

Curriculum Vitae

Clark E. Sherman

Department of Marine Sciences
University of Puerto Rico at Mayagüez
Call Box 9000
Mayagüez, PR 00681-9000
(787) 899-2048 ext. 250
clark.sherman@upr.edu

Education

University of Rochester, Rochester, NY	Biology-Geology	B.S. (1987)
University of Hawaii at Manoa, Honolulu, HI	Marine Geology and Geophysics	M.S. (1992)
University of Hawaii at Manoa, Honolulu, HI	Marine Geology and Geophysics	Ph.D. (2000)

Appointments

2005–Present	Professor of Geological Oceanography, Department of Marine Sciences, University of Puerto Rico, Mayagüez Campus,
2002-2004	Assistant Professor of Geology; Director, Earthquake Education Center, Charleston Southern University
2001-2002	Geologist, Research Planning, Inc (RPI), Columbia, SC
2000-2001	Visiting Assistant Professor of Marine Geology, Department of Geological Sciences, The University of North Carolina at Chapel Hill
1997-2000	Graduate Assistant, Department of Geology and Geophysics, University of Hawaii at Manoa
1991-1997	Research Associate V, (full time) Department of Oceanography, School of Ocean and Earth Science and Technology (SOEST), University of Hawaii at Manoa, curator of SOEST Core Analysis Laboratory and manager of SOEST X-Ray Diffraction Facility
1988-1991	Graduate Assistant, Department of Geology and Geophysics, University of Hawaii at Manoa

Publications

- Appeldoorn, R., Ballantine, D., Bejarano, I., Carlo, M., Nemeth, M., Otero, E., Pagan, F., Ruiz, H., Schizas, N., **Sherman, C.** and Weil, E., 2015. Mesophotic coral ecosystems under anthropogenic stress: a case study at Ponce, Puerto Rico. *Coral Reefs*: 1-13.
- Baker, E. Puglise, K., Colin, P. L., Harris, P. T., Kahng, S. E., Rooney, J., **Sherman, C.**, Slattery, M. and Spalding, H. L., 2015. What are Mesophotic Coral Ecosystems? In: Baker, E.K., Puglise, K.A. and Harris, P.T. (Eds.). *Mesophotic Reefs – A Life Boat For Coral Reefs? The United Nations Environment Programme and GRID-Arendal, Nairobi and Arendal.* www.unep.org, www.grida.no.

- Sherman, C.E.**, Fletcher C.H., Rubin, K.H, Simmons, K.R., Adey, W.H. 2014. Sea-level and reef accretion history of Marine Isotope Stage 7 and late Stage 5 based on age and facies of submerged late Pleistocene reefs, Oahu, Hawaii. *Quaternary Research* 81:138-150.
- Whitall, D., L.J. Bauer, **C. Sherman**, K. Edwards, A. Mason, T. Pait, and C. Caldwell. 2013. Baseline Assessment of Guánica Bay, Puerto Rico in Support of Watershed Restoration. NOAA Technical Memorandum NOS NCCOS 176. Prepared by the NCCOS Center for Coastal Monitoring and Assessment Biogeography Branch. Silver Spring, MD. 169 pp.
- Sherman C.**, R. Hernández, Y. Hutchinson and D. Whitall. 2013. Terrigenous Sedimentation Patterns at Reefs Adjacent to the Guánica Bay Watershed. pp. 103-112. In Whitall,D., L.J. Bauer, C. Sherman, K. Edwards, A. Mason, T. Pait, and C. Caldwell. 2013. Baseline Assessment of Guánica Bay, Puerto Rico in Support of Watershed Restoration. NOAA Technical Memorandum NOS NCCOS 176. Prepared by the NCCOS Center for Coastal Monitoring and Assessment Biogeography Branch. Silver Spring, MD. 169 pp.
- Sherman, C.**, Appeldoorn, R., Ballantine, D.L., Bejarano, I., Carlo, M., Kesling, D., Nemeth, M., Pagán, F., Ruiz, H., Schizas, N., Weil, E., 2013. Exploring the mesophotic zone: Diving operations and scientific highlights of three research cruises across Puerto Rico and US Virgin Islands, in: Lang, M.A., Sayer, M.D.J. (Eds.), *Proceedings of the 2013 AAUS/ESDP Curaçao Joint International Scientific Diving Symposium*. American Academy of Underwater Sciences, Curaçao, pp. 297-312.
- Locker S, Armstrong R, Battista T, Rooney J, **Sherman C**, Zawada D (2010) Geomorphology of mesophotic coral ecosystems: current perspectives on morphology, distribution, and mapping strategies. *Coral Reefs* 29:329-345
- Sherman C**, Nemeth M, Ruiz H, Bejarano I, Appeldoorn R, Pagán F, Schärer M, Weil E (2010) Geomorphology and benthic cover of mesophotic coral ecosystems of the upper insular slope of southwest Puerto Rico. *Coral Reefs* 29:347-360
- Sherman C**, Appeldoorn R, Carlo M, Nemeth M, Ruiz H, Bejarano I (2009) Use of technical diving to study deep reef environments in Puerto Rico. *Proc American Academy of Underwater Sciences 28th Scientific Symposium*:58-65
- *Cuevas DN, **Sherman CE**, Ramirez WR, Hubbard DK (2009) Coral growth rates from the Holocene Canada Honda fossil reef, southwestern Dominican Republic: comparisons with modern counterparts in high sedimentation settings. *Caribbean Journal of Science* 45:94-109
- #Hernández R, **Sherman C**, Weil E, Yoshioka P (2009) Spatial and temporal patterns in reef sediment accumulation and composition, southwestern insular shelf of Puerto Rico. *Caribbean Journal of Science* 45:138-150
- Ballantine DL, Appeldoorn RS, Yoshioka P, Weil E, Armstrong R, Garcia JR, Otero E, Pagan F, **Sherman C**, Hernandez-Delgado EA, Bruckner A, Lilyestrom C (2008) Biology and Ecology of Puerto Rican Coral Reefs. In: Riegl B, Dodge RE (eds) *Coral Reefs of the USA*. Springer, pp 375-406
- *Cuevas DN, **Sherman CE**, Ramirez WR, Hubbard DK (2008) Environmental factors controlling community structure, morphology and linear extension of mid-Holocene reef corals from Canada Honda, Southwestern Dominican Republic. *Proc 11th International Coral Reef Symposium*:21-25
- Fletcher CH, Bochicchio C, Conger CL, Engels MS, Feirstein EJ, Frazer N, Glenn CR, Grigg RW, Grossman EE, Harney JN, Isoun E, Murray-Wallace CV, Rooney JJ, Rubin KH,

