

CURRICULUM VITAE

Charles Garrett Messing

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Professor, Oceanographic Center, Nova Southeastern University

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DOB: 5 July 1948, Bronx, New York

Education

Ph. D. (1979) Biological Oceanography, Rosenstiel School of Marine and Atmospheric Science, University of Miami, Coral Gables, FL

M. S. (1975) Biological Oceanography, RSMAS, University of Miami, Coral Gables, FL

B. A. (1970) Biological Science, Rutgers: The State University, New Brunswick, NJ

Recent Professional Scientific Experience

2012-present Research Associate, Dept. Invertebrate Zoology, National Museum of Natural History, Smithsonian Institution, Washington, DC.

2012-present Research Associate, Scripps Institute of Oceanography, University of California at San Diego, La Jolla, CA.

2000-present Professor, Nova Southeastern Univ. Oceanographic Center, Dania Beach, FL

1994-2000 Adjunct Assoc. Prof., Dept. Geological Science, Univ. Miami, Coral Gables, FL

1993-2000 Associate Professor, Nova Southeastern Univ. Oceanographic Center, Dania, FL

Recent Awards

2000, 2005 Visiting Scientist, Museum National d'Histoire Naturelle, Paris

2001 Visiting Scholar, University of Sydney

Selected Recent Peer-reviewed Scientific Journal Articles and Book Chapters

Messing, CG (2013) A revision of the genus *Atelecrinus* PH Carpenter (Echinodermata: Crinoidea). *Zootaxa* 3681 (1): 001–043.

Reed JK, Messing C, Walker B, Brooke S, Correa T, Brouwer M, Udouj T (2013) Habitat characterization, distribution, and areal extent of deep-sea coral ecosystem habitat off Florida, southeastern United States. *Caribbean Journal of Science* 47(1):13-30.

Rouse GW, Jermin LS, Wilson NG, Eeckhaut I, Lanterbecq D, Oji T, Young CM, Browning T, Cisternas P, Helgen LE, Stuckey M, Messing CG (2013) Fixed, free, and fixed: the fickle phylogeny of extant Crinoidea (Echinodermata) and their Permian-Triassic origin. *Molecular Phylogenetics and Evolution* 66(1):161-81.

Appeltans W, *et al.*, Messing CG, *et al.* [135 authors] (2012) The magnitude of global marine species diversity. *Current Biology* 22(23):2189-2202.

Johnsen S, Frank TM, Haddock SHD, Widder EA, Messing CG (2012) Light and vision in the deep-sea benthos: I. Bioluminescence at 500–1000 m depth in the Bahamian Islands. *Journal of Experimental Biology* 215:3335-3343.

Baumiller TK, Salamon MA, Gorzelak P, Mooi R, Messing CG, Gahn FJ (2010) Post-Paleozoic crinoid radiation in response to benthic predation preceded the Mesozoic marine revolution. *Proc. Nat. Acad. Sci.* 107(13):5893-5896. www.pnas.org/cgi/doi/10.1073/pnas.0914199107

- Messing CG, Reed JK, Brooke SD & Ross SW (2008) Deep-water coral reefs of the United States. Pp. 767-791 *In: Riegl B & Dodge RE (eds), Coral Reefs of the USA*. Springer-Verlag.
- Messing CG, David J, Roux M, Améziane N & Baumiller TK (2007) In situ stalk growth rates in tropical western Atlantic sea lilies (Echinodermata: Crinoidea). *J Exp. Mar. Biol. Ecol.* 353 (2007) 211–220.
- Messing CG (2007) The crinoid fauna (Echinodermata: Crinoidea) of Palau. *Pacific Science* 61(1): 91-111.
- Messing CG, Meyer, DL, Siebeck U, Jermiin LS, Vaney, DI, Rouse GW (2006) A modern, soft-bottom, shallow-water tropical crinoid fauna (Echinodermata) from the Great Barrier Reef. *Coral Reefs* 25(1):164-168.
- Messing CG (2004) Biozonation on deep-water carbonate mounds and associated hardgrounds along the western margin of Little Bahama Bank, with notes on the Caicos Platform island slope. Pp. 107-115 *IN Lewis, R.D. & Panuska, B.C. (eds.) 11th Symposium on the Geology of the Bahamas and other Carbonate Regions*, Gerace Research Center, San Salvador, Bahamas.

