

BIOGRAPHICAL SKETCH

Gregory Mountain

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Education

Brown University, Providence, RI, Geology / Geophysics, B.A. 1972
Columbia University, New York, NY, Marine Geology, Ph.D. 1981
USGS, Woods Hole, MA, Post-Doctoral Associate, Marine Geology, 1981- 82

Appointments

2003 - Professor I (Tenured), Rutgers University
2002-03 Research Professor I, Rutgers University
2002 - Adjunct Sr. Research Scientist, Lamont-Doherty Earth Observatory
2001 Doherty Sr. Research Scientist, Lamont-Doherty Earth Observatory
1996-01 Sr. Research Scientist, Lamont-Doherty Earth Observatory
1993-96 Res. Scientist, Lamont-Doherty Earth Observatory
1989-90 Assoc. Prog. Director (Rotator) MG&G/OCE, National Science Foundation
1982-93 Assoc. Research Scientist, Lamont-Doherty Geological Observatory
1981-82 National Research Council Post-Doctoral Assoc., USGS, Woods Hole, MA
1977-81 Graduate Research Assist. Lamont-Doherty Geological Observatory
1974-77 Faculty Fellow, Columbia University
1972-74 Core Descriptor, Lab Supervisor, Woods Hole Oceanographic Institution
1972 - Participant on 30 research cruises: 5 DSDP/ODP/IODP drilling expeditions, Co-Chief Sci. ODP Leg 150 + IODP Exp 313, 10 geophysical-geological survey cruises as Chief Sci., 8 geophysical-geological survey cruises as Co-Chief Sci.

Professional Activities

1984 Member, DSDP Sedimentary Petrology + Physical Properties Panel
1988 Co-Convener (with J.Watkins) JOI/USSAC wkshp on "The Role of ODP Drilling in the Investigation of Global Changes in Sea Level", El Paso, TX
1988-89 Chairman, JOIDES Site Survey Panel
1991-92 Member, JOIDES Sea Level Working Group
1992-95 Member, JOIDES Site Survey Panel
1993 Manager (Temporary), JOIDES Site Survey Data Bank
1995 Member, JOI/USSAC Advisory Panel
1995-97 Member, JOIDES Planning Committee
1997 Co-Convener (with N.Driscoll), JOI/USSAC workshop on "Marine Coring at Margins", Palisades, NY
1997-99 Alternate, JOIDES Science Committee
1998-00 Co-Chair (with T.Quinn), JOIDES Shallow-Water Drilling Prog. Plan. Grp.
2001 Member, Steering Comm., "JEODI Workshop on Alternate Platform Drilling", Lisbon, Portugal

- 2002 JOI/USSAC Distinguished Lecturer, "The Ups and Downs of Determining Ancient Sea-Level Change"
- 2003 Co-Convener (with J.Gee) JOI/USSAC wkshp on "Ocean Drilling and Site Survey Introduction", San Francisco CA
- 2003-05 Member, JOI/USSAC Advisory Committee
- 2004-09 Member, DOSECC Drilling Safety Review Panel
- 2005-08 Member, IODP Science Planning Committee
- 2008-09 Member, Steering Committee, Ocean Drilling Consortium
- 2011 Invited Moderator, AAAS Symposium "Where Ocean Meets Land: Dynamic Shorelines in a Warming World", Washington, DC
- 2011 - Member, Integrated Regional Team, US State Dept. Panel on Law of the Sea
- 2013 - President, Lamont-Doherty Earth Obs. Alumni Association
- 2014 - Member, UNOLS Marcus Langseth Science Oversight Committee

Graduate Student Advisor

R. Early (MA, 2007), D. Monteverde (PhD, 2008), K. Bitting (PhD, 2013), L. Lugin (MS, 2016), K. Baldwin (MS, 2016)

Graduate Student Committee Member

S. Pekar (PhD, 1999), X. Comas (PhD, 2005), S. Henderson (MS, 2006), A. Kulpecz (PhD, 2008), A. Elmore (PhD, 2009), A. Henza (MA, 2009), Z. Seker (MS, 2012), S. Karakaya (MS, 2012), T. Degirmenci (MS, 2014), L. Neitzke (PhD, 2015), C. Lombardi (PhD, in progress), S. Graham (MS, in progress), C. Johnson (MS, in progress), A. Madof (Columbia U., PhD, 2010), C. Campbell (Dalhousie U., PhD, 2011), T. Bhatnagar (Columbia U., PhD, in progress)

EPS Courses Taught

Principles of Stratigraphy (w/ K. Miller), Introduction to Geophysics, Planet Earth, Seminar in Sequence Stratigraphy (w/ K. Miller), Seminar on Peak Oil (w/ K. Miller), Seismic Acquisition + Processing, Introduction to Geology, Marine Geology (w/ J. Wright)

University Service

- 2005 EPS Colloquium Organizer
- 2010 Member, EPS Faculty Compensation Program review committee
- 2012 - Member, SAS Curriculum Requirements Committee
- 2013,15 Member, SAS Advisory Committee on Appointments + Promotions
- 2015 Member, EPS Faculty Compensation Program review committee

Selected Peer-Reviewed Publications

Miller, K.G., Browning, J.V., Mountain, G.S., Sheridan, R.E., Sugarman, P.J., Glenn, S., and Christensen, B.A., 2014, History of continental shelf and slope sedimentation on the U.S. Middle Atlantic margin, in Chiocci, F.L. and Chivas, A.R., eds., Continental Shelves of the World: Their Evolution During the Last Glacio-Eustatic Cycle: Geological Society, London, Special Publication 41, p. 21-34. doi: 10.1144/M41.3.

