

**DONALD CHARLES BARBER**

Associate Professor of Environmental Studies and Geology on the Harold F. Alderfer Professorship

Bryn Mawr College, 101 North Merion Avenue  
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**EDUCATION**

2001	<b>PhD Geological Sciences</b>	University of Colorado	Boulder, Colorado
1995	<b>MS Geological Sciences</b>	University of Maine	Orono, Maine
1991	<b>BS Geology</b>	Duke University	Durham, North Carolina

**ACADEMIC APPOINTMENTS**

2017-present	<b>Associate Professor of Environmental Studies and Geology on the Harold F. Alderfer Chair,</b> Bryn Mawr College.
2010-2017	<b>Associate Professor of Geology on the Harold F. Alderfer Chair in Environmental Studies,</b> Bryn Mawr College; <b>Co-director of Environmental Studies</b> at Bryn Mawr, 2015-2018.
2007-2009	<b>Associate Professor of Geology on the Clowes Fund for Science and Policy; Director of</b> <b>Environmental Studies,</b> Bryn Mawr College.
2001-2006	<b>Assistant Professor of Geology,</b> Bryn Mawr College.
2000-2001	<b>Lecturer,</b> Department of Geology, Bryn Mawr College.

**OTHER PROFESSIONAL EXPERIENCE**

2005-2010	<b>Expert Witness &amp; Marine Science Consultant,</b> Montgomery McCracken Walker & Rhoads. Provided testimony and evidence in major marine casualty and oil spill litigation ( <i>U.S. v. CITGO Asphalt Refining Co.</i> , U.S. District Court - Eastern District of Pennsylvania).
1992-1994	<b>Marine Science Consultant/Coastal Geologist/GIS Technician,</b> Maine Geological Survey; AquaTech Inc. and Wright-Pierce Engineers. Mapped shoreline change and seabed features.
1987	<b>Coastal Research Consultant,</b> Kearney Centaur Consulting, Washington, DC. Investigated geological and socioeconomic feasibility of jetty stabilization at Oregon Inlet, North Carolina.
1985-1988	<b>Shipboard Research Technician - Biological Oceanography,</b> Monterey Bay Aquarium Research Institute; Univ. Southern California; Duke University (see <i>List of Research Cruises</i> , last page CV).

**REFEREED JOURNAL PUBLICATIONS AND BOOK CHAPTERS** (UNDERLINED: STUDENTS ADVISED OR CO-ADVISED)

25. Walker, Jennifer. S., R.E. Kopp, T.A. Shaw, Niamh Cahill, Nicole S. Khan, **D.C. Barber**, Matthew Brain, Jennifer Clear, Reide Corbett, B.P. Horton, *in review*. Common Era sea level budgets along the northeast US Atlantic coast. *Nature Communications* (accepted pending revision, Aug 2020).
24. Walker, Jennifer. S. Niamh Cahill, Nicole Khan, T.A. Shaw, D.C. Barber, K. Miller, R.E. Kopp, B.P. Horton, 2020. Incorporating temporal and spatial variability of salt-marsh foraminifera into sea-level reconstructions. *Marine Geology* **429**, 106293. <http://dx.doi.org/10.1016/j.margeo.2020.106293>
23. Reo Charbonneau, Bianca, Stephanie M. Dohner, J.P. Wnek, **D.C. Barber**, Phoebe Zarnetske, Brenda B. Casper, *in review*. Vegetation effects on coastal foredune initiation: Wind tunnel experiments and field validation for three dune-building plants. *Geomorphology* (submitted Oct 2020).

