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Education

Ph.D., **Marine Geology & Geophysics**, Columbia University, New York, New York, 1993.
M.Ph., **Geology**, Columbia University, New York, New York, 1992
M.S., **Oceanography**, University of Rhode Island, Narragansett, Rhode Island, Oceanography, 1987.
B.S., **Geology**, Trinity University, San Antonio, Texas, 1983.

Research Interests

Energy Systems: production, conversion, delivery and uses of energy; assessment of natural energy resources; energy economics, policy and markets; the energy-food-water nexus; and energy use and climate change.

Professional Experience

Duke University, Durham, North Carolina

Nicholas School of the Environment

- **Chair, Division of Earth & Ocean Sciences**, 2011-2014, 2016-present
- **Professor**, 2009-present
- **Energy & Environment Program Chair**, Masters of Environmental Management Program, 2004-2012
- **Associate Professor**, 2003-2009
- **Director of Graduate Studies, Division of Earth & Ocean Sciences**, 2000-2004
- **Assistant Professor**, 1998-2003

University

- **Director**, Duke University Energy Hub, 2010-2011
- **Associate Director**, Gendell Center for Engineering, Energy & the Environment, 2008-2012

University of Colorado, Boulder, Colorado

- **Research Associate Scientist II**, Institute of Arctic & Alpine Research, 1996-1998
- **Instructor**, Department of Geology, 1997-1998

Lamont-Doherty Earth Observatory, Columbia University, Palisades, New York

- **Associate Research Scientist**, 1994-1996
- **Postdoctoral Research Scientist**, 1993

Honors

- Truman and Nellie Semans/Alex Brown & Sons Professor of Earth and Ocean Sciences (rotating Chair) and Bass Fellow (for excellence in teaching & research), Duke University, 2011-present
- Aldo Leopold Fellow, Woods Institute for the Environment, Stanford University, 2011-present

- Research Triangle Institute President’s Award for helping create the Research Triangle Energy Consortium, an energy research partnership between Duke University, North Carolina State University, the University of North Carolina at Chapel Hill, and the Research Triangle Institute
- Amoco Production Company Geophysics Fellowship, Columbia University, 1988-1989
- Senior Geology Student of the Year Award, Trinity University, 1983

Scholarly Leadership

Editorial Positions

- **Associate Editor**, *Geology*, 2000-2001
- **Associate Editor**, *Journal of Sedimentary Research*, 1996-2001
- **Guest Editor**, *Marine Geophysical Researches*, Special Issue, Advances in Seafloor Mapping using Side-scan Sonar and Multibeam Bathymetry, 1996

Selected Examples of Academic Community Service

- Member, Higher Education Steering Committee, American Council on Renewable Energy, 2006-2007
- Co-Convener, National Science Foundation Source to Sink Theoretical Institute, September 17-22, Eureka, CA, 2006
- Member, Steering Committee, National Science Foundation MARGINS Program, 2005-2007
- Co-Chair, 32nd International Geologic Congress Topical Session, “Coupled Process-Response models in sediment transport and stratigraphy”, Florence, Italy, August 20-28, 2004.
- Co-Chair, Geological Society of America Annual Meeting Special Session, “Clinoforms: Past, Present and Modeled”, 2003.
- Co-Chair, Sediment Transport in Continental Shelves, Slopes and Beyond, *The 37th Annual Technical Meeting of the Society of Engineering Science*, October 23-25, Columbia, SC, 2003.
- Group Leader, Sedimentary Processes, Ocean Drilling Project 2000 Complex Meeting, Vancouver, BC, 2000.
- Member, National Science Foundation panel on Future of Marine Geosciences on Siliclastic Margins, 1996.
- Member, National Science Foundation panel of US scientists at Nansen Arctic Drilling Workshop, St. Petersburg, Russia, 1996.
- Member, European Commission-sponsored Arctic Paleo-River Discharge Workshop, Bremerhaven, Germany, 1996.
- Co-chair, American Geophysical Union Geodesy Special Session on Gravity Gradiometry, 1995.
- Co-convener Joint Oceanographic Institute and Lamont-Doherty Earth Observatory Submarine Slope Stability Workshop, 1995.

