

Hannah S. Rabinowitz

61 Route 9W

Palsades, NY 10964

E-mail: hannahr@ldeo.columbia.edu

EDUCATION

Lamont-Doherty Earth Observatory of Columbia University

Examining the seismogenic potential of subducting sediments

Ph.D. Candidate (*Expected graduation November 2017*)

Major: *Tectonophysics*

Advisory committee: *Heather M. Savage, Ben K. Holtzman, Christopher H. Scholz*

New York, NY

September 2012–Present

Washington University in St. Louis

Reactivation of pseudotachylite-bearing faulted rocks (Undergraduate thesis)

Bachelor of Arts, May 2012

Major: *Earth and Planetary Science, Geophysics Track*

Minor: *Economics*

St. Louis, MO

August 2008–May 2012

GRANTS AND AWARDS

Bruce C. Heezen Memorial Prize

Department of Earth and Environmental Science, Columbia University

Recipient of a departmental award for outstanding academic and research achievement in the Earth Sciences (2016)

National Science Foundation Graduate Research Fellowship

National Science Foundation (NSF)

Recipient of a 3-year fellowship from NSF, providing tuition and stipend support

Investigating fault strength during the 2011 Tohoku Earthquake (2014–2017)

Schlanger Ocean Drilling Fellowship Award

Integrated Ocean Drilling Program (IODP)

Recipient of a year-long \$30,000 fellowship from IODP

Determining the Frictional Temperature Rise During the 2011 Tohoku Earthquake (2013–2014)

AGU Outstanding Student Presentation Award

American Geophysical Union

Recipient of an award for my poster presentation at the 2014 AGU Fall Meeting

Detecting seismic signatures in the rock record at the Japan Trench

Carl Storm Underrepresented Minority (CSURM) Fellowship

Gordon Research Conferences

Grant to attend the Gordon Research Conference in Rock Mechanics in August, 2012

The Courtney Werner Memorial Prize

Department of Earth and Planetary Sciences, Washington University in St. Louis

Prize awarded to an undergraduate who has demonstrated academic achievement (2012)

PUBLICATIONS

4. Rabinowitz, H.S., P.J. Polissar, H.M. Savage, 2017. Reaction kinetics of alkenone and *n*-alkane thermal alteration at seismic timescales, *G-cubed* 18(1), 204–219. doi: 10.1002/2016GC006553
3. Rabinowitz, H.S., H.M. Savage, T. Plank, P.J. Polissar, J.D. Kirkpatrick, C.D. Rowe, 2015. Multiple major faults at the Japan Trench: Chemostratigraphy of the plate boundary at IODP Exp. 343: JFAST. *Earth and Planetary Science Letters* 423, 57–66. doi: 10.1016/j.epsl.2015.04.010
2. Pope W.H., ... H.S. Rabinowitz, ..., G.F. Hatfull, 2011. Expanding the diversity of mycobacteriophages: insights into genome architecture and evolution. *PLoS One*, 6(1): e16329. doi:10.1371/journal.pone.0016329.
1. Pope, W.H., ... H.S. Rabinowitz, ..., G.F. Hatfull, 2011. Cluster K mycobacteriophages: Insights into the evolutionary origins of mycobacteriophage TM4. *PLoS One*, 6(10): e26750. doi:10.1371/journal.pone.0026750.

IN PREP

- Rabinowitz, H.S.**, H.M. Savage, P.J. Polissar. Multiple shallow seismic faults in region of 2011 Tohoku-oki earthquake, *in prep.*
Rabinowitz, H.S., P. Skemer, T.M. Mitchell, J. Williams, V.G. Toy, G. Di Toro. Experimental reactivation of pseudotachylite-bearing fault rocks, *in prep.*

ABSTRACTS

- Rabinowitz, H.S.**, H.M. Savage, B.M. Carpenter, C. Colletini, M.J. Ikari. Frictional behavior of sediments in subduction zones. American Geophysical Union Fall Meeting, 2016 (*Poster*)
Rabinowitz, H.S., H.M. Savage, B.M. Carpenter, C. Colletini. Frictional behavior of carbonate-rich sediments in subduction zones. Southern California Earthquake Center, 2016 (*Poster*)
Rabinowitz, H.S., H.M. Savage, B.M. Carpenter, C. Colletini. Frictional behavior of carbonate-rich sediments in subduction zones. Gordon Research Conference, 2016 (*Poster*)
Rabinowitz, H.S., H.M. Savage, B.M. Carpenter, C. Colletini. Frictional behavior of carbonate-rich sediments in subduction zones. American Geophysical Union Fall Meeting, 2015 (*Talk*)
Rabinowitz, H.S., H.M. Savage, P.J. Polissar, T. Plank, C.D. Rowe, J.D. Kirkpatrick. Detecting seismic signatures in the rock record at the Japan Trench. American Geophysical Union Fall Meeting, 2014 (*Poster*)
Rabinowitz, H.S., H.M. Savage, P.J. Polissar, T. Plank, C.D. Rowe, J.D. Kirkpatrick. Detecting seismic signatures in the rock record at the Japan Trench. Gordon Research Conference in Rock Deformation, 2014 (*Poster*)
Rabinowitz, H.S., H.M. Savage, P.J. Polissar, T. Plank, C.D. Rowe, J.D. Kirkpatrick, 2013. Detecting the frictional temperature rise during the 2011 Tohoku Earthquake using the thermal maturity of biomarkers. American Geophysical Union Fall Meeting, 2013 (*Talk*)
Rabinowitz, H.S., H.M. Savage, P.J. Polissar, T. Plank, C.D. Rowe, J.D. Kirkpatrick, 2013. Detecting the frictional temperature rise during the 2011 Tohoku Earthquake using the thermal maturity of biomarkers. SCEC Annual Meeting, 2013 (*Poster*)
Rabinowitz, H., P. Skemer, T. Mitchell, G. Di Toro, 2011. Experimental Reactivation of Pseudotachylite-bearing Faulted Rocks. Gordon Research Conference 2012. (*Poster*)
Rabinowitz, H., P. Skemer, T. Mitchell, G. Di Toro, 2011. Experimental Reactivation of Pseudotachylite-bearing Faulted Rocks. American Geophysical Union Fall Meeting 2011. (*Poster*)
Rabinowitz, H., 2011. Experimental Reactivation of Pseudotachylite-bearing Faulted Rocks. Washington University Undergraduate Research Symposium. (*Talk*)
Rabinowitz H., P. Hynes, C. Rhyan, E. Sims, E. Weisser, B. Zhang, 2009. Isolation and Characterization of Mycobacteriophage Angelica. Washington University Undergraduate Research Symposium. (*Poster*)

TEACHING EXPERIENCE

- Environmental Risks and Disasters Spring 2013, Spring 2014
Professor: Göran Ekström
Teaching Assistant for an undergraduate course for which I led and developed material for weekly discussion sections and office hours and graded homework and exams.
Chemical Geology Spring 2016
Professor: Denton Ebel
Teaching Assistant for a graduate-level course for which I led bi-weekly office hours and graded homework and exams.

FIELD EXPERIENCE

- Southern California, Nevada, Italy** 2012–2016
Sampled transects across faults for biomarker thermal maturity studies
Oklahoma 2016
Participated in a rapid deployment of seismometers after the 2016 M5.8 Pawnee earthquake