22. Kemp, A.C., [Jessica J. Kegel](#), S.J. Culver, **D.C. Barber**, D. Mallinson, E. Leorri, C.E. Bernhardt, Niamh Cahill, S.R. Riggs, [Anna Lee Woodson](#), R. Mulligan and B.P. Horton, **2017**. An extended late Holocene relative sea-level history for North Carolina, USA. *Quat. Sci. Rev.* 160, 13-30.  
<http://dx.doi.org/10.1016/j.quascirev.2017.01.012>
21. Marenco, P.J., [Katherine R. Martin](#), K.N. Marenco, **D.C. Barber**, **2016**. Increasing global ocean oxygenation and the Ordovician Radiation: Insights from Th/U of carbonates from the Ordovician of western Utah. *Palaeogeography, Palaeoclimatology, Palaeoecology* 458, 77-84. [dx.doi.org/10.1016/j.palaeo.2016.05.014](http://dx.doi.org/10.1016/j.palaeo.2016.05.014)
20. Morris, J.T., **D.C. Barber**, J. Callaway, R. Chambers, S.C. Hagen, C.S. Hopkinson, Beverly J. Johnson, P. Megonigal, S.C. Neubauer, Tiffany Troxler, Cathleen Wigand, **2016**. Contributions of organic and inorganic matter to sediment volume and accretion in tidal wetlands at steady state. *Earth's Future* 4, 110-121.  
<http://dx.doi.org/10.1002/2015EF000334> [OPEN ACCESS JOURNAL]
19. Pilarczyk, Jessica E., and **D.C. Barber**, **2015**. Chapter 17: Mollusca. in: Shennan, I., A.J. Long and B.P. Horton, eds., *Handbook of Sea-Level Research*, American Geophysical Union-Wiley, 258-267.
18. [Nebel, Stephanie H.](#), A.C. Trembanis and **D.C. Barber**, **2013**. Tropical cyclone frequency and barrier island erosion rates, Cedar Island, Virginia. *Journal of Coastal Research* 29, 133-144.  
<http://dx.doi.org/10.2112/JCOASTRES-D-11-00206.1>
17. Andrews, J.T., **D.C. Barber**, Anne E. Jennings, D.D. Eberl, B. MacLean, M.E. Kirby and J.S. Stoner, **2012**. Varying sediment sources to the NW Labrador Sea slope between and during Heinrich events 0 to 4. *Journal of Quaternary Science* 27, 475-484. <http://dx.doi.org/10.1002/jqs.2535>
16. [Nebel, Stephanie H.](#), A.C. Trembanis and **D.C. Barber**, **2012**. Shoreline analysis and barrier island dynamics: decadal scale patterns from Cedar Island, Virginia. *Journal of Coastal Research* 28, 332-341.  
<http://dx.doi.org/10.2112/JCOASTRES-D-10-00144.1>
15. Rashid, H., F. Saint-Ange, **D.C. Barber**, M.E. Smith and N. Devalia, **2012**. Fine scale sediment structure and geochemical signature between eastern and western North Atlantic during Heinrich events 1 and 2. *Quaternary Science Reviews*, 46, 136-150. <http://dx.doi.org/10.1016/j.quascirev.2012.04.026>
14. Magee, P., H.-P. Uerpmann, M. Uerpmann, S.A. Jasim, M. Handel, **D.C. Barber**, [C. Fritz](#) and [E. Hammer](#), **2009**. Multidisciplinary research on the past human ecology of the east Arabian coast: excavations at Hamriya and Tell Abra q (Emirate of Sharjah, United Arab Emirates). *Arabian Archaeology & Epigraphy*. 20, 18-29.
13. Alley, R.B., J.T. Andrews, **D.C. Barber**, P.U. Clark, **2005**. Why an ice shelf for Heinrich events? Comment on "Catastrophic ice shelf breakup as the source of Heinrich event icebergs" by C.L. Hulbe et al. *Paleoceanography* 20, PA1009. <http://dx.doi.org/10.1029/2004PA001086>
12. Kelley, J.T., D.C. Barber, D.F. Belknap, D.M. FitzGerald, S. van Heteren, S.M. Dickson, 2005. Sand budgets at geological, historical and contemporary time scales for a developed beach system, Saco Bay, Maine, USA. *Marine Geology*, 214, 117-142. <http://dx.doi.org/10.1016/j.margeo.2004.10.027>
11. Magee, P., **D.C. Barber**, [Marta Sobur](#) and S. Jasim, **2005**. Sourcing Iron Age softstone artifacts in south eastern Arabia: Results from inductively coupled plasma-mass spectrometry. *Arabian Archaeology and Epigraphy* 16, 129-143. <http://dx.doi.org/10.1111/j.1600-0471.2005.00247.x>
10. Benson, L.V, **D.C. Barber** J.T. Andrews, H. Taylor, R. Theriault, P. Lamothe, **2003**. Rare-earth elements and Nd and Pb isotopes as source indicators for Labrador Sea clay-size sediments during Heinrich event 2. *Quaternary Science Reviews*, 22, 881-889. [http://dx.doi.org/10.1016/S0277-3791\(03\)00011-8](http://dx.doi.org/10.1016/S0277-3791(03)00011-8)
9. Farmer, G.L., **D.C. Barber**, J.T. Andrews, **2003**. The Nd, Sr and Pb isotopic compositions of late Quaternary ice proximal sediments in the northern North Atlantic. *Earth and Planetary Science Letters*, 209, 227-243.  
[http://dx.doi.org/10.1016/S0012-821X\(03\)00068-2](http://dx.doi.org/10.1016/S0012-821X(03)00068-2)
8. Kelley, J.T., S.M. Dickson, D.F. Belknap, W.A. Barnhardt and **D.C. Barber**, **2003**. Sand volume and distribution on the paraglacial inner continental shelf of the northwestern Gulf of Maine. *Journal of Coastal Research*, 19, 41-56. <http://www.jstor.org/stable/pdf/4299146.pdf>