- Sherman CE**, Vitousek S (2008) Geology of Hawaii Reefs. In: Riegl B, Dodge RE (eds) Coral Reefs of the USA. Springer, pp 435-488
- Hubbard DK, Burke RB, Gill IP, Ramirez WR, **Sherman CE** (2008) Coral-reef geology: Puerto Rico and the US Virgin Islands. In: Riegl BM, Dodge RE (eds) Coral Reefs of the USA. Springer, pp 263-302
- Fletcher, CH, III, Murray-Wallace, CV, Glenn, CR, **Sherman, CE**, Popp, B, Hessler, A (2005) Age and Origin of Late Quaternary Eolianite, Kaiehu Point (Moomomi), Molokai, Hawaii. *Journal of Coastal Research* SI 42:97-112
- Rubin KH, Fletcher CH, III, **Sherman CE** (2000) Fossiliferous Lana'i deposits formed by multiple events rather than a single giant tsunami. *Nature* 408:675-681
- McMurtry GM, Herrero-Bervera E, Cremer MD, Smith JR, Resig J, **Sherman C**, Torresan ME (1999) Stratigraphic constraints on the timing and emplacement of the Alike 2 giant Hawaiian submarine landslide. *Journal of Volcanology and Geothermal Research* 94:35-58
- Sherman CE**, Fletcher CH, III, Rubin KH (1999) Marine and meteoric diagenesis of Pleistocene carbonates from a nearshore submarine terrace, Oahu, Hawaii. *Journal of Sedimentary Research* 69:1083-1097
- Fletcher CH, **Sherman CE** (1995) Submerged shorelines on O'ahu, Hawai'i: archive of episodic transgression during the last deglaciation? *Journal of Coastal Research Special Issue* 17:141-152
- Sherman CE**, Glenn CR, Jones AT, Burnett WC, Schwarcz, HP (1993) New evidence for two highstands of the sea during the last interglacial, oxygen isotope substage 5e. *Geology* 21:1079-1082

*PhD Advisee, #MS Advisee

Grants

- Assessment of geological and geochemical proxies of sources of terrigenous sediment reaching reefs adjacent to the Guanica Bay watershed, southwest Puerto Rico (PI)
Source: NOAA Coral Reef Conservation Program
Amount: \$74,906 Duration: 1.5 years (1 Aug 2015 to 31 Jan 2017)
- Structure and development of mesophotic coral reefs, Southwest Puerto (PI)
Source: National Geographic Society
Amount: \$20,000 Duration: 1 year (on no-cost extension)
- Sedimentation at Reefs Adjacent to the Guanica Bay Watershed (PI)
Source: National Fish and Wildlife Foundation
Amount: \$41,999 Duration: 1 year, start date pending (completed)
- Structure and Connectivity of Mesophotic Reefs across a Longitudinal Gradient (Co-PI)
Source: Caribbean Coral Reef Institute
Amount: \$136,297 Duration: September 2010-August 2012
- Terrigenous Sedimentation Patterns in Guanica Bay (PI)
Source: Caribbean Coral Reef Institute
Amount: \$37,199 Duration: August 2010-July 2011
- A Sedimentary Record of Marine Flooding Events from Coastal Salt Ponds, Southwest Puerto Rico (PI)
Source: UPR-Sea Grant

