. Preliminary analyses of bottom sediment characteristics in Lake Blackwater. Blackwater Science Meeting, March 2008.

Palinkas, C. (invited). A sedimentologist's toolbox: event-scale processes. REU Summer Seminar. UMCES Horn Point Laboratory, July 2007.

Palinkas, C., A. Ogston. Event-scale analysis of sedimentary processes. ICES/PICES Early Career Conference, June 2007.

Palinkas, C. (invited) Modern coastal sedimentary processes: new advances and future directions. UMCES Appalachian Laboratory, Chesapeake Biological Laboratory, April 2007.

Palinkas, C., J. Cornwell, C. LeBeau\*, R. Halvorson\*. Geochemistry of recent (<100 y) sediments in the Corsica River. GSA Annual Meeting, October 2006.

Palinkas, C. (invited). Shelf sedimentary processes in the Adriatic Sea and beyond: potential linkages to Chesapeake Bay sediment dynamics. IAN Chesapeake Bay Seminar Series, July 2006.

Palinkas, C. (invited). Modern shelf sedimentation in the Adriatic Sea. VIMS Physical Sciences Seminar Series, April 2006.

Palinkas, C. (invited). Temporal and spatial patterns of sedimentation in the Adriatic Sea. UMCES Horn Point Laboratory Seminar Series, Summer 2005.

#### F. Workshops Attended:

STAC Workshop (invited): Conowingo Infill Influence on Chesapeake Water Quality, January 2016.

NAGT and On the Cutting Edge – Teaching Geoethics Across the Curriculum, June 2014.

IAN Climate Change Resilience Indicators (invited), January 2014.

Chesapeake Modeling Symposium, May 2012.

USGS 2011 Storm Effects Meeting, April 2012.

IAN Assateague Island National Seashore and Climate Change Synthesis Workshop (invited), March 2011

PAGES Young Scientist Meeting, July 2009

NSF MARGINS Mini-Lesson Education Workshop, June 2009.

IAN Science Communication Course, April 2008

NSF MARGINS Education Workshop, Bringing Source-to-Sink Discoveries to the Classroom, March 2008.

MD-DNR Corsica River Data Analysis Workshop, April 2007.

ICES/PICES Early Career Scientist Conference, June 2007.

STAC Workshop: An Introduction to Sedimentsheds: Sediment and Its Relationship to Chesapeake Bay Water Clarity (invited), January 2007.

NSF MARGINS Teleconnections Between Source and Sink in Sediment Dispersal Systems Theoretical and Experimental Institute, September 2006.

On the Cutting Edge Early Career Faculty Workshop: Teaching, Research, and Managing Your Career, June 2006.

#### G. Active Memberships in Professional Societies

American Geophysical Union  
Geological Society of America

Coastal and Estuarine Research Federation  
Association of Women Geoscientists  
Society of Wetland Scientists

## **V. Teaching and Training**

Member, UMCES Graduate Faculty  
Member, MEES Faculty and USM Inter-Institutional Graduate Faculty

University System of Maryland Courses Taught:

MEES 608A: Topics in Boundary Layers and Sediment Transport (1 credit, co-instructor, Spring 2013)

MEES 608J: Thesis Proposal Writing (2 credits, lead instructor), Spring 2010

MEES 698G: Marine Geology (3 credits; sole instructor), Fall 2006, 2008, 2010

MEES698G: Sediment Dynamics in Coastal and Estuarine Environments (3 credits; sole instructor), Fall 2014

MEES 609R: Global Environmental Remote Sensing Seminar (2 credits; lead instructor), Spring 2008

MEES 708F: Ethical Aspects of Environmental Science Seminar (1 credit; sole instructor), Fall 2015

## **VI. Student Training**

### **A. Committee Chair or co-chair**

Emily Russ (PhD)

Matthew Biddle (MS)

Nicole Barth (MS, 2011): Currently Faculty at Chesapeake College

Thesis: "Impact of breakwaters on sediment characteristics and submerged aquatic vegetation", 307 pp.

### **B. Committee Member**

Rasika Gawde (Post-doctoral committee), Horn Point Laboratory

Lynda Bell (MS), Horn Point Laboratory

Jia Gao (MS, 2015), Horn Point Laboratory

Karen Taylor (MS, 2009), Chesapeake Biological Laboratory

### **C. Research Internships Supervised**

Colette LeBeau (Maine Maritime Academy), REU student summer 2006,  
"Geochronology and characterization of grain size and trace metals in sediment cores collected from the Corsica River, Maryland"

Moncie Wright (UMBC), REU student summer 2007, Anthropogenic effects on sedimentation in St. Martin River and Blackwater National Wildlife Refuge"

Caroline Baumgartner (Muhlenberg College), REU student summer 2008,  
 “Sediment grain size in current and historical SAV beds of the  
 Chesapeake”

Cristina Hernandez (University of Puerto Rico), REU student summer 2009, “The  
 role of marshes in the sediment budget of the Corsica River, Maryland”

David Walters (Longwood University), REU student summer 2010, “Effect of  
 elevation on sedimentation in a tidal freshwater wetlands system”

Andrea Englinton (Gustavus Adolphus College), REU student summer 2011,  
 “Potential sediment exchange between marshes and adjacent submersed  
 aquatic vegetation (SAV) beds”

Erik Hovland (Old Dominion University), Summer 2011, worked on  
 sedimentation in Dyke Marsh Preserve as part of a 3-credit oceanography  
 elective (Dr. John McConaugha, advisor)

Ben Green (University of Iowa), REU student summer 2012, “Sedimentation  
 trends and their effect on nitrogen burial in the lower Potomac River”

Nick Taylor (University of Virginia), REU student summer 2013, “The evaluation  
 of basic calculations concerning the effects of non-storm waves on  
 offshore sediment at Jefferson-Patterson Park, MD”