7. Andrews, J.T. and **D.C. Barber**, 2002. Dansgaard-Oeschger events: Is there a signal off the Hudson Strait ice stream? *Quaternary Science Reviews* 21, 443-454. [http://dx.doi.org/10.1016/S0277-3791\(01\)00073-7](http://dx.doi.org/10.1016/S0277-3791(01)00073-7)
6. Hemming, S.R., C.M. Hall, P.E. Biscaye, S.M. Higgins, B.D. Turrin, J.F. McManus, **D.C. Barber**, J.T. Andrews, W.S. Broecker, 2002.  $^{40}\text{Ar}/^{39}\text{Ar}$  step-heating spectra and  $^{40}\text{Ar}^*$  concentrations of fine-grained sediment in North Atlantic Heinrich layers. *Chemical Geol.* 182, 583-603. [http://dx.doi.org/10.1016/S0009-2541\(01\)00342-4](http://dx.doi.org/10.1016/S0009-2541(01)00342-4)
5. **Barber, D.C.**, A. Dyke, C. Hillaire-Marcel, A.E. Jennings, J.T. Andrews, M.W. Kerwin, G. Bilodeau, R. McNeely, J. Southon, M.D. Morehead, J.-M. Gagnon, 1999. Forcing of the cold event 8200 years ago by catastrophic drainage of Laurentide lakes. *Nature* 400, 344-348. <http://dx.doi.org/10.1038/22504>
4. Andrews, J.T., **D.C. Barber**, A.E. Jennings, 1999. Errors in generating time-series and in dating events at Late Quaternary millennial (radiocarbon) timescales: Examples from Baffin Bay, NW Labrador Sea and East Greenland. in: Clark, P.U., R. Webb and L. Keigwin, (eds.), *Mechanisms of Global Climate Change at Millennial Time Scales*. Amer. Geophys. Union *Monograph* 112, 23-33.
3. Andrews, J.T., M.E. Kirby, A. Aksu, **D.C. Barber**, D. Meese, 1998. Late Quaternary detrital carbonate events in Baffin Bay (67 - 74 N): Do they correlate with and contribute to Heinrich events in the North Atlantic? *Quaternary Science Reviews* 17, 1125-1137. [http://dx.doi.org/10.1016/S0277-3791\(97\)00064-4](http://dx.doi.org/10.1016/S0277-3791(97)00064-4)
2. Andrews, J.T., M.E. Kirby, A.E. Jennings, **D.C. Barber**, 1998. Late Quaternary stratigraphy, chronology, and depositional processes on the slope of S.E. Baffin Island: Implications of Detrital Carbonate and Heinrich events for onshore glacial history. *Geographie physique et Quaternaire* 52, 91-105.
1. van Heteren, S., D.M. FitzGerald, **D.C. Barber**, J.T. Kelley, D.F. Belknap, 1996. Volumetric analysis of a New England barrier using ground-penetrating radar and coring techniques. *Journal of Geology* 104, 471-483.