- Amount: \$114,044 Duration: March 2010-February 2012
- Terrigenous Sedimentation Patterns in Guanica Bay (PI)
Source: Caribbean Coral Reef Institute
Amount: \$25,996 Duration: August 2009-July 2010
 - Character and Timing of a Reef Give-Up Event on the Southwest Puerto Rico Shelf (PI)
Source: UPR-Sea Grant
Amount: \$114,044 Duration: March 2008-February 2011
 - SGER: Sclerosponges: a key to understanding the influence of global warming on ocean thermocline and mixed layer variability..an example from the Caribbean (Co-PI)
Source: National Science Foundation-Marine Geology and Geophysics
Duration: 08/08-07/09
 - CRES 2006: Ecology, Integrity & Status of Deep Caribbean Coral Reefs (Co-PI)
Source: NOAA Center for Sponsored Coastal Ocean Research
Duration: 09/06-08/11
 - Geochronology of Late Pleistocene Reefs on the Puerto Rico and St. Croix Shelves (PI)
Source: UPRM-Research and Development Center
Amount: \$5,000 Duration: November 2006-December 2007
 - Sedimentary Petrology of Beach Sands at Rincón, Puerto Rico (PI)
Source: UPR Sea Grant
Amount: \$3,430 Duration: August 2006-July 2007
 - CCRI-Cross-Shelf Sedimentation Patterns and Processes (Co-PI)
Source: Caribbean Coral Reef Institute
Amount: \$42,703 Duration: September 2005-August 2008
 - Late Quaternary Reef Accretion of Southwestern Puerto Rico (PI)
Source: UPRM College Arts and Sciences
Amount: \$4,970 Duration: August 2005-July 2006

Recent Abstracts/Presentations

- Sherman, C.** and Appeldoorn, R., Geomorphology of mesophotic coral ecosystems in Puerto Rico and US Virgin Islands. 37th Scientific Meeting of the Association of Marine Laboratories of the Caribbean, Willemstad, Curaçao, 18-22 May 2015.
- Sherman, C.** and Fernández, J., A record of late Holocene coastal evolution and relative sea-level change from a coastal salt pond, southwest Puerto Rico. 2014 GSA Annual Meeting, Vancouver, British Columbia, 19–22 October 2014.
- Sherman, C.**, Appeldoorn, R., Ballantine, D.L., Bejarano, I., Carlo, M., Kesling, D., Nemeth, M., Pagán, F., Ruiz, H., Schizas, N., Weil, E., 2013. Exploring the mesophotic zone: Diving operations and scientific highlights of three research cruises across Puerto Rico and US Virgin Islands, 2013 AAUS/ESDP Curaçao Joint International Scientific Diving Symposium. October 24-27, 2013, Curaçao.
- Sherman, C.**, Hutchinson, Y., Hernández, R., Terrigenous sedimentation patterns at reefs adjacent to the Guanica Bay watershed, southwest Puerto Rico. 36th Scientific Meeting of the Association of Marine Laboratories of the Caribbean, Ocho Rios, Jamaica, 17-21 June 2013.
- Sherman, C.**, and Appeldoorn, R., Geomorphology of mesophotic coral ecosystems in Puerto Rico and US Virgin Islands. 62nd Annual Meeting of the Southeastern Section of the Geological Society America, San Juan, Puerto Rico, 20-21 March 2013.

