

Kelly Ann Gibson

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EDUCATION	University of Miami, Miami, FL Rosenstiel School of Marine and Atmospheric Science PhD., Marine Geology and Geophysics <i>Dissertation: "Rapid Climate Change in the Tropics: A Half-Million Year Long Geochemical Record from the Cariaco Basin, Venezuela"</i> Advisor: Dr. Larry Peterson The College of William and Mary, Williamsburg VA B.S. Geology <i>Thesis: "The Use of Seismic Technology in Identifying Scour Resistant Layers: A Study of the Wreck Site of the Queen Anne's Revenge and the Control of Underlying Geology on the Process of Scour and Burial"</i> Advisor: Dr. Jesse McNinch, Virginia Institute of Marine Science (VIMS)	2006 – 2012 2000 – 2004
EMPLOYMENT	<i>Adjunct Faculty</i> , Marine Science Program, University of South Carolina <i>Postdoctoral Associate</i> , Earth and Ocean Sciences, University of South Carolina <i>Research Assistant</i> , Marine Geology and Geophysics, RSMAS <i>Teaching Assistant</i> , Marine Science, RSMAS	2016 – present 2013 – 2016 2006 – 2012 2007 – 2009
RESEARCH INTERESTS	Reconstruction of abrupt climate/environmental change from marine sediments/microfossils The role of the tropics in the global climate system Biogeochemical cycling of nutrients, minor and trace elements in the ocean Paleoproxy development	
PUBLICATIONS	Gibson, K.A. , Thunell, R.C., Machain-Castillo, M.L., Fehrenbacher, J., Spero, H., Wejnert, K. E., Nava-Fernandez, X., Tappa, E.J., <i>submitted</i> . Planktonic foraminifera as recorders of water column hydrography in the Eastern Tropical North Pacific, <i>Earth and Planetary Science Letters</i> Gibson, K.A. , Thunell, R.C., Tappa, E.J., Peterson, L.C., McConnell, M., 2015. The influence of millennial-scale climate change on nitrogen isotope dynamics in the Cariaco Basin during marine isotope stage 3. <i>Paleoceanography</i> , 30, doi: 10.1002/2014PA002684 Gibson, K. A. , Peterson, L.C., 2014. A 0.6 million year record of millennial-scale climate variability in the tropics, <i>Geophysical Research Letters</i> , 41, 969–975, doi:10.1002/2013GL058846. Meckler, A.N., Sigman, D.N., Gibson, K.A. , François, R., Martínez-García, A., Jaccard, S.L., Röhl, U., Peterson, L.C., Tiedemann, R., Haug, G.H, 2013. Deglacial pulses of deep ocean silicate into the subtropical North Atlantic Ocean, <i>Nature</i> , 495, 495 – 498, doi:10.1038/nature12006 Gibson, K.A. , 2012. Rapid Climate Change in the Tropics: A Half-Million Year Long Geochemical Record from the Cariaco Basin, Venezuela, University of Miami, Miami, FL.	
GRANTS AND AWARDS	"Ba/Ca in Planktonic Foraminifera as a Recorder of Freshwater Input to the Ocean: Proxy Refinement in the Gulf of Papua, Papua New Guinea" University of South Carolina Advanced Support for Innovative Research Excellence (ASPIRE) program (\$5000)	July 2105 – Sept 2016

	“The influence of recent climate change on northward advection of the North Pacific denitrification signal along the California Coast.” R/V Point Sur Chief Scientist Training Cruise Grant (\$1200)	Oct 2014
	“Calibration of qualitative scanning X-ray fluorescence records from the Cariaco Basin” Geological Society of America Student Research Grant (\$1549)	2010
	RSMAS Fellowship, RSMAS, University of Miami	2006 – 2007
TEACHING	<i>Adjunct Faculty</i> , Marine Science Program, USC, Columbia, SC Courses: Chemistry of the Seas (MSCI 313), Oceans and Society (MSCI 210)	2016 - present
	<i>Guest Lecturer</i> , Marine Science Program, USC, Columbia, SC Courses: Chemical Oceanography (MSCI 782), Paleoclimate (MSCI/GEOL 711) Intro to Marine Science (MSCI 101),	2015
	<i>Teaching Assistant</i> , Marine Science Program, University of Miami, Miami, FL Courses Taught: Origin and Geology of the Galapagos Islands (MSC 424), two-week field-based geology course; Introduction to Marine Science (MSCI 111)	2008, 2009, 2012
MENTORING	<i>Lead Undergraduate Mentor</i> , Marine Sediments Research Lab, USC, Columbia, SC Primary mentor for a visiting undergraduate student from Curso de Oceanologia, Universidade Federal do Rio Grande, Brazil	2014 – 2015
	<i>Trace Metals Instructor</i> , Marine Sediments Research Lab, USC, Columbia, SC	2013 – 2015
	Paleoclimatology Lab, RSMAS, University of Miami, Miami, FL	2008 – 2009
INVITED TALKS	Gibson, K.A. , 2015, Planktonic Foraminifera as Recorders of Sea Surface Hydrography in the Eastern Tropical North Pacific: Climate Connections and Paleoproxy Development, Virginia Institute of Marine Science Department of Physical Science Seminar, Gloucester Point, VA	
	Gibson, K.A. , 2013, Rapid Climate Change in the Tropics: A Half-Million Year Long Geochemical Record from the Cariaco Basin, Venezuela, Department of Marine Science Seminar, University of South Carolina, Columbia, SC.	
ABSTRACTS	Hammes, U., Gibson, K. , Peterson, L, Ruppel, S, 2015. Sedimentologic and paleoceanographic controls of anoxia in the Holocene Cariaco Basin (Venezuela): implications for control of source rock deposition of Cretaceous (Eagle Ford) and Jurassic (Haynesville) mudrocks. AAPG,	
	Gibson, K. , Thunell, R., Machain-Castillo, M., Wejnert, K., Nava-Fernandez, X., Rodriguez Ramirez, A., Fehrenbacher, J., Spero, H., Tappa, E., 2014. Planktonic foraminifera as recorders of sea surface hydrography in the Eastern Tropical North Pacific (Gulf of Tehuantepec, MX). AGU, San Francisco, CA.	
	Scher, H., Romans, B., Buckely, W., Gibson, K. , Moffitt, Z., 2013. Terrigenous input, deep water circulation, and bottom current intensity in the late Eocene to late Oligocene North Atlantic, ICP, Barcelona, Spain.	
	Gibson, K.A. , Thunell, R.C., Tappa, E.J., Peterson, L.C., McConnell, M. 2014. The Influence of Rapid, Millennial-Scale Climate Change on Nitrogen Isotope Dynamics of the Cariaco Basin during	