Selected Publications

Henry, C.L. (student), and L.F. Pratson, 2016, Effects of environmental temperature change on the efficiency of coal- and natural gas-fired power plants. *Environmental Science & Technology*, v. 50, p. 9764-9772.

- Worman, S.L. (student), L.F. Pratson, T.H. Darrah, J. Karson, and E. Klein, 2016, Faster-spreading ridges may rival slower-spreading ridges in free H₂ gas production by serpentinization of peridotite. *Geophysical Research Letters*, v. 43, p. 6435-6443.
- Alqahtani, B.J., K.M. Holt (student), D. Patino-Echeverri, and L. Pratson, 2016, Residential solar PV systems in the Carolinas: opportunities and outcomes. *Environmental Science & Technology*, v. 50, p. 2082-2091.
- Haerer, D. (research assistant), and L. Pratson, 2015, Employment Trends in the U.S. Electricity Sector, 2008-2012: *Energy Policy*, v. 82, p. 85-98.
- Bradbury K. (student), L. Pratson and D. Patiño-Echeverri, 2014, Economic viability of energy storage systems based on price arbitrage potential in real-time U.S. electricity markets: *Applied Energy*, v. 114, p. 512-519.
- Eccles, J.K. (student), and L. Pratson, 2014, A “Carbonshed” Assessment of Distributed vs. Centralized CCS Deployment in the Continental U.S.: *Applied Energy*, v. 113, p. 352-361.
- Eccles, J.K. (student), and L. Pratson, 2013, Economic evaluation of offshore storage potential in the US Exclusive Economic Zone: *Greenhouse Gases: Science and Technology*, v. 3, p. 84-95.
- Pratson, L.F., D. Haerer (research assistant) and D. Patino-Echeverri, 2013, Fuel Prices, Emission Standards and Generation Costs for Coal vs. Natural Gas Power Plants: *Environmental Science & Technology*.
- Eccles, J.K. (student), and L. Pratson, 2012, Global CO₂ storage potential of self-sealing marine sedimentary strata: *Geophysical Research Letters*, v. 39:19.
- Chandel, M.K., G. Kwok, R. Jackson, and L.F. Pratson, 2012, The potential of waste-to-energy in reducing greenhouse gas emissions: *Carbon Management*, v. 3:2, pp. 133-144.
- Eccles, J., M.K. Chandel, and L.F. Pratson, 2012, Effects of well spacing on geologic storage site costs and surface footprint: *Environmental Science & Technology*, v. 46:8, p. 4649-4656.
- Monast, J., B.R. Pearson, and L.F. Pratson, 2012, A cooperative federalism framework for CCS regulation: *Environmental & Energy Law Journal of the University of Houston Law Center*, v. 7:1, p. 2-46.
- Amblas, D., T.P. Gerber (student), B. De Mol, R. Urgeles, D. Garcia-Castellanos, M. Canals, L.F. Pratson, A. Camerlenghi, 2012, The survival of a submarine canyon during long-term outbuilding of a continental margin: *Geology*, v. 40:6, p. 543-546.
- Eccles, J. (student), L. Pratson, R.G. Newell, and R.B. Jackson, 2012, The impact of geologic variability on capacity and cost estimates for storing CO₂ in deep-saline aquifers: *Energy Economics*, v. 35:5, p. 1569-1579.
- Chandel, M., L. Pratson, and R. Jackson, 2011, The potential impacts of climate change policy on freshwater use in thermoelectric power generation: *Energy Policy*, v. 39:10, p. 6234-6242.
- Wildman, R.A. Jr., L.F. Pratson, M. DeLeon, J.G. Hering, 2011, Physical, chemical, and mineralogical characteristics of a reservoir sediment selta (Lake Powell, USA) and implications for water quality during low water level: *Journal of Environmental Quality*, v. 40:2, p. 575-86.
- Amblas, D., T.P. Gerber, M. Canals, L.F. Pratson, R. Urgeles, G. Lastras, A.M. Calafat, 2011, “Transient erosion in the Valencia Trough turbidite systems, NW Mediterranean Basin: *Geomorphology*, v. 130:3-4, p. 173-184.

