



Department of Geology Awards Ceremony

Friday, April 21, 2016

University of Georgia



Alumni Advisory Board Members

Mr. Frank Lieth, Chair

Director, Geological Services, US Vulcan Materials Co.

Ms. Charlotte Abrams

Nuclear Regulatory Commission

Mr. Jeff Blackmon

Project Manager, Newmont Gold

Dr. Donald Baker

President, OGM Resources

Mr. Skip Forsthoff

Consultant Geologist
Chevron

Mr. Alex Glover

Director of Mining & Environment, Active Minerals, International, LLC

Mr. John Hayden

Deputy Executive Director, Government Relations & Public Affairs,
Society for Mining, Metallurgy, and Exploration, Inc.

Mr. Daven Mashburn

Senior Exploration Manager, Newmont Gold

Dr. Theodore McCarthy

Fellow Analyst, Savannah River National Laboratory

Dr. Wes Myers

Los Alamos National Laboratory

Mr. Ed Moritz
President, Gustavson Associates

Mr. James Nutaitis
Geologist, BHP Billiton

Mr. Seth Ramaley
Director, Groundwater Protection Program
Waste Management

Mr. Jim Redwine
Senior Managing Scientist
Anchor QEA, LLC

Dr. James Saunders
Professor of Geology, Auburn University

Ms. Katie Sechrist
Geologist, Newmont Gold Corp.

Mr. Jeff Shellebarger
President, Chevron NA Exploration and Development



Undergraduate Accolades

B.S. / A.B. Recipients
Summer 2015 - Fall 2015 – Spring 2016 – Summer 2016

Miranda Anderson
Marie Bartlett
Elizabeth Benyshek
Joe Booth
Mathew Breithaupt
Alan Brown
William Bugbee
William Bullard
Anslie Butler
Lauren Carter
Paul Chompoonich
Calvin Conn
Emily Cox
Renee Day
Rachel Ehlinger
Veronica Fay

Audrey Fisher
Mya Habermann
Tyler Henry
Sarah Hickey
Bobby Ikebudu
Arthur Machado
Mathew Perdue
Amelia Perry
Austin Poncelet
Devin Scheid
Kunal Sinha
Michael Torcivia
Victor Truong
Christopher Wheeler
Samuel Yun

Senior Theses/Research

Elizabeth Benyshek
Joe Booth*
William Bullard*
Rachel Ellinger
Mya Habermann
Sarah Hickey
Anthony Moraes
Amelia Perry
Austin Poncelet*

Morrison Nolan
David Richards
Samuel Svoboda
Michael Torcivia*
Victor Truong*
Carson Walters
Christopher Wheeler

*denotes support from KaMin Undergraduate Research Fund

Presentations at Professional Meetings

Benyshek, Elizabeth, 2015, Antarctica climate: Applying NASA Earth Observations to Assess the Seasonal and Inter-annual Sea Ice Dynamics in McMurdo Sound, Ross Sea, Antarctica, NASA DEVELOP National Program Fall meeting.

Booth, Joe, 2016, Mineralogy and Petrology of Huerfano Butte, a Tertiary intrusion on the Great Plains, Colorado, UGA CURO symposium.

Ehlinger, Rachel, 2016, Comparative analysis of soil organic matter fractionation in ultisols, UGA CURO symposium.

Habermann, Mya A., Klimczak, C., 2015, Tectonic controls on pyroclastic volcanism on Mercury, American Geophysical Union Fall Meeting, San Francisco, CA.

Hickey, Sarah, 2016, Drift between two specific conductivity probes, UGA CURO symposium.

Nolan, Morrison, 2016, Re-evaluation of the proposed identities of the middle Cambrian sponge, *Brooksella alternata*, of the Conasauga shale of Georgia and Alabama, Georgia Mineralogical Society meeting, and UGA CURO symposium.

Geology Club Field School Scholarship

Bobby Ikebudu
Randall Padgett

Newmont Mining Corporation Field School Scholarships

Sarah Hickey

Bobby Ikebudu

**Outstanding Field School Student
2016**

Mathew Purdue

**Outstanding Undergraduate Students
2015-2016**

Elizabeth Benyshek
Joe Booth

Mya Habermann
Michael Torcivia



Graduate Student Accolades

2015-2016 Graduate Degrees

Ph.D.