**PUBLISHED ABSTRACTS PRESENTED BY STUDENTS SINCE 2010 ONLY—LAST 10 YEARS (UNDERLINED: STUDENT ADVISEES)**

- 2019 Silva, Camila P., D.C. Barber, T.J. Mozdzer, Mercedes J. Aponte, Variability in Late Holocene to modern organic matter content beneath *Spartina patens* salt marshes, Plum Island Estuary, Massachusetts. Geological Society of America *Southeastern Section Meeting* (March) Charleston, SC. [Talk]
- 2019 Ogata Bernstein, Jake, P.J. Marenco, D.C. Barber, Reliability of common carbonate isolation techniques and subsequent fidelity of stable carbon isotope signatures. Geological Society of America *Northeastern Section Meeting* (March) Portland, ME. [Talk]
- 2018 McCarthy, Amelia G., D.C. Barber, Deborah S Goodwin, Spatial and temporal patterns of zooplankton diversity and abundance in the Phoenix Islands Protected Area, Central Equatorial Pacific. American Geophysical Union-*Fall Meeting* (Dec.) Washington, DC. [Poster]
- 2018 Walker, Jennifer S., B.P. Horton, D.C. Barber, Jennifer L. Clear, Nicole Khan, T. Shaw, M. Brain, D.R. Corbett, A. Kemp, R.E. Kopp, The inception of the Anthropocene as revealed by proxy sea-level records. American Geophysical Union-*Fall Meeting* (Dec.) Washington, DC. [Talk]
- 2018 Aponte, Mercedes J., D.C. Barber, Sierra B. Perez, Response of North Carolina salt marshes to hydraulic modifications, agricultural runoff and accelerated sea level rise. Geological Society of America *Annual Meeting* (Nov.) Indianapolis. [Talk]
- 2018 Walker, Jennifer S., B.P. Horton, Nicole Khan, T.A. Shaw, D.C. Barber, Niamh Cahill, Incorporating spatial and temporal variability of salt-marsh foraminifera into sea level reconstructions. Geological Society of America *Annual Meeting* (Nov.) Indianapolis. [Talk]
- 2018 Walker, Jennifer S., A.C. Kemp, D. Barber, T.A. Shaw, R.E. Kopp, B.P. Horton, Reconstructing Holocene sea level in New Jersey using a new multi-proxy absence/presence method. PALSEA-QUIGS Workshop: *Climate, ice sheets and sea level during past interglacial periods*. (24-27 Sept.) Galloway, NJ. [Talk]
- 2017 Garcia-Artola, Ane, S.E. Engelhart, A.C. Kemp, D. Nikitina, N. Cahill, D.C. Barber, C.H. Vane, D.R. Corbett, J.L. Clear, J.E. Pilarczyk, T. Shaw, Jennifer Walker and B.P. Horton, The Common Era sea-level history of Delaware Bay, U.S. mid-Atlantic coast. World Climate Research Programme *Conference on Sea Level Changes and Coastal Impacts* (July) New York City, NY. [www.sealevel2017.org](http://www.sealevel2017.org) [Poster]