- Golden, J.S., K.J. Dooley, J.M. Anderies, B.H. Thompson, G. Gereffi, and L. Pratson, 2010, Sustainable product indexing: navigating the challenge of ecolabeling: *Ecology and Society*, v. 15.
- Chandel, M., L. Pratson, and E. Williams, 2010, Potential economies of scale in CO₂ transport through use of a trunk pipeline: *Energy Conversion and Management*, v. 51, p. 2825-2834.
- Pratson, E., A. Vengosh, G. Dwyer, L. Pratson, and E. Klein, 2010, The effectiveness of arsenic remediation from groundwater in a private home: *Groundwater Remediation and Monitoring*, v. 30, p. 87-93.
- Gerber, T.P.(student), D. Amblàs, M.A. Wolinsky, L.F. Pratson, and M. Canals, 2009, A model for the long-profile shape of submarine canyons: *Journal Geophysical Research - Earth Surface*, v. 114, doi:10.1029/2008JF001190.
- Gerber, T.P. (student), L.F. Pratson, S. Kuehl, J.P. Walsh, C. Alexander, and A. Palmer, 2009, The influence of sea level and tectonics on Late Pleistocene through Holocene sediment storage along the high-sediment supply Waipaoa continental shelf: *Marine Geology*, v. 267, doi:10.1016/j.margeo.2009.10.002.
- Eccles, J. (student), L. Pratson, R.G. Newell and R.B. Jackson, 2009, Physical and economic potential of geological CO₂ storage in saline aquifers: *Environmental Science & Technology*, v. 43, p. 1962-1969.
- Pratson, L., J. Hughes-Clarke, M. Anderson, T. Gerber (student), D. Twichell, R. Ferrari, C. Nittrouer, J. Beaudoin, J. Granet and J. Crockett, 2008, Effects of subaqueous gravity flows on timing and patterns of basin infilling as documented in Lake Powell during a drought: *Geology*, v. 36, p. 843-846.
- Gerber, T. (student), L. Pratson, M. Wolinsky, R. Steel, J. Mohr, J. Swenson and C. Paola, 2008, Autocyclic behavior of experimental turbidity currents: *Journal of Sedimentary Research*, v. 78, p. 220-238.
- Treml, E., P.N. Halpin, D.L. Urban and L.F. Pratson, 2008, Modeling population connectivity by ocean currents, a graph-theoretic approach for marine conservation: *Landscape Ecology*, v. 23, p. 19-36 (*Voted journal's best paper of the year*).
- Wolinsky, M.A., and L.F. Pratson, 2007, Overpressure and slope stability in prograding clinoforms: implications for marine morphodynamics: *Journal of Geophysical Research - Earth Surface*, v. 112, F04011 (20 p.).
- Mountain, G.S., R.L. Burger, H. Delius, C.S. Fulthorpe, J.A. Austin, D.S. Goldberg, M.S. Steckler, C.M. McHugh, K.G. Miller, D.H. Monteverde, D.L. Orange, and L.F. Pratson, 2007, The long-term record on continental margins in C.A. Nittrouer, J.A. Austin, M.E. Field, J.H. Kravitz, M.S. Steckler, J.P.M. Syvitski and P.L. Wiberg (eds.), *Continental-Margin Sedimentation: Transport to Sequence*, International Association of Sedimentologists Special Publication, Blackwell Publishers No. 37, Blackwell Publishers, p. 381-458.
- Syvitski, J., L. Pratson, M. Steckler, P. Wiberg, M. Garcia, R. Geyer, C. Harris, E. Hutton, J. Imran, H. Lee, M. Morehead, and G. Parker, 2007, Prediction of margin stratigraphy, in C.A. Nittrouer, J.A. Austin, M.E. Field, J.H. Kravitz, M.S. Steckler, J.P.M. Syvitski and P.L. Wiberg (eds.), *Continental-Margin Sedimentation: Transport to Sequence*, International Association of Sedimentologists Special Publication No. 37, Blackwell Publishers, p. 459-530.
- Pratson, L., P. Wiberg, M. Steckler, D. Cacchione, J. Karson, E. Mullenbach, J. Swenson, C. Nittrouer, A.B. Murray, G. Spinelli, C. Fulthorpe, D. O'Grady, G. Parker, N. Driscoll, R. Burger, C. Paola, D. Orange, M. Wolinsky, M. Field, C. Friedrichs and J. Fildolez, 2007, Seascape evolution on clastic continental shelves and slopes, in C.A. Nittrouer, J.A. Austin, M.E. Field, J.H. Kravitz, M.S.

