

Martha C. McConnell
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EDUCATION

Ph.D. candidate, Geological Sciences (Primary advisor: Dr. Robert C. Thunell)

University of South Carolina, Columbia, SC, expected 2008 (GPA– 3.93)

Dissertation: *Climate Proxies and Tropical Climate Variability in the Cariaco Basin, Venezuela During Marine Isotope Stage 3*

M.S. Geological Sciences (Primary advisor: Dr. Robert C. Thunell)

University of South Carolina, Columbia, SC, 2003 (GPA– 4.0)

Thesis: *Calibration of the Planktonic Foraminiferal Mg/Ca Paleothermometer: Sediment Trap Results from the Guaymas Basin, Gulf of California*

B.A. Geology

Colgate University, Hamilton, NY, 1997

SELECTED AWARDS

- Austral Summer Institute VIII, Oceanography and Climate Change: Past, Present and Future Scenarios, Participation Fellowship, 2008
- Dean John A. Knauss Marine Policy Fellowship, NOAA National Sea Grant, 2007
- NASA SC Space Grant Graduate Research Fellowship, 2004-2005
- Taber Award for Outstanding Masters Research, University of South Carolina, 2003

PROFESSIONAL EXPERIENCE

U.S. Senator Frank R. Lautenberg (D-NJ), Legislative Fellow, 2007

- Provide scientific expertise on ocean and climate issues
- Analyze, develop, and work to implement ocean and climate policies
- Research and synthesize information for Congressional hearings, meet frequently with Federal and State scientists, officials, and constituents on environmental issues

Department of Geological Sciences, University of South Carolina, 2001-present

- Graduate Research Assistant / Instructional Assistant

Sea Education Association, Inc. – Assistant Scientist, Woods Hole, MA, 1998-2003

- Taught and guided students in oceanographic research in over 12 oceanographic cruises
- Managed 24-hour laboratory operations including data acquisition, processing, analysis
- Trained and managed science crew members aboard sailing school vessels

Support Office for Aerogeophysical Research, University of Texas Institute for Geophysics Research Assistant, Antarctica, 1999-2001

- Maintained and operated a suite of geophysical systems aboard a Twin Otter Aircraft to research the subglacial topography, ice-surface topography, gravity, and magnetics
- Coordination, management, and training of scientific flight crew, base station operators
- Projects included: Site surveys of Lake Vostok, East-West Antarctic Boundary, WAIS Ice Divide Migration, Ice Stream Shear margins

The Boston Harbor Association – Education Coordinator, Boston, MA, 1998–1999

- Coordinated Boston Harbor education program for greater Boston inner city youths
- Designed and managed and innovative learning program focusing on water quality and marine ecology issues facing Boston Harbor and Massachusetts Bay

PROFESSIONAL MEMBERSHIPS

American Association for the Advancement of Science, American Geological Institute, American Geophysical Union, Association for Women Geoscientists

UPCOMING TALKS

Invited Speaker – Climate Variability: A View from the Tropics, Ocean Sciences Meeting, March 2008

SELECTED PUBLICATIONS/PRESENTATIONS

Invited Speaker - Communicating With Congress Workshop, American Geophysical Union Fall Meeting, December 13, 2007.

Oral Presentation - Tropical Climate Variability During Marine Isotope Stage 3: Results from the Cariaco Basin, *Eos Trans. AGU*, 88(52), Fall Meet. Suppl., Abstract OS43C-05, 2007

Invited Lecturer, Essex Land Trust, Climate Change Impacts on New England: Regional Initiatives, September 23, 2007

McConnell, M.C., R.C. Thunell, Y. Astor, J. D. Wright, and R. Fairbanks, Seasonal Variability in the Seawater Salinity and the Oxygen Isotopic Composition of Seawater from the Cariaco Basin, Venezuela: Implications for Paleosalinity Reconstructions, in prep.

Poster Presentation – McConnell, M.C., R.C. Thunell, L.C. Peterson, and D. Black, Timing and Magnitude of Tropical Climate Variability in the Cariaco Basin, Venezuela During Marine Isotope Stage 3, *Eos Trans. AGU*, 87(52), Fall Meet. Suppl., Abstract PP13A-1586, 2006.

Poster Presentation - McConnell, M.C., R.C. Thunell, E.J. Tappa, and J.W. Wright, Seasonal Variability of Seawater Salinity and the Oxygen Isotopic Composition of Seawater in the Cariaco Basin, Venezuela, *Eos Trans. AGU*, 86(52), Fall Meet. Suppl., Abstract PP31B-1526, 2005.

McConnell, M.C., and R.C. Thunell, Calibration of the Planktonic Foraminiferal Mg/Ca Paleothermometer: Sediment Trap Results from the Guaymas Basin, Gulf of California, *Paleoceanography*, vol 20., PA2016, doi:10.1029/2004PA001077, 2005.

Poster Presentation - McConnell, M.C., R.C. Thunell, L. Peterson, and D. Black, Tropical Sea Surface Temperatures During Marine Isotope Stage 3: Mg/Ca Results from the Cariaco Basin, Venezuela, *EOS Trans. AGU*, 85 (47), Fall Meet. Suppl., Abstract OS33A-0579, 2004.

Oral Presentation - McConnell, M.C., and R.C. Thunell, Calibration of the Planktonic Foraminiferal Mg/Ca Paleothermometer: Sediment Trap Results from the Guaymas Basin, Gulf of California, *Eos Trans. AGU*, 84(52), Ocean Sci. Meet. Suppl., Abstract OS12A-O6A, 2004.

Invited Oral Presentation - McConnell, M.C., *Calibration of the Planktonic Foraminiferal Mg/Ca Paleothermometer: Sediment Trap Results from the Guaymas Basin, Gulf of California*, Graduate Student Day, University of South Carolina, 2003.

Poster Presentation - McConnell, M.C., and R.C. Thunell, and E. Tappa, Further Calibration of the Planktonic Foraminiferal Mg/Ca Paleothermometer: Sediment Trap Results From the Cariaco and Guaymas Basins, *Eos Trans. AGU*, 83(47), Fall Meet. Suppl., Abstract PP51A-0271, 2002.