

**Danielle F. Stroup**

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*Citizenship:* United States of America

**EDUCATION:**

2008 *PhD Candidacy Examination*, Unconditional Pass, Columbia University, New York, NY  
*Major:* Marine Geophysics *Minors:* Seismology, Tectonophysics  
2007 *M.A.* Columbia University, New York, NY  
2005 *B.S.* Florida State University, Tallahassee, FL (*magna cum laude*)  
*Major:* Interdisciplinary Physics, with Geology *Minors:* Mathematics, French

**EMPLOYMENT:**

9/05 – present Graduate Fellow, Department of Earth and Environmental Sciences  
Lamont-Doherty Earth Observatory, Columbia University  
5/04 – 8/04 Intern, Research Experience for Undergraduates, National Science Foundation  
Department of Physics, University of Colorado  
1/04 – 12/04 Research Assistant, Department of Geology, Florida State University  
6/03 – 8/03 Intern, Research Experience for Undergraduates, National Science Foundation  
Department of Oceanography, University of Rhode Island

**MAJOR RESEARCH INTERESTS:**

- Extensional tectonics and rifting
- Relationship between earthquake triggering and poroelastic theory
- Magmatic, tectonic, and hydrothermal interactions at mid-ocean ridges

**FIELD AND SEA GOING EXPERIENCE:**

1/08 Shipboard scientific party, *R/V Langseth*, Hydroacoustic calibration of airgun array for marine mammal impact assessment, Gulf of Mexico  
1/07 Shipboard scientific party, *R/V Atlantis*, Deep-tow camera operations and ocean bottom seismometer recovery, 9°50'N East Pacific Rise  
7-8/03 Watchstander, *R/V Bjarni Seamundsson*, Deep-tow camera operations, CHIRP surveying, and coring, Tjornes Fracture Zone

**HONORS AND AWARDS:**

2005 Lynn Shannon Proctor Award – Outstanding Female Student in Physics  
Department of Physics, Florida State University  
2005 Elected Phi Beta Kappa  
2005 Elected Sigma Pi Sigma  
2003 Elected National Society of Collegiate Scholars

- 2001 Florida Bright Futures Scholarship  
2001 Florida State University Tuition Scholarship for Academic Achievement

**PROFESSIONAL SOCIETIES:**

- American Association of Petroleum Geologists
- American Geophysical Union
- The American Association for the Advancement of Science

**UNIVERSITY SOCIETIES:**

- Women in Science at Columbia University
- Women in Math, Science, and Engineering at Florida State University

**PUBLICATIONS:**

**Peer-reviewed journal articles**

**Stroup, D. F.**, D. R. Bohnenstiehl, M. Tolstoy, F. Waldhauser, and R. T. Weekly (2007), Pulse of the seafloor: Tidal Triggering at 9°50'N East Pacific Rise, *Geophys. Res. Lett.*, doi: 10.1029/2007GL030088.

**Published meeting abstracts**

**Stroup, D. F.**, M. Tolstoy, T. J. Crone, A. Malinverno, D. R. Bohnenstiehl, and F. Waldhauser (2008), The Relationship between Poroelastic Effects and Tidal Triggering of Microearthquake Activity at 9°50'N East Pacific Rise, RIDGE 2000 Community Meeting, Mantle to Microbe: Integrated Studies at Oceanic Spreading Centers, Portland, OR, 24-26 March.

**Stroup, D. F.**, D. R. Bohnenstiehl, M. Tolstoy, F. Waldhauser, and R. T. Weekly (2007), Variability in Tidal Triggering of Microearthquake Activity at 9°50'N East Pacific Rise, *Eos Trans. AGU*, 88(52), *Fall Meet. Suppl.*, Abstract T33B-1377.

**Stroup, D. F.**, D. R. Bohnenstiehl, M. Tolstoy, F. Waldhauser, and R. T. Weekly (2006), Tidal Triggering of Microearthquakes at 9°50'N on the East Pacific Rise, *Eos Trans. AGU*, 87, *Fall Meet. Suppl.*, Abstract B318-1102.

**Stroup, D. F.**, M. Tolstoy, D. R. Bohnenstiehl, and F. Waldhauser (2006), Tidal Triggering of Microseismicity at 9°50'N on the East Pacific Rise, RIDGE 2000 sponsored Ridge Theoretical Institute, Modeling Hydrothermal Processes at Oceanic Spreading Centers: Magma to Microbe, Mammoth Lakes, CA, 25-30 June.

**Stroup, D. F.**, and J. E. Georgen (2004), Inferred Variations in Crustal Accretion Processes Along the Southwest Indian Ridge Near the Marion Hotspot, *Eos Trans. AGU*, 85, *Fall Meet. Suppl.*, Abstract T41D-1245.

**UNPUBLISHED MANUSCRIPTS:**

**Manuscripts in Preparation**

**Stroup, D. F.**, M. Tolstoy, T. J. Crone, A. Malinverno, D. R. Bohnenstiehl, and F. Waldhauser, Permeability Constrained by Observed Tidal Triggering of Microearthquake Activity, in prep.

**Manuscripts Written During Undergraduate Internships**

**Stroup, D. F.**, and M. Ritzwoller (2004), Surface Wave Dispersion: Improving the Global Seismic Model and Observing Hotspots of the Southwest Indian Ridge.

**Stroup, D. F.**, and Y. Shen (2003), Analyzing Tsunamigenesis Using Relationships Between Seismic Moment and Spectral Strength.

**INVITED TALKS:**

- *“Pulse of the seafloor: Tidal Triggering of Microearthquakes at 9°50’N East Pacific Rise”*, Lamont-Doherty Earth Observatory’s Division of Seismology, Geology, and Tectonophysics Seminar Series, Fall 2007.

**B. S. Advisor:** J. E. Georgen

**Ph.D. Committee/Advisors:** D. R. Bohnenstiehl, J. B. Gaherty, W. Menke, and M. Tolstoy