- Steckler, J.P.M. Syvitski and P.L. Wiberg (eds.), *Continental Margin Sedimentation: From Sediment Transport to Sequence Stratigraphy*, International Association of Sedimentologists Special Publication No. 37, Blackwell Publishers, p. 339-380.
- Pratson, L.F., E. Hutton, A. Kettner, and J. Syvitski, 2007, The impact of floods and storms on the acoustic reflectivity of the inner continental shelf: a modeling assessment: *Continental Shelf Research*, v. 27, p. 542-559.
- Kraft, B.J., I. Overeem, C.W. Holland, L.F. Pratson, J.P.M. Syvitski and L. Mayer, 2006, Stratigraphic model predictions of geoaoustic properties: *IEEE Ocean Engineering*, v. 31, p. 266-283.
- Violet, J., B. Sheets, L. Pratson, C. Paola, R.T. Beaubouef and G. Parker, 2005, Experiment on turbidity currents and their deposits in a model 3D subsiding mini-basin: *Journal of Sedimentary Research*, v. 75, p. 820-843.
- Swenson, J.B., C. Paola, L. Pratson, V.R. Voller, and A.B. Murray, 2005, Fluvial and marine controls on combined subaerial and subaqueous delta progradation: Morphodynamic modeling of compound-clinoform development: *Journal of Geophysical Research – Earth Surface*, v. 110, p. F02013-2029.
- Wolinsky, M., and L.F. Pratson, 2005, Constraints on landscape evolution from slope histograms: *Geology*, v. 33, p. 477-480.
- Cacchione, D.A., and L.F. Pratson, 2004, Internal tides and the continental slope: *American Scientist*, March-April issue, p. 130-137.
- Fryer, G.J., P. Watts, and L.F. Pratson, 2004, Source of the great tsunami of 1 April 1946: a landslide in the upper Aleutian forearc: *Marine Geology*, v. 203, p. 201-218.
- Pratson, L.F., A. Stroujkova, D. Herrick, F. Boadu, and P. Malin, 2003, Predicting seismic velocity and other rock properties from clay content only: *Geophysics*, v. 68, p. 1847-1856.
- Cacchione, D., L. Pratson, and A. Ogston, 2002, Shaping of continental slopes by internal waves: *Science*, v. 296, p. 724-727.
- Pratson, L.F., and W. Gouveia, 2002, Seismic modeling of experimental strata: *American Association of Petroleum Geologists Bulletin*, v. 86, p. 129-144.
- Bahr, D., E. Hutton, J. Syvitski, and L. Pratson, 2001, Compaction from first principles: an analytical solution for approximating sediment porosity profiles: *Computers & Geosciences*, v. 27, p. 691-700.
- Pratson, L.F., J. Imran, E. Hutton, G. Parker and J. Syvitski, 2001, BANG1D: A one-dimensional Lagrangian model of turbidity current mechanics: *Computers & Geosciences*, v. 27, p. 701-716.
- Pratson, L.F., 2001, A perspective on what is known and not known about seafloor instability in the context of the evolution of the US continental margin: *Marine and Petroleum Geology*, v. 18, p. 499-501.
- McAdoo, B., L. Pratson, and D. Orange, 2000, Submarine landslide geomorphology, US Continental Slope: *Marine Geology*, v. 169, p. 103-136.
- O'Grady, D., J. Syvitski, L.F. Pratson, and J.F. Sarg, 2000, Categorizing the morphologic variability of siliciclastic passive continental margins: *Geology*, v. 28, p. 207-210.
- Pratson, L.F., J. Imran, G. Parker, J. Syvitski and E. Hutton, 2000, Debris flows versus turbidity currents: a modeling comparison of their dynamics and deposits, in A. Bouma and C. Stone (eds), *Fine-Grained Turbidite Systems: AAPG Memoir 72 / SEPM Special Publication No. 68*, p. 57-72.