- Miller, K.G., Mountain, G.S., Browning, J.V., Katz, M.E., Monteverde, D., Sugarman, P.J., Ando, H., Bassetti, M.A., Bjerrum, C.J., Hodgson, D., Hesselbo, S., Karakaya, S., Proust, J.-N., and Rabineau, M., 2013. Testing sequence stratigraphic models by drilling Miocene foresets on the New Jersey shallow shelf. *Geosphere*, 9:1236–1256. doi:10.1130/GES00884.1
- Miller, K.G., Browning, J.V., Mountain, G.S., Bassetti, M.A., Monteverde, D., Katz, M.E., Inwood, J., Lofi, J., and Proust, J.-N., 2013. Sequence boundaries are impedance contrasts: core-seismic-log integration of Oligocene–Miocene sequences, New Jersey shallow shelf. *Geosphere*, 9:1256–1285. doi:10.1130/GES00858.1
- Miller, K., G.Mountain, J.Wright, J.Browning, 2011, A 180-million-year record of sea-level and ice-volume variations from continental margin and deep-sea isotopic records, in *Oceanography* 24(2): 40-53. Special Issue on Sea Level, J.Willis, L.Miller, G.Mountain (eds.)
- McHugh, C., C.Hartin, G.Mountain, H.Gould, 2010, Sedimentation along the Last Glacial Maximum paleoshoreline: Mid-Atlantic Continental Margin, USA, *Marine Geol.* 277:31-47.
- Monteverde, D., Mountain, G. and Miller, K, 2008, Early Miocene sequence development across the New Jersey margin, *Basin Research*, v.20, p. 249-267.
- Mountain, G.S., Burger, R.L., Delius, H., Fulthorpe, C.S., Austin, J.A., Goldberg, D.S., Steckler, M.S., McHugh, C.M., Miller, K.G., Monteverde, D.H., Orange, D.L. and Pratson, L.F., 2007, The Long-Term Stratigraphic Record on Continental Margins, in *Continental Margin Sedimentation: From Sediment Transport to Sequence Stratigraphy*, Nittrouer, C.A., Austin, J.A., Jr., Field, M.E., Kravitz, J.H., Syvitski, J.P.M., Wiberg, P.L., eds., IAS Spec. Publ. No. 37, Blackwell Publishing Ltd, Oxford p. 381-458.
- Miller, K. G., Kominz, M. A., Browning, J. V., Wright, J.D., Mountain, G.S., Katz, M.E., Sugarman, P. J., Cramer, B.S., Christie-Blick, N., Pekar, S.F., 2005, The Phanerozoic record of global sea-level change, *Science*, 310, 1293-1298.
- Katz, M., B. Cramer, G. Mountain, S. Katz, and K. Miller, 2001, Uncorking the bottle: did thermal dissociation or mechanical disruption trigger the latest Paleocene methane release? *Paleoceanography* 16(6):549-562.
- Monteverde, D., K.Miller, and G.Mountain, 2000, Correlation of offshore seismic profiles with onshore New Jersey Miocene sediments, *Sed. Geology* 134:111-127.
- Fulthorpe, C.S., J.A. Austin, and G.S. Mountain, 2000, Morphology and distribution of Miocene slope incisions off New Jersey: Are they diagnostic of sequence boundaries? *Geol. Soc. America Bull.*, v. 112, no. 6, pp. 817-828.