Selected Recent Abstracts of Oral and Poster Presentations

- Reed JK, Messing CG, Walker BK, Farrington S, Brooke S, Correa TBS, Brouwer M (2012) Distribution and characterization of deep-sea coral ecosystem habitats off Southeastern United States. 5th Intl. Symp. Deep-Sea Corals, 2-6 Apr 2012, Amsterdam. Program & Abstracts p. 127.
- Messing CG, David AW, Farrington S and Reed JK. (2012) Coral-dominated assemblages and associated fishes on the Pourtales Terrace, Florida Keys, USA. 5th International Symposium on Deep-Sea Corals, 2-6 Apr 2012, Amsterdam. Program & Abstracts p. 167.
- Reed JK, Farrington S, Messing C, Walker B, Brooke S, Brouwer M, Correa T, Udouj T. 2011. Distribution and habitat characterization of deep-sea coral ecosystem habitat off Florida, southeastern United States. Amer. Soc. Limnology and Oceanography, 2011 International Aquatic Sciences Meeting (13-18 Feb 2011) San Juan, Puerto Rico. Abstract and poster.
- Reed JK, Messing C, Walker B, Brooke S, Brouwer M, Correa T, and Farrington S (2010) Distribution and characterization of deep-water reef and hard-bottom habitats off eastern Florida. Renewable Ocean Energy and the Marine Environment: Responsible Stewardship for a Sustainable Future, Nov., Florida Atlantic University. Abstract, p. 42.
- Robinson JL, Thomas JD & Messing CG. 2009. A Comparison of Mesobenthic Amphipod Diversity on 3-Dimensional Artificial Substrates versus Natural Substrates in a Shallow Coral Reef Environment. Benthic Ecology Meeting, Corpus Cristi, TX, March 2009.
- Messing CG, Brooke SD, Reed JK, Richardson SL. 2008. A Possible Role for Agglutinated Foraminiferans in the Growth of Deep-Water Coral Bioherms. 4th International Deep-Sea Coral Symposium, Univ. Victoria, Wellington, NZ, 1-5 Dec 2008.
- Shirur K, Brooke SD, Messing CG, Reed JK. 2008. Quantitative habitat characterization and benthic assemblage structure of deep-water scleractinian reefs off eastern Florida. Fourth International Deep-Sea Coral Symposium, New Zealand, Dec. 1-5, 2008, p. 161.
- Reed JK, Pomponi SA, Messing CG & Brooke SD. 2008. Habitat, Fauna, and Conservation of Florida's Deep-Water Coral Reefs. American Geophysical Union Annual Meeting, Fort Lauderdale, FL 27-30 May.

- Neumann AC & Messing CG. 2006. The geological and biological characteristics of lithoherms. Soc. Sedimentary Geology (SEPM) short course no. 19, Quaternary Reefs and Platforms: Bridging the Gap between the Ancient and the Modern, 13-14 Apr, 2006 AAPG Annual Convention, Houston.
- Messing CG, Moyer RP, Walker BK, Dodge RE & Shaul R. 2005. Distribution of Deep-Water Corals on the Western Margin of Little Bahama Bank, Bahama Islands. Third International Deep-Sea Corals Symposium, 28 Nov-2 Dec, Miami.

Recent Selected Grants and Contracts (Principal Investigator except where noted)

- Seaward Services, Inc., for US Department of the Navy: "South Florida Ocean Measurement Facility Deep Water Benthic Habitat Characterization" (Co-PI with BK Walker, NSU) 2011-2013.
- National Science Foundation: Collaborative Research: Assembling the Echinoderm Tree of Life. (Co-PI; PIs: DA Janies, WI Ausich, Ohio State University) 2010-2014.
- US Department of Energy, Golden Field Office: Siting Study for a Hydrokinetic Energy Project Located Offshore Southeast Florida (Co-PI; C. Vinick, PI, Dehlsen Associates, LLC), 2010-2011.
- Florida Fish and Wildlife Conservation Commission: A practical guide to the shallow-water marine sponges (Porifera) of South Florida, 2007-2009.
- Mote Marine Laboratory: Professional workshop in support of a practical guide to the shallow-water marine sponges (Porifera) of South Florida, 2007-2008
- NOAA Office of Ocean Exploration: Florida's Deep-water Oases: Exploration and Characterization of Deep-Reef Ecosystems, 2007-2009
- Suez Energy North America: Calypso U.S. Pipeline, LLC, Mile Post (MP) 31 - MP 0: Deep-water Marine Benthic Video Survey, 2006-2007
- NOAA Office of Ocean Exploration: Mapping and Characterization of Deep Sea Coral Ecosystems off the Coast of Florida. Nov 2005-Oct 2006 (Co-Principal Investigator; Sandra D Brooke, PI).
- Ecology & Environment, Inc.: Tractebel/Blue Marlin natural gas pipeline biological habitat survey, 0-200 m depth, off Freeport, Grand Bahama Island. Jun 2003-Jun 2007 (Co-investigator; RE Dodge, PI).
- Ecological Services Program, URS Corporation, Miami Springs, FL 33166: URS Tractebel/Calypso natural gas pipeline biological habitat survey, 65-200 m depth, off Fort Lauderdale, FL. Jun 2003-Jun 2004 (Co-investigator; RE Dodge, PI).