- 2016 Fuller, Abby, A.F. Plante and D.C. Barber, Analysis of restoration practices: Geochemical soil survey of the Unionville Serpentine Barrens, Chester County, PA. Geological Society of America *Northeastern Section Meeting* (March) Albany, NY. [Poster]
- 2015 Shmorhun, Nina, D.C. Barber and Jessica Kegel, Characterizing Modern and Late Holocene saltmarsh foraminifera assemblages from Smyrna Creek, coastal North Carolina as proxies for sea level. Geological Society of America *Annual Meeting* (Nov.) Baltimore. [Poster]
- 2015 Shmorhun, Nina, D.C. Barber, J.T. Morris and Jessica Kegel, Late Holocene saltmarsh peat accumulation and sea level rise in Core Sound and southern Pamlico Sound, North Carolina, USA. Geological Society of America *Northeastern Section Meeting* (March) Bretton Woods, NH. [Poster]
- 2014 Kegel, Jessica, A.C. Kemp, S.J. Culver, E. Leorri, D. Mallinson, D.C. Barber, B.P. Horton, J.T. Morris and Anna L. Woodson, Extension of the Late Holocene sea-level record in North Carolina. Geological Society of America *Annual Meeting* (October) Vancouver, BC. [Poster]
- 2014 Shmorhun, Nina, D.C. Barber, J.T. Morris and Anna L. Woodson, Late Holocene initiation and development of saltmarsh peat deposits in Core Sound and southern Pamlico Sound, North Carolina, USA. Geological Society of America *Annual Meeting* (October) Vancouver, BC. [Poster]
- 2012 Woodson, Anna L., D.C. Barber, Late Holocene sea level in southern Pamlico Sound: New data from saltmarsh cores on Western Pt., Cedar Island, North Carolina. Geological Society of America *Southeastern Section Meeting* (April) Asheville, NC. [Talk]
- 2012 Taddonio, Heather, D.C. Barber, Lower moves faster: Contrasting retreat patterns of grazed and ungrazed segments of the North Bay Barrier, North Carolina. Geological Society of America *Southeastern Section Meeting* (April) Asheville, NC. [Poster]
- 2010 Tinder, Phaedra C., D.C. Barber, R.D. Powell, Julie Brigham-Grette, Short-term glacial calving processes at Kronebreen-Kongsvegen Glacier, Kongsfjorden, Svalbard. *40<sup>th</sup> Annual International Arctic Workshop Abstracts* (March) Winter Park, CO. [Poster]
- 2010 Wolfenden, Sophia A., D.C. Barber, P. Magee, Inter-specific radiocarbon age differences in mollusc shells from coastal archaeological deposits, Southeastern Arabia. Geological Society of America *Northeastern Section Meeting* (March) Baltimore. [Talk]

**OTHER PUBLISHED CONFERENCE ABSTRACTS SINCE 2010 ONLY — LAST 10 YEARS (UNDERLINED: STUDENT ADVISEES)**

- 2020 **Barber, D.C.**, Carey Parker, Mercedes Aponte, Blue carbon stocks in temperate salt marshes (North Carolina, USA) vary in response to accelerated sea-level rise, salinity & hydraulic modifications. [Ocean Sciences Meeting](#) (February) San Diego, CA. [Poster]
- 2018 **Barber, D.C.**, Emma Wu, Alyson M. Thibodeau, Standard saltmarsh field sampling techniques provide reproducible patterns of total mercury accumulation in cores along the US East Coast. American Geophysical Union-*Fall Meeting* (Dec.) Washington, DC. [Poster]
- 2017 Mozdzer, T.J., M.K. McCormick, **D.C Barber**, Emily Geoghegan, Francine Leech, Camila Silva, L.A. Deegan. Nutrient enrichment induces environmental filtering to alter blue carbon pools and processes. Society of Wetland Scientists *Annual Meeting* (June) San Juan, Puerto Rico. [Talk]
- 2014 Morris, J.T., A.C. Kemp, **D.C. Barber**, S.J. Culver, Jessica Kegel, B.P. Horton. Marsh equilibrium theory: A Paleo Perspective. American Geophysical Union-*Fall Meeting* (Dec.) San Francisco. [Talk]
- 2014 **Barber, D.C.**, T. Storrs Kegel, Past and present inundation episodes along the US East Coast: Short-term variability and adaptation to long-term sea level rise. Geological Society of America *Annual Meeting* (October) Vancouver, BC. [Poster]
- 2014 **Barber, D.C.**, T. Storrs Kegel, Caroline H. Herman, Past and present inundation episodes along the US East Coast (North Carolina and New Jersey): Implications for sea level adaptation. *Ocean Sciences Meeting* (February) Honolulu. [Talk]
- 2012 **Barber, D.C.**, Anna L. Woodson, T. Storrs Kegel, Abrupt sea-level change and possible links to climate variability around 2,900 years ago. Geol. Society of America *Annual Mtg.* (Nov.) Charlotte, NC. [Talk]