- Fulthorpe, C.S., J.A. Austin, and G.S. Mountain, 1999, Buried fluvial channels on the New Jersey continental margin: Did sea-level lowstands expose the entire shelf during the Miocene?, *Geology* 27(3):203-206.
- Steckler, M.S., G.S. Mountain, K.G. Miller, and N.Christie-Blick, 1999, Reconstructing the geometry of Tertiary sequences on the New Jersey passive margin by 2-D backstripping: the interplay of sedimentation, eustasy and climate, *Marine Geology* 154:399-420.
- Miller, K.G., G.S. Mountain, J.S. Browning, M. Kominz, P.J. Sugarman, N. Christie-Blick, M.E. Katz, and J.D. Wright, 1998, Cenozoic global sea level, sequences, and the New Jersey transect: results from coastal plain and continental slope drilling, *Reviews of Geophysics* 36(4):569-601.
- Austin, J.A., C.S. Fulthorpe, G.S. Mountain, D. Orange, and M. Field, 1996, Continental margin seismic stratigraphy: assessing the preservation potential of heterogeneous geologic processes operating on continental shelves and slopes, *Oceanography* 9(3):173-177.
- Miller, K.G., G.S. Mountain, and Leg 150 Shipboard Party, 1996, Drilling and dating New Jersey Oligocene-Miocene sequences: ice volume, global sea level, and Exxon records, *Science* 271(5252):1092-1095.
- Mountain, G., J.E. Damuth, C.M.G. McHugh, J. Lorenzo, and C. Fulthorpe, 1996, Origin, reburial and significance of a mid-miocene canyon, New Jersey continental slope, *Sci. Results, Ocean Drilling Prog., Leg 150*.
- Fulthorpe, C.S., G.S. Mountain, and K.G. Miller, 1996, Mapping of Neogene depositional geometries, New Jersey continental slope, ODP Leg 150 drilling area, *Sci. Results, Ocean Drilling Prog., Leg 150*.
- Pratson, L. F., W. B. F. Ryan, G. S. Mountain, and D. C. Twichell, 1994, "Submarine Canyon Initiation by Downslope Eroding Sediment Flows: Evidence in Late Cenozoic Strata on the New Jersey Continental Slope", *Geol. Soc. America Bull*, v. 106, no. 3, pp. 395-412.
- Mountain, G.S. and K.G. Miller, 1992, "Seismic and Geologic Evidence for Early Paleogene Deep-Water Circulation in the Western North Atlantic", *Paleoceanography*, v. 7, no. 4, p. 423-439.
- Greenlee, S.M., W.J. Devlin, K.G. Miller, G.S. Mountain, P.B. Flemings, 1992, "Lithostratigraphy and Biostratigraphy of Neogene Depositional Sequences, NJ Continental Shelf and Slope", *Geol. Soc. America Bull*, v. 104, p. 1403-1411.

- Christie-Blick, N., G.S. Mountain and K.G. Miller, 1990, "Seismic Stratigraphic Record of Sea-Level Changes", *in: National Research Council Studies in Geophysics: Sea-level Change*, National Academy of Sciences, Washington, D.C., p. 116-140.
- Mountain, G.S. and W.L. Prell, 1989, "A Multiphase Plate Tectonic History of the Southeast Continental Margin of Oman", *in: Roberston, A.H.F., M.P Searle, and A.C. Ries (eds.), The Geology and Tectonics of the Oman Region, Sp. Publ. 49 of the Geological Society*, p. 725-744.
- Mountain, G.S., 1987, "Cenozoic Margin Construction and Destruction Offshore New Jersey", *in: C.Ross and D. Haman (eds.), Cushman Foundation for Foraminiferal Research, Sp. Publ. 24*, p. 57-83.
- Miller, K.G., R.G. Fairbanks and G.S. Mountain, 1987, "Tertiary Oxygen Isotope Synthesis, Sea-Level History, and Continental Margin Erosion", *Paleoceanography*, v.2, p.1-19.
- Miller, K.G., Melillo, A.J., G.S. Mountain, J.A. Farre and C.W. Poag, 1987, "Middle to Late Miocene Canyon Cutting on the New Jersey Continental Slope: Biostratigraphic and Seismic Stratigraphic Evidence", *Geology*, v.15, p. 509-512.
- Wise, S.W., J.E. Van Hinte, G.S. Mountain, B.N.M. Biart, J.M. Covington, W.S. Drugg, D.A. Dunn, J. Farre, D. Habib, M.B. Hart, J.A. Haggerty, M.W. Johns, T.H. Lang, P.A. Meyers, K.G. Miller, M.R. Moullade, J.P. Muza, J.G. Ogg, M. Okamura, M. Sarti and U. von Rad, 1986. "Mesozoic-Cenozoic Clastic Depositional Environments Revealed by DSDP Leg 93 Drilling on the Continental Rise Off the Eastern United States", *in: North Atlantic Palaeoceanography*, Summerhayes, C.P. and N.J. Shackleton (eds.), *Geol. Society Sp. Publ. No. 21*, p. 35-66.
- Tucholke, B.E. and G.S. Mountain, 1986, "Tertiary Paleooceanography of the Western North Atlantic Ocean", *in: The Geology of North America: vol M, The Western Atlantic Region*, P.R. Vogt and B.E. Tucholke (eds.), *Geol. Soc. of America Sp. Pub.*, p. 631-650.
- Mountain, G.S. and B.E. Tucholke, 1985, "Mesozoic and Cenozoic Geology of the U.S. Atlantic Continental Slope and Rise". *in: Geologic Evolution of the U.S. Atlantic Margin*, C.W. Poag (ed.), Van Nostrand Reinhold, Stroudsburg, Pa., p. 293-341.
- Miller, K.G., G.S. Mountain, and B.E. Tucholke, 1985, "Oligocene Glacio-Eustacy and Erosion on the Margins of the North Atlantic", *Geology*, v. 13, p. 10-13.
- Tucholke, B.E. and G.S. Mountain, 1979, "Seismic Stratigraphy, Lithostratigraphy and Paleosedimentation Patterns in the North American Basin", *in: Talwani, M., W. Hay and W.B.F. Ryan (eds.), Deep Drilling Results in the Atlantic Ocean: Continental Margins and Paleoenvironment*, Maurice Ewing Symposium Series, v. 3, p. 58-86.