

**Department of Earth and Planetary Sciences  
Senior Theses**

Lev Horodyskyj

“Heterogeneous Chemistry and Titan’s Aerosols”

Advisor: Darrell Strobel

2003

*[PhD Geosciences and Astrobiology, Penn State University]*

Margaret Hurwitz

“The Effects of the El Nino / Southern Oscillation on Upper Tropospheric Water Vapor”

Advisor: Darryn Waugh

2003

*[PhD Atmospheric Chemistry, University of Cambridge UK]*

Erica Barth

“C3 Plant Tissue as an Indicator of Atmospheric Carbon Isotope Composition under Controlled pCO<sub>2</sub> Conditions”

Advisor: Hope Jahren

2008

*[Science Writer/Analyst at Environmental Consulting Company, then Masters in Environmental Management, Yale]*

Emily Jordan

“Crystal Size Distributions in Pallasites”

Advisor: Bruce Marsh

2009

Kathleen A. Schiro

“Analyzing the Influence of Tropical Cyclones on Upper Tropospheric Water Vapor Distributions and Climate”

Advisor: Darryn Waugh

2011

*[PhD Atmospheric Sciences, UCLA]*

Robert Nedbor-Gross

“Comparison of the Balanced Vortex Experiment to Real World Hurricanes”

Advisor: Thomas Haine

2011

Arielle Alpert

“Sea Surface Temperature Variations and Relationships with Climate Variability in the Tropical Atlantic”

Advisor: Anand Gnanadesikan

2012

[*PhD Atmospheric Sciences, Rutgers University*]

Yuchao Gao

“Climate Variability and Air Mass Trajectories in Africa”

Advisor: Darryn Waugh

2013

[*PhD Earth and Environmental Sciences, Columbia University*]

Amy Klivans

“Pyroxenes in the Palisades Sill: Chemical Analysis and Textures”

Advisor: David Veblen

2013

Matt Sykes

“Effects of Heat Stresses on Equilibrium  $\Delta_{47}$  of Calcium Carbonate”

Advisor: Ben Passey

2013

Jessica L. Noviello

“Observational and Experimental Block Distributions on the Asteroid 25143 Itokawa: Implications for its Evolutionary History”

Advisor: Bruce Marsh and Olivier Barnouin

2014

Edward Kardish

“Isotopic Composition in Precipitation at Olin Hall”

Advisor: Naomi Levin

2014

Adam Dec

“An Urban Patchwork: Variations in Land Cover and Soil”

Advisor: Katalin Szlavecz

2015

Eric Ryberg

“Evaluation of an Off-Axis Integrated Cavity Output Spectrometer for High-Precision Triple Oxygen Isotope Analysis of Waters”

Advisor: Naomi Levin

2015