- 2011 **Barber, D.C., Anna L. Woodson, Elizabeth H. Newbern**, Late Holocene saltmarsh accretion among sand ridges, West Bay, southern Pamlico Sound, North Carolina. American Geophysical Union *Fall Meeting* (December) San Francisco. [Poster]
- 2010 **Barber, D.C., Stephanie Nebel, Zoe Ruge**, Retreat of North Carolina shorelines linked to changes in ocean circulation 2,900 years ago. Geological Society of America *Annual Meeting* (Nov.) Denver. [Talk]

**PROFESSIONAL AFFILIATIONS**

Ancient Order of Shellbacks [*Imperium Neptuni Regis*], inducted 10 Nov 1985, 110°W.  
 American Geophysical Union, member since 1987.  
 Geological Society of America, member since 1991.

**PEER REVIEWER FOR FUNDING AGENCIES**

US National Science Foundation (individual proposals and panelist)  
 NSERC-Canada

**PEER REVIEWER FOR JOURNALS** (partial list)

<i>Earth &amp; Planetary Science Letters</i>	<i>Nature</i>
<i>Geology</i>	<i>Nature Geoscience</i>
<i>Geophysical Review Letters</i>	<i>Quaternary Science Reviews</i>
<i>Journal of Geoscience Education</i>	<i>Science</i>
<i>Journal of Sedimentary Research</i>	<i>Science of the Total Environment</i>

**COURSES TAUGHT** SINCE 2010 ONLY — LAST 10 YEARS [**BOLD: extended off-campus component of course**]

- ENVS 001 Introduction to Environmental Studies @ Swarthmore: w/ Mark Wallace, spring 2012.
- ENVS 101 Intro. Env. Studies co-taught: E. Stroud, fall '12; M. Rock, fall '15, spr '17; C. Hager, fall '14, '17, '18.
- GEOL/ENVS 103 Earth Systems and the Environment: 2010; '11; '13; '15.
- GEOL 108 Introduction to Oceanography: spring 2019.
- GEOL 130 Focus: Earth's Future Climate [*half-semester seminar for 1<sup>st</sup>-year students*]: fall 2011.
- GEOL 205 Sedimentary Materials & Environments: 2011; '12; '13; '15; '16; '17; '18; '19.
- GEOL/ENVS 206 Energy Resources & Sustainability: 2010; '13; '15\*, '16; '17\* '20 [**\*Climate & Policy 360° Germany**].
- GEOL 270 Geoarchaeology [w/ P. Magee]: 2010; '13 [**2007 winter field course - United Arab Emirates**].
- GEOL/ENVS 298 Applied Environmental Science Seminar: fall 2012 [*Science of Alternative Energy 360°*].
- GEOL 299 Field Course in Geology [**spr 2011; spr '16: modern carbonates - San Salvador, Bahamas**].
- GEOL/ENVS 314 Marine Geology: 2011; '14\*; '18\* [**\*Coasts in Transition 360° trip to Belize; fall '18 Fla. Keys**].
- GEOL 350 Adv. Topics in Geology: Climate Change & Sea Level: fall 2010; '13\*; '15 [**\*fall '13 Florida Keys**].
- ENVS 350 Adv. Topics in Environmental Studies: Carbon, Climate and Sea Level: spring 2019, fall 2020.
- ENVS 397 Senior Seminar in Environmental Studies: 2010; 2011; 2018.
- GEOL 398 Senior Thesis † in Geology (replaced GEOL 403 in fall 2016): every year since 2016.
- GEOL 399 Geology Capstone Seminar: spr 2012; fall '13; '14-15 AY; '15-16 AY; spr '17; spr '18; fall '18-19 AY.
- GEOL 403 Supervised Research – included both non-thesis & senior thesis † supervision: 2000 - 2016.
- GEOL/ENVS 425 Praxis III: Independent Community-Engaged Project Supervision: spring 2016; fall '17.

**UNDERGRADUATE THESIS ADVISEES 37 SENIOR THESES ADVISED SINCE 2010 (52 SINCE 2001)**

*Comments* - unless otherwise noted, Bachelor's degree in Geology from Bryn Mawr or Haverford (HC).  
- Does **not** include non-thesis supervised work (GEOL 403), Praxis III, or Summer Science interns.