Stella Castro (University of Puerto Rico), REU student summer 2014,  
 “Geochronological analysis of sediments in tidal freshwater marshes in the  
 Patuxent River”

Connor Reyer (University of Georgia), REU student summer 2015, “Suspended  
 sediment variability in tidal fresh and salt marshes”

#### D. High School and College Students Mentored

Taylor Robinson (Easton High School), 2008-2009

Ritu Dwivedy and Jackline Yim (Thomas Jefferson High School for Science and  
 Technology), 2010-2011

Elizabeth Johnson and Brooke Kanarak (Thomas Jefferson High School for  
 Science and Technology), 2011-2012

Chris Cook (Chesapeake College), 2012

Sam Pelham (high schooler from California), 2013

Nick Sotto (North Dorchester High School), 2013

Kristin Ketterman (Easton High School), 2015

#### E. High School Teachers Mentored

Lisa Wu (Thomas Jefferson High School for Science and Technology), 2010-  
 2012

#### F. Other Personnel Supervised

Debbie Hinkle (FRA), 2010-present

Erin Markin (FRA), 2011-2012

Bern Gross (FRA), 2010-2011

Fred Hampton (volunteer), 2012

### VII. Outreach and Service

#### A. Outside University of Maryland

- Co-President, US Section of the International Association for the Promotion of Geoethics, 2014-present
- Session Chair, AGU Ocean Sciences Meeting 2016, “Ethical Principles and Practices in the Ocean Sciences”
- Session Chair, GSA Annual Meeting 2015, “Ethics of Geoscience in Practice and Application”
- Session Chair, AGU Fall Meeting, 2013, “Coastal Geomorphology and Morphodynamics”
- Session Chair, AGU Fall Meeting, 2011, “Particle Dynamics and Sedimentary Processes in Estuarine and Coastal Environments”
- Session Chair, CERF Biannual Meeting, 2011, “Dynamic Feedbacks between Marsh Sedimentation and Biodiversity: Implications for Global Environmental Change”
- Session Chair, GSA NE/SE Meeting, 2010, “Estuarine Sediment Dynamics”
- Session Chair, AGU Fall Meeting, 2010, “Geomorphological and Ecological Processes in Tidal Flats and Wetlands,” and “Estuarine Sediment Dynamics and Fate of Particles, Contaminants, and Carbon at the Land-Ocean Interface”
- Student Poster Judge, AGU (2010-present), CERF (2009, 2011), Ocean Sciences Meeting (2008, 2010, 2012, 2014), GSA NE/SE Meeting 2010
  
- Panel Reviewer for EPA STAR program, NSF Graduate Research Fellowship Program, NSF Geomorphology and Land-Use Dynamics Program
- Paper Reviewer for *Marine Geology*, *Continental Shelf Research*, *Environmental Management*, *Estuaries and Coasts*, *American Society of Agricultural & Biological Engineers*, *Journal of Marine Systems*, *Quaternary Geochronology*, *Geomorphology*, *Journal of Geophysical Research*, *Journal of Ocean University of China*, *Limnology and Oceanography Methods*, *Estuarine Coastal and Shelf Research*, *Ocean Dynamics*, *Deep-Sea Research*, *Geo-Marine Letters*
- Proposal Reviewer for NSF Marine Geology and Geophysics, New Jersey Sea Grant, NOAA Coastal Hypoxia Program, Hudson River Foundation, Oregon Sea Grant, NSF Biological Oceanography
- Nature* Reader Panel
- External Paper Reviewer for USGS
- Blackwater NWR Technical Advisory Group
- Sediment Workgroup, Chesapeake Bay Program
- Interviewed for and quoted in 2 *Chesapeake Quarterly* publications:
  - “Can we clean up our waters? Lessons from the Corsica River” by Erica Goldman, September 2010 issue
  - “Big year for storms, bad year for Bay sediment” by Jeff Brainard, December 2011 issue

Trained as a Reformed Teaching Observation Program observer, 2013

Moderator, NOSB Chesapeake Bay Bowl, February 2007-2010  
Science Judge, NOSB National Finals, May 2009  
Career Panel, NOSB National Finals, May 2009  
Presentation to Izaak Walton League, October 2008  
Annapolis High School Physics IB Field Day at Chesapeake Bay Foundation,  
January 2007

B. University of Maryland

UMCES Graduate Faculty Council (GFC), 2014-present; Chair of the GFC Data  
Committee, 2015  
UMCES Presidential Fellowships Committee, 2014-present  
MEES Earth and Ocean Sciences Working Group, 2016  
UMCES Accreditation Self-Study Working Group 2, 2014-2015  
MEES Admission Committee, Oceanography AOS, 2007-2010  
REU Selection Committee, 2007-2009, 2013, 2015-2016  
UMCES Faculty Senate, 2010-present; Secretary 2012-present; Chair of Faculty  
Development Working Group, 2015-2016; member of Faculty  
Performance Working Group, 2015-2016  
UMCES Conflict of Interest Committee, 2012-present  
HPL Director's Review Committee, 2011

C. Laboratory Committees

HPL Post-Doctoral Mentoring Committee, 2014-present  
HPL Faculty Search Committee, Coastal Resilience, Chair 2015-present  
HPL Education Committee 2006-2010, 2014-present; student seminar  
coordinator, 2006-2008; Chair 2014-present  
HPL Faculty Cluster Hire Search Committee, 2014-2015  
HPL Safety Committee, 2012-present  
HPL Open House Committee, 2006-2008; Chair 2007  
HPL Seminar Committee, Chair 2009  
HPL Boat Committee, 2010-present; Chair 2012-present  
HPL Christmas Parade Committee, 2007-present