Douglas John, “Exploring Low-Oxygen Conditions in the Cambrian through Trilobites of the Wheeler Shale.” (Walker)

Elias Horry Parker, “Crustal Structure across the southern Appalachians and Atlantic Coastal Plain: Constraints from teleseismic receiver functions and new perspectives from magnetic modeling.” (Hawman)

Wondwosen Seyoum, “Satellite Remote Sensing and Modeling of the Hydrosphere for Understanding Terrestrial Water Cycle Dynamics at Different Scales.” (Milewski)

M.S.

Matthew Cahalan, “Sinkhole Formation Dynamics and Geostatistical-Based Prediction Analysis in a Mantled Karst Terrain.” (Milewski)

Laura Fackrell, “Understanding Thermophilic Ammonia Oxidizing Archea Environments Across Extreme Redox Gradients.” (Schroeder)

Adam Forsberg, “Evaluation of a quantitative phosphorus loss model for potential improvement of the southern phosphorus indices.” (Dowd)

Corbin Kling, “Topographic Expressions of Large Thrust Faults on Mars.” (Klimczak)

Michael Lukas, “Geophysical Prospection at Caisteal Mac Tuathal, Perthshire, Scotland.” (Garrison)

Presentations at Professional Meetings

Alberts, Erik C., Verellen, Devon N. Parker, E. Horry, Hawman, Robert B., Fischer, Karen M. and Wagner, Lara S., 2016, Imaging the MOHO Beneath the Southern Appalachians Using Global Seismic Phases Recorded by the SESAME Broadband Array; Southeast GSA.

Crane, Kelsey, Klimczak, C., 2016, Testing the timing and rate of global contraction on Mercury against its cratering record, Lunar and Planetary Science Conference, Woodlands, TX.

Michael C. Durham and Adam M. Milewski, 2015, Effects of infiltration variability on modeled transmission losses in ephemeral channels: GSA Annual Meeting Abstracts with Programs.

Michael C. Durham and Adam M. Milewski, 2015, Can Satellite Remote Sensing Assess Water Resources in Data Limited Environments: International Conference on Geospatial Techniques in Geosciences in Taza, Morocco.

Kling, Corbin L., Klimczak, C., 2016, Displacement-Length Scaling Relationships of Large Thrust Faults on Mars, Lunar and Planetary Science Conference, Woodlands, TX.

Lukas, Michael, 2016, Geophysical Prospection at Caisteal Mac Tuathal in Perthshire, Scotland, Society for American Archaeology Annual Meeting.

Rotz, Rachel, 2015, Investigating the Effects of Precipitation Dynamics on Inland Freshwater Lens Formation Using a Physical Model, GSA Annual Meeting.

Rotz, Rachel, 2015, Revealing Links Between Space Exploration and Our Earth at Marshall Space Flight Center, GSA Annual Meeting.

Voarintsoa, Ny Riavo G., L. Bruce Railsback, George A. Brook, Lixin Wang, Fuyuan Liang, Hai Cheng, R. Lawrence Edwards, 2015, Late Holocene (ca. AD 370-1210) ecosystem changes inferred from a stalagmite from northwestern Madagascar: the role of the ITCZ and human activity, AGU Fall meeting 2015.

Voarintsoa, Ny Riavo G., George A. Brook, Fuyuan Liang, Eugene Marais, Hai Cheng, R. Lawrence Edwards, and L. Bruce Railsback, 2015, Stronger Monsoon during southward migration of the ITCZ recorded in a Namibian stalagmite. Monsoons and the ITCZ: the annual cycle in the Holocene and the Future, Columbia University, Sept 2015.

Voarintsoa, Ny Riavo G., L. Bruce Railsback, Xianglei Li, Gayatri Kathayat, Hai Cheng, George A. Brook, and R. Lawrence Edwards, 2015, Stalagmite records revealing extensive drier period in northwestern Madagascar between the early and late Holocene (8-1.5 ka B.P.), Summer School on Speleothem Science, Department of Earth Sciences, University of Oxford, Aug 2015.

Journal Publications

Craddock, R. A., S. Tooth, J. R. Zimbelman, S. A. Wilson, T. A. Maxwell, and **Corbin Kling** (2015), Temporal observations of a linear sand dune in the Simpson Desert, central Australia: Testing models for dune formation on planetary surfaces, J. Geophys. Res. Planets.