Noelle Lewis '20 (w/ P. Marengo & J.S. Walker)	Sheba S. Brown '11 (HC)
Emmalyn M. Hicks '19	Sarah Christian '11
Amelia G. McCarthy '19	Sarah Matteson '11
Hannah M. Sensenig '19 (w/ Pedro Marengo)	Caitlin Tully '11 (HC) (w/ Pedro Marengo)
Camila P. Silva '19	Subin Yoon '11
Maya Bhalla-Ladd '19 (BIOL w/ T. Mozdzer)	Erin E. Reviea '11 (w/ Helen White)
Melissa McGlaughlin '19 (BIOL w/ T. Mozdzer)	Michelle A. Gauthier '10
Mercedes Aponte '18	Tanya M. Nelson '10
Yingying Lin '18	Maryann Tekverk'10 (HC)
Matt Willig '18 (HC)	Phaedra Tinder '10
Emma Wu '18 (w/ Katherine Marengo)	Sophia A. Wolfenden '10
Abby Letts '17 (HC)	Dawne E. Ballard '09
Bridget Murray '17 (Anthro., w/ Casey Barrier)	Naomi Hamermesh '09 (Math, w/ V. Donnay)
Abby Fullem '16 (HC) (w/ Pedro Marengo)	Jessica Scheick '09
Sierra B. Perez '16	Shirley M. Chen '08
Julia Grace Klinges '15 (HC)	Alexi Ernstoff'08 (HC)
Nina S. Shmorhun '15	Matthew Klinman'08 (HC)
Caroline H. Herman '13	Evan Pugh '07 (HC)
Taylor Storrs Kegel '13 (HC)	Shannon Ulrich '06
Holly Brunner '12 (Physics, w/ Mark Matlin)	Brenda A. Zera '05
Christina Lee '12 (w/ Pedro Marengo)	Stephanie H. Nebel '05
Elizabeth H. Newbern '12	Rebecca Lessem '03 (GeoArch, w/ P. Magee)
Sascha S. Patel '12	Rebecca Kraft '03
Nora A. Schmidt '12	Allison Hayes-Conroy '03 (Cities)
Heather A. Taddonio '12	Shannon Tyman '02 (Cities)
Anna Lee Woodson '12	Andrea L. Friedman '01

**GRADUATE STUDENT ADVISING (BMC, UDEL, UPENN, RUTGERS)**

Jennifer Sue Walker, PhD, Oceanography (Marine & Coastal Sci., Rutgers University) 2019.  
Bianca Reo Charbonneau, PhD, Biology (Ecology, University of Pennsylvania) 2019.  
Ali Emre Kuruçayırılı, PhD, Classical & Near Eastern Archaeology, Bryn Mawr College 2015.  
Steven Karacic, PhD, Classical & Near Eastern Archaeology, Bryn Mawr College 2014.  
Stephanie Hope Nebel, MS Geology, 2009; PhD Geology (University of Delaware) 2013.  
Crystal Fritz, PhD, Classical & Near Eastern Archaeology, Bryn Mawr College 2009.  
Peter Nassar, PhD, Geology, Bryn Mawr College 2003.  
Kristen A. Bollman, MA, Geology, Bryn Mawr College 2002.  
Howell Bosbyshell, PhD, Geology, Bryn Mawr College 2002.

**POSTDOCTORAL SUPERVISION AND MENTORING**

- 2019-2020: Dr. Jennifer S. Walker, Postdoctoral Fellow in Marine & Coastal Sciences, Rutgers University.
- 2016-2017: Dr. Ane Garcia-Artola, Postdoctoral Fellow in Marine & Coastal Sciences, Rutgers University.
- 2013-2015: Dr. Josh Caplan, Bucher-Jackson Postdoctoral Fellow in Biology at Bryn Mawr College.
- 2008-2010: Dr. Jose Carlos Hernández, NSF Postdoctoral Fellow in Biology at Villanova University.
- 2005-2008: Dr. Catherine Riihimaki, Keck Postdoctoral Fellow in Geology at Bryn Mawr College.