- Sherman C**, Ramírez, W, Mercado, M (2012) Reef accretion on the outer shelf of southwest Puerto Rico. 12th International Coral Reef Symposium, Cairns, Australia, July 9-13, 2012
- Sherman C**, Hernández R, Hutchinson Y, Rojas M (2011) Sedimentation patterns at reef sites adjacent to the Guanica Bay watershed, southwest Puerto Rico. 35th Scientific Meeting of the Association of Marine Laboratories of the Caribbean, San Jose, Costa Rica, May 23-27, 2011
- Sherman C**, Ramírez W (2011) Submerged outer-shelf hummock reefs, southwest Puerto Rico: Record of a regional reef give-up event? 35th Scientific Meeting of the Association of Marine Laboratories of the Caribbean, San Jose, Costa Rica, May 23-27, 2011
- Sherman C**, Nemeth M, Ruiz, H, Bejarano I, Appeldoorn R, Weil E, Hutchinson Y, Rojas M (2011) Geomorphology and sediment dynamics in mesophotic coral ecosystems of the upper insular slope of southwest Puerto Rico. 19th Caribbean Geological Conference, Le Gosier, Guadeloupe, March 21-24, 2011
- Sherman C**, Nemeth M, Ruiz, H, Bejarano I, Appeldoorn R, Weil E, Hutchinson Y, Rojas M (2011) Geomorphology and sediment dynamics in mesophotic coral ecosystems of the upper insular slope of southwest Puerto Rico. 2011 ASLO Aquatic Sciences Meeting, San Juan, Puerto Rico, February 13-18, 2011
- Sherman C**, Ramírez W (2010) Character and Timing of a Reef Give-Up Event on the Southwest Puerto Rico Shelf. Simposio de investigación, University of Puerto Rico Sea Grant Program, Mayagüez, Puerto Rico, October 29, 2010
- Sherman C**, Hernández R, Hutchinson Y (2010) Sedimentation patterns at reef sites adjacent to the Guanica Bay watershed, southwest Puerto Rico. Caribbean Coral Reef Institute 2010 Meeting, Lajas, Puerto Rico, November 12, 2010
- Sherman C**, Appeldoorn R, Carlo M, Nemeth M, Ruiz H, Bejarano I (2010) Use of Technical Diving to Study Mesophotic Coral Ecosystems in Puerto Rico. 1st International Technical Scientific Diving Workshop, Interuniversity Institute for Marine Sciences (IUI), Eilat, Israel, June 20-25, 2010
- Sherman C**, Ramírez W (2010) Character and Timing of a Reef Give-Up Event on the Southwest Puerto Rico Shelf. Conversatorio Marino, University of Puerto Rico Sea Grant Program, Mayagüez, Puerto Rico, April 20, 2010
- Sherman C**, Nemeth M, Ruiz H, Bejarano I, Appeldoorn R, Pagán F, Schärer M, Weil E (2009) Geomorphology and mesophotic coral ecosystems of the upper insular slope of southwest Puerto Rico. 34th Scientific Meeting of the Association of Marine Laboratories of the Caribbean, Roseau, Dominica, May 25-29, 2009
- Sherman C**, Appeldoorn R, Carlo M, Nemeth M, Ruiz H, Bejarano I (2009) Use of technical diving to study deep reef environments in Puerto Rico. American Academy of Underwater Sciences 28th Scientific Symposium, Atlanta, Georgia, March 13-14, 2009
- Sherman C**, Ruiz H, Nemeth M, Bejarano, I, Carlo, M, Appeldoorn, R, Ballantine D, Pagán F (2008) Preliminary Surveys of Deep-reef Habitats on the Upper Insular Slope of Southwest Puerto Rico. 18th Caribbean Geological Conference, Santo Domingo, Dominican Republic, March 24-29, 2008

Other Activities

- Editor, Caribbean Journal of Science
- Lead diver on NOAA-funded Deep Coral Reef Ecosystems Studies project and fully certified as technical, mixed-gas, rebreather diver. As part of this project, lead and coordinated deep-

diving operations off southwest Puerto Rico, surveying mesophotic coral habitats of the upper insular slope, collecting samples for laboratory analyses and precision deployment and recovery of on-bottom oceanographic instruments. This field work supported several related research projects being conducted by eight faculty within the Department of Marine Sciences (DMS).

- Lead diver and Co-PI (geomorphology and sedimentology) on three NOAA-CCRI funded cruises examining remote mesophotic coral habitats in Puerto Rico and US Virgin Islands. In addition to scientific duties, lead and coordinated ship-based deep-diving operations at remote sites. Diving activities included geomorphic characterization of sites, benthic photo surveys and collection of sample for laboratory analyses
- As Chair of the Department of Marine Sciences Diving Control Board oversaw the Department's application and subsequent acceptance as a full Organizational Member of the American Academy of Underwater Sciences (AAUS). This process included establishing and enacting AAUS protocols, such as diving medical exams and first-aid training, as well as a full revision of the DMS Diving Safety Manual to be in accordance with AAUS policies and protocols.
- Co-Chair of Mini-Symposium (Mini-Symposium 1: Lessons From the Past) at 11th International Coral Reef Symposium, Fort Lauderdale Florida, July 2008
- Invited participant (Geomorphology and Physical Processes) in the first Mesophotic Coral Ecosystems Workshop held in Jupiter, Florida, July 12-15, 2008. The workshop was hosted by the Perry Institute for Marine Science and organized by the NOAA National Centers for Coastal Ocean Science's Center for Sponsored Coastal Ocean Research and the Office of Ocean Exploration and Research's NOAA Undersea Research Program, and the US Geological Survey.