- Mello, U., and L.F. Pratson, 1999, Regional slope stability and mass-movement mechanics from the two-dimensional state of stress in a semi-infinite slope: *Marine Geology*, v. 154, p. 339-356.
- Syvitski, J., L. Pratson, D. O'Grady, 1999, Stratigraphic Predictions of Continental Margins for the Navy. In: L. Whatney et al (eds.) Numerical Experiments in Stratigraphy: Recent Advances in Stratigraphic and Sedimentologic Computer Simulations: *SEPM Special Publication No. 62*, p. 220-236.
- Pratson, L., D. Divins, T. Butler, D. Metzger, G. Sharman, M. Steele, T. Beggren, T. Holcombe and R. Ramos, 1999, Development of an elevation database for the US coastal zone: *ACSM Surveying and Land Information Systems (SALIS) Journal*, v. 59, no. 1, p. 1-13.
- Pirmez, C., L.F. Pratson, and M.S. Steckler, 1998, Clinof orm development by advection-diffusion of suspended sediment: modeling and comparison to natural systems: *Journal of Geophysical Research*, v. 103, B-10, p. 24,141-24,157.
- Pratson, L.F., R.E. Bell, D. Dosch, J. White, B. Korn, E. Biegert, R. Anderson, C. Affleck, A. Grierson, and R. Phair, 1998, Results from a high resolution 3-D marine gravity gradiometry survey over a buried salt structure, Mississippi Canyon Area, in R.I. Gibson and P.S. Millegan (eds.), Gulf of Mexico Geological Applications of Gravity and Magnetics: Case Histories: *SEG Geophysical Reference Series No. 8 / AAPG Studies in Geology No. 43*, p. 137-145.
- Syvitski, J., L. Pratson, M. Perlmutter, P. de Boer, G. Parker, M. Garcia, P. Wiberg, M. Steckler, D. Swift, and H.J. Lee, 1997, EARTHWORKS: A large scale and complex numerical model to understand the flux and deposition of sediment over various time scales. In: V. Pawlosky-Glahn (ed.), Proceedings of IAMG '97, *The third annual conference of the International Association of Mathematical Geology*, CIMNE, Barcelona, v. 3, p. 29-33.
- Pratson, L.F., and W.F. Haxby, 1997, Panoramas of the Seafloor: *Scientific American*, v. 4, p. 82-87.
- Seidl, M.A., J.K. Weissel, and L.F. Pratson, 1996, The kinematics and pattern of escarpment retreat across the rifted continental margin of southeast Australia: *Basin Research*, v. 8, p. 301-316.
- Pratson, L.F., and W. Haxby, 1996, What is the slope of the U.S. continental slope?: *Geology*, v. 24 p. 3-6.
- Pratson, L.F., and B.J. Coakley, 1996, A model for the headward erosion of submarine canyons induced by downslope eroding sediment flows: *Geological Society of America Bulletin*, v. 108, p. 225-234.
- Pratson, L.F., and W.B.F. Ryan, 1996, Automated drainage extraction in mapping the Monterey submarine drainage system, California: Advances in Seafloor Mapping using Side-scan Sonar and Multibeam Bathymetry (special issue), L.F. Pratson and M. Edwards, eds., *Marine Geophysical Researches*, v. 18, p. 757-777.
- Pratson, L.F., and M. Edwards, 1996, An introduction to advances in seafloor mapping using side-scan sonar and multibeam bathymetry: Advances in Seafloor Mapping using Side-scan Sonar and Multibeam Bathymetry (special issue), L.F. Pratson and M. Edwards, eds., *Marine Geophysical Researches*, v. 18, p. 601-605.
- Weissel, J.K., L.F. Pratson and A. Malinverno, 1994, The length-scaling properties of topography, M. Ellis and D. Merritts, eds, Tectonics and Topography (special section): *Journal of Geophysical Research*, v. 99, p. 13,997-14,012.
- Pratson, L.F., W.B.F. Ryan, Gregory S. Mountain, and David C. Twichell, 1994, Submarine canyon initiation by downslope eroding sediment flows; evidence in Late Cenozoic strata on the New Jersey continental slope: *Geological Society of America Bulletin*, v. 106, p. 395-412.

