



DEPARTMENT OF GEOSCIENCES
JUNIOR PAPERS (Class of '16)
FALL 2014-2015

Ryan T. Barker

“A Raman Spectroscopic Study of Crystalline and Metamict Zircon”

T. Duffy / B. Schoene

Alyson K. Beveridge

“Supervised Image Classification of the Allan Hills Blue Ice Area: Finding Records of Earth’s Climate History”

J. Higgins / M. Bender

Ethan C. Campbell

“Wintertime Evolution of the Weddell Sea Upper Ocean”

J. Sarmiento / R. Toggweiler

Alison M. Campion

“Interpreting the Stratigraphy of Far-Field Records of the Late Paleozoic Ice Age: When Did Glaciation Begin?”

A. Maloof / J. Higgins

Shanna L. Christian

“The Phenology of Zooplankton in Subtropic and Subpolar Regions”

J. Sarmiento / B. Ward

Jay B. Dessy

“The Effects of Land Surface Roughness on Hurricane Sandy’s Lower Atmosphere Wind Speed”

D. Medvigy / G. Philander

Collin R. Edwards

“Geochemical Conditions for Arsenic Speciation in Bangladesh and New Jersey Groundwater”

S. Myneni / F. Morel

Atleigh G. Forden

“Application of Rock Dissolution Methods to Explore the Cause of Anomalously High $^{87}\text{Sr}/^{86}\text{Sr}$ in Shuram Excursion Ediacaran Carbonates”

J. Higgins / B. Schoene

Kenny M. Hulpach

“Relating the Southern Ocean Overturning Circulation to Antarctic Sea Ice Extent”

J. Sarmiento / S. Fueglistaler

Rebecca A. Lowy

“*Thalassiosira weissflogii* Growth Under N-limited, N-replete and Varied $p\text{CO}_2$ Conditions”

F. Morel / D. Sigman



**DEPARTMENT OF GEOSCIENCES
JUNIOR PAPERS (Class of '16)
FALL 2014-2015**

Sophia C. Myers

“Not All Forams: Benthic Foraminifera Fragmentation and Ocean Acidification”

G. Keller / J. Higgins

Evan M. O'Brien

“An Investigation of the Continued Applicability of Pacific Salmon Catch Patterns”

J. Sarmiento / G. Philander

Anteneh A. Sarbanes

“Foraminiferal Response to Stress Influxes of the Early Danian Climate”

G. Keller / A. Rubin

Anjali Taneja

“Development of a Fluorescent Probing Protocol to Detect *in situ* Prokaryotic mRNA Transcription”

T. Onstott / B. Ward

Anna C. Van Brummen

“Layer and Spatial Distribution Analysis of Lester Park Stromatolites”

A. Maloof / J. Irving

Ethan M. Vasquez

“A Test for Climate Models: The Response to Milankovitch Forcing”

G. Philander / S. Fueglistaler

Fiona M. West

“A Coupled Nitrogen- Phosphorus Model for Tropical Ecosystems”

D. Medvigy / L. Hedin

Claire M. Zarakas

“Do Nitrogen-Herbivory Feedbacks Constrain the Tropical Forest Carbon Sink”

D. Medvigy / L. Hedin