**RESEARCH CRUISE EXPERIENCE: OCEANOGRAPHY, MARINE & COASTAL GEOLOGY, GEOPHYSICAL SURVEYS**

<b>Cruise Name</b>	<b>Primary Cruise Mission</b>	<b>Cruise Dates &amp; Chief Scientists</b>	<b>Location</b>	<b>Work Done</b>
<i>EPOCS-85</i> Legs 3 & 4	Physical Oceanography	October - Dec 1985 Stan Hayes/Greg Thomas	Eastern Tropical & Equatorial Pacific	Chlorophyll (Chl <sub>A</sub> ) Primary productivity
<i>EPOCS-86</i> Leg 2	Physical Oceanography	May - June 18 1986 Linda Mangum	Eastern Tropical & Equatorial Pacific	Chl <sub>A</sub> , Nutrients Primary productivity
<i>TEW-2</i>	Physical and Chemical Ocea.	June - July 1987 Stan Hayes	15°S Zonal Transect SW Equatorial Pacific	Chl <sub>A</sub> , Nutrients Primary productivity
<i>EPOCS-87</i> Leg 1	Physical Oceanography	July - August 1987 Ben Moore	Western Equatorial & Tropical Pacific	Chl <sub>A</sub> , Nutrients Primary productivity
<i>WECOMA 8802</i>	Biological Oceanography	Feb - March 1988 Richard Barber	Equatorial Pacific	Chl <sub>A</sub> , Primary productivity
<i>WECOMA 8803B</i>	Marine Geology Paleoceanography	March - April 1988 Margaret Leinen	Equatorial Pacific (140°W)	Chl <sub>A</sub> , Nutrients, Primary productivity
<i>EPOCS-88</i> Leg 1	Physical Oceanography	May - June 1988 Rick Miller	Central Equatorial Pacific	Chl <sub>A</sub> , Nutrients Primary productivity
<i>CTZ-88</i> <i>Fall</i>	Physical Oceanography	September 1988 Curt Collins	Coastal Zone, Central California	Chl <sub>A</sub> , Dissolved O <sub>2</sub> Nutrients
<i>EPA-91</i> Casco Bay	Marine Geology Benthic Biology	July 1991 Les Watling/W. Barnhart	Bigelow Bight, Gulf of Maine	Side Scan Sonar Piston Coring
<i>Sea Grant</i> <i>SC-91</i>	Coastal and Marine Geology	July 1991 Dan Belknap/Joe Kelley	Saco Bay, Gulf of Maine	Side Scan Sonar Seismic Profiling
<i>MMS-91</i> Eastern Maine	Coastal and Marine Geology	July 1991 Stephen M. Dickson	Narraguagas Bay, Gulf of Maine	Bottom Grab Samples Side Scan Sonar
<i>MMS-92</i> (SC/SB)	Coastal and Marine Geology	July 1992 J. Kelley/D. Belknap	Maine Inner Shelf Saco/Sheepscot Bays	Vibracores Seismic Profiling
<i>MMS-93</i> (SB/PB)	Coastal and Marine Geology	Aug-Sept 1993 J. Kelley/D. Belknap	Maine Inner Shelf Sheepscot/Penobscot	Vibracores Seismic Profiling
<i>HU97048</i> <i>CCGS Hudson</i>	Marine Geology & Geophysics	Sept - October 1997 David J.W. Piper	Hudson Strait, Labrador Sea	Piston Core sampling Seismic Profiling
<i>RV Capricorn</i> Onslow Bay	Marine Geology & Geophysics	May 2004 Walter Barnhart	Offshore Bogue and Shackleford Banks, NC	Seismic Profiling Side Scan Sonar

**Work Done** indicates Don Barber's primary responsibilities on each cruise:

- Chlorophyll: analyses of phytoplankton biomass per unit volume using shipboard Turner™ fluorometer.
- Primary productivity: shipboard phytoplankton growth rate experiments involving <sup>14</sup>C uptake analysis.
- Side Scan Sonar and Seismic Profiling: seafloor & sub-bottom surveys using towed geophysical equipment.
- Bottom samples: Smith-McIntyre grabs; piston- and vibracores: sub-bottom coring, logging and sampling.