- Pratson, L.F. and W.B.F. Ryan, 1994, Pliocene to Recent infilling and subsidence of intraslope basins offshore Louisiana: *American Association of Petroleum Geologists Bulletin*, v. 78, p. 1483-1506.
- Ryan, W.B.F., W.F. Haxby, L. Pratson and C. McHugh, 1991, Intercomparison of co-registered bathymetry, Hydrosweep bathymetry, SeaMARC I imagery and submersible observations on the continental slope of the eastern U.S: *IEEE Oceans 91*, v. 2, p. 1159-1164.
- Ryan, W.B.F., C. McHugh and L. Pratson, 1991, Combining multispectral sonar imagery of Monterey Canyon with a digital terrain model for seabed characterization: *IEEE Oceans 91*, v. 2, p. 1147-1151.
- Pratson, L.F. and E.P. Laine, 1989, The relative importance of gravity-induced versus current-controlled sedimentation during the Quaternary along the mid-east U.S. outer continental margin revealed by 3.5 kHz echo character: *Marine Geology*, v.89, p. 87-126.

External Funding

- Department of Defense Minerva Program, PI, “Assessing the international risk to national economies posed by a marine chokepoint shutdown”, 3/1/17-2/28/19, \$382,966.
- Department of Defense Minerva Program, PI, “A global value chain analysis of food security and food Staples for major energy exporting nations in the Middle East and North Africa”, 5/1/12-6/30/15, \$1,119,596.
- Saudi Aramco, PI, “A prefeasibility study of tailpipe CO₂ capture”, 9/1/11-5/31/12, \$40,000.
- Department of Energy, PI, “Carbonsheds’ as a framework for optimizing US CCS pipeline transport on a regional to national scale”, 1/1/10-12/31/13, \$299,143.
- National Science Foundation, Co-PI, “Productivity, stability and geomorphical evolution of New England salt marshes: Plum Island case study”, 7/1/06-12/31/07, \$120,684.
- Office of Naval Research, PI, “Modeling the impact of flood deposition and storm reworking on the seismic response of shelf strata in the Gulf of Lions”, 10/1/04-9/30/06, \$188,903.
- National Science Foundation, PI, “Collaborative Research – Resolution of the stratigraphic record for a high input, collision-margin shelf basin: The MARGINS Waipaoa Focus Area”, 7/1/04-6/30/07, \$214,292.
- Office of Naval Research, PI, “EuroSTRATAFORM: Modeling the impact of seacape evolution on the seismic response of shelf and slope strata”, 10/1/02-9/30/04, \$188,903.
- Office of Naval Research, PI, “Capturing Uncertainty DRI: Seabed variability and acoustic prediction”, 6/1/01-9/30/04, \$167,000.
- Office of Naval Research, PI, “Integrative process-based modeling of strata formation”, 10/1/98-10/31/01, \$359,909.
- National Oceanic and Atmospheric Administration, PI, “Development and implementation of an NGDC-based coastal data and modeling program”, 4/1/96-3/31/98, \$60,000.
- Office of Naval Research, PI, “Analysis and modeling of the causes and consequences of submarine slope failure”, 10/1/96-9/30/98, \$185,000.
- Office of Naval Research, PI, “Studies of slope stability and their integration into STRATAFORM”, 10/1/94-9/30/96, \$133,531.