Marine Isotope Stage 3, Southeastern Biogeochemistry Symposium, Atlanta, GA.

Gibson, K.A., Peterson, L.C., 2013. A half million years of suborbital variability from the Cariaco Basin: A proxy for Greenland “ice core” records?, Goldschmidt, Florence, Italy.

Gibson, K., Peterson, L.C., 2011. A Half-Million Year Geochemical Record of Climate from Cariaco Basin, INQUA Congress, Bern, Switzerland.

Gibson, K.A., Peterson, L.C., 2010. Elemental Records of the Penultimate Glacial-Interglacial Cycle In the Cariaco Basin, Venezuela, AGU, San Francisco, CA.

Gibson, K.A., Peterson, L.C., Yurco, L.N., 2009. A multi-proxy, high resolution record of the Younger Dryas in Cariaco Basin, AGU, San Francisco, CA.

Peterson, L.C., **Gibson, K.A.**, Black, D.E., Thunell, R.C., Lea, D.W., Haug, G.H., 2007. The History and Dynamics of Anoxia in Cariaco Basin, invited talk, AGU, San Francisco, CA.

FIELD WORK	Chief Scientist in Training Cruise, Moss Landing CA	Oct 2014
	Sediment trap turnaround cruises	
	Santa Barbara Basin	Oct 2013, May 2014
	Cariaco Basin	Nov, May 2013
	IODP-799 Site Survey Cruise, Western Pacific Warm Pool	Sept - Oct 2013
	Modern carbonate sedimentology cruises/fieldwork	
	Exuma, Bahamas	Apr 2008
	Little Bahama Bank, Bahamas	Jul 2007
	Florida Keys	Apr 2007, Aug 2008
Colorado Plateau Field Camp	May – Jun 2003	
PROFESSIONAL DEVELOPMENT	Marine Geoscience Leadership Symposium, Washington DC	Mar 2015
	Integrated Ocean Discovery Program Short Course (AGU)	Dec 2014
	Preparing for an Academic Career in the Geosciences Workshop	Jun 2012
	University of North Carolina - Chapel Hill	
	International Workshop on XRF Core Scanning, Royal Institute for Sea Research, Texel, Netherlands	Sept 2010
SERVICE, OUTREACH, LEADERSHIP	Peer Reviewer for: Earth and Planetary Science Reviews, Continental Shelf Research	2015 – present
	University of South Carolina Postdoc Association Secretary/Treasurer	2014-2015
	University of South Carolina Region II Science and Engineering Fair Judge	2014
	Marine Science REU Symposium and Discovery Day Undergraduate Research Presentation judge	2013, 2014
	Marine Science Outreach with Third Grade at Columbia Jewish Day School	2013
	National Ocean Science Bowl Judge	2011
	Tour Guide, RSMAS:	2008 – 2012
	Treasurer, Marine Science Graduate Student Organization (MSGSO), RSMAS	2007 – 2008
	“Geotopics” departmental seminar Co-Organizer, RSMAS	2006 – 2007
AFFILIATIONS	National Postdoc Association	2014 – present
	National Association of Geoscience Teachers	2012 – present
	Association for Women Geoscientists	2012 – 2013
	Earth Science Women’s Network	2011 – present

American Geophysical Union
Geological Society of America

2006 – present
2006 – present

REFERENCES

Dr. Robert Thunell
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