- National Science Foundation, PI, “A new model of shallow-water clinoform development and its integration into modeling sequence stratigraphy”, 5/1/94-4/30/96, \$62,000.
- Office of Naval Research, PI, “A spatial model of erosion and sedimentation on continental margins”, 10/1/92-9/30/94, \$174,747.

Students

PhD

- Matthew A. Wolinsky, PhD in Earth & Ocean Sciences, 2005, Duke University, “Process and Form in Earth Surface Dynamical Systems: Quantitative Analysis and Modeling”.
- Henrique L. Tono, PhD in Earth & Ocean Sciences, 2007, Duke University, “Phantom Seismic Stratigraphy: the Origins of Time-Line Reflectors & Missing Base-Level Markers from Images and Properties of Experimental Strata”.
- Thomas Gerber, PhD in Earth & Ocean Sciences, 2007, Duke University, “Modeling, Experimental, and Observational Approaches to Integrating Seascape Evolution and Strata Formation on Clastic Continental Margins”.
- Daniel Kahn, PhD 2008, Duke University, “Hydro-Fractured Reservoirs: A Study Using Double-Difference Location Techniques”
- Jordan Eccles, PhD in Earth & Ocean Sciences, 2011, Duke University, “Impacts of Geological Variability on Carbon Storage Potential”.
- Kyle Bradbury, PhD 2013, Duke University, “The Potential of Energy Storage Systems with Respect to Generation Adequacy and Economic Viability”.
- Stacey Worman, PhD 2015, Duke University, “Global rates of free hydrogen (H₂) production by serpentinization and other abiogenic processes within young ocean crust”.
- Candise Henry, PhD in progress, Duke University, TBD

MS

- Damian Herrick, MS in Earth & Ocean Sciences, 2001, Duke University, "A Survey of Existing Velocity Models Using Physical Properties Derived Solely from Clay Content".
- Kristyn Hall, MS in Earth & Ocean Sciences, 2012, Duke University, “Carbon Capture and Storage through Enhanced Oil Recovery”.
- Kyra Moore Holt, MS in Earth & Ocean Sciences, 2014, Duke University, “Limits and economic effects of distributed PV generation in North and South Carolina”

Post-Doctoral Advisees:

- Dr. Jim Buttles, 1999-2000, Duke University, Durham, NC (now a Research Associate at the Jackson School of Earth Sciences, University of Texas at Austin)
- Dr. Anastasia Stroujkova, 2000-2001, Duke University, Durham, NC (now a Research Geophysicist with Weston Geophysical)

Professional Masters of Environmental Management Students

- I have advised over 70 Nicholas School MEM students on their Masters Project.

Teaching

Current Courses

- ENV 130/211, Energy & the Environment (undergrad and grad versions of course)
- ENRGYENV 625, Energy Markets & Innovation (Fuqua Daytime MBA Program)

Past Courses

- ENV 298.10, Energy Industry Houston Fieldtrip
- ENV 298.18, Clean Energy California Fieldtrip
- ENRGYENV 491C, Energy and the Environment (Fuqua Cross Continent MBA Program)
- DEL 478.01, Energy & Environment Today (distance education course for Nicholas Duke Environmental Leadership Program)
- ENV 131/299, World Trade in Energy Resources (dual undergrad/grad course)
- ENV398.09, Energy & Environment Program Area Symposium
- EOS 240, Introduction to Computer Modeling in the Earth Sciences (grad course)
- EOS 110L, Sedimentology and Stratigraphy (undergrad course)
- EOS 244, Sedimentary Basins (Basin Analysis)
- EOS 140, Introduction to Remote Sensing in the Earth Sciences (undergrad course)
- EOS 53, Introduction to Oceanography (undergrad course)