Milewski, A., El Kadiri, R., and **Durham, Michael C.**, 2015, Assessment and Intercomparison of TMPA Satellite Precipitation Products in Varying Climatic and Topographic Regimes in Morocco, *Remote Sensing*, v. 7, 5697-5717.

John, Douglas and Walker, SE, 2016, Testing Symbiotic Morphology in Trilobites under Dysoxic and Oxic Conditions from Cambrian to Early Ordovician Lagerstätten; *Paleogeog., Paleoclim., Paleoecol.*, v. 441, p. 704-720.

Parker, E. Horry, R.B. Hawman, K.M. Fischer, and L.S. Wagner, 2015 Constraining lithologic variability along the Alleghanian detachment in the southern Appalachians using passive-source seismology, *Geology*, 43, 431-434.

Brook, G.A., Railsback, L. B., Scott, L., **Voarintsoa, Ny Riavo G.**, Liang, F., 2015, Late Holocene Stalagmite and Tufa Climate Records for Wonderwerk Cave: Relationships Between Archaeology and Climate in Southern Africa: *African Archaeological Review*, v. 34 (4), p. 1-32.

Railsback, L. B., Gibbard, P.L., Head, M.J., **Voarintsoa, Ny Riavo G.**, Toucanne, S., 2015, An optimized scheme of lettered marine isotope substages for the last 1.0 million years, and the climatostratigraphic nature of isotope stages and substages: *Quaternary Science Reviews*, v. 111, p. 94-106.

External Funding

Cronin, Kelly, Lifespan and isotopic and trace element geochemistry of the Antarctic scallop *Adamussium colbecki*, GSA research grant support.

Howes, Bolton, The sequence stratigraphy of the Twin Creek Limestone in southwestern Wyoming: an analysis of the stratigraphic completeness of the Jurassic Sundance Seaway, GSA research support.

Wright, Sarah, Distinguishing sequence boundaries from other erosional surfaces: A case study from the Jurassic Windy Hill sandstone, GSA research support.

Internal Funding

Miriam Watts-Wheeler Research Scholarships
Fall 2015 • Spring 2016

Quentin Anlian

Regional tectonics and the deformation of porous Ordovician and Cretaceous sandstones in the Cañon City Embayment, Colorado.

Kelly Cronin

Adamussium colbecki as an Antarctic paleoenvironmental proxy for patterns of glacial meltwater and primary productivity.

Bolton Howes

The sequence stratigraphy of the Jurassic Twin Creek Limestone in southwestern Wyoming.

Jake Lee

Investigating the Mantle Source of the Lunar Crater Volcanic Field, Nevada.

Pedro Monarrez

Testing the Role of Escalation on Middle Jurassic Macroevolutionary Patterns at the Regional Scale.

Rachel Rotz

Investigation of Precipitation Dynamics on Inland Freshwater Lenses.

Chris Smith

Foraminiferal response to potentially toxic elements: An examination of uptake and the calcification process using the propagule method.

Sarah Wright

Distinguishing sequence boundaries from other erosional surfaces: A case study from the Jurassic Windy Hill Sandstone, Wyoming USA.

Miriam Watts-Wheeler Travel Scholarships

Fall 2015 • Spring 2016

Michael Durham

Michael Lukas

SEG/Gary and Lorene Servos Groundwater Exploration Scholarship

Rachel Rotz

UGA Funding

Durham, Michael. C. - University of Georgia OVPR Internal Grants and Awards, for participation in International Conference on Geospatial Techniques in Geosciences in Taza, Morocco

Durham, Michael. C. - University of Georgia Graduate School Student Travel Fund, for participation in 2015 GSA Annual Meeting in Baltimore, Maryland

Gilles and Bernadette Allard Geology Award

Quentin Anlian

Regional tectonics and the deformation of porous Ordovician and Cretaceous sandstones in the Cañon City Embayment, Colorado

Jake Lee

Investigating the Mantle Source of the Lunar Crater Volcanic Field, Nevada.

Pedro Monarrez

Testing the Role of Escalation on Middle Jurassic Macroevolutionary Patterns at the Regional Scale

John Sanford Levy Award

Kelly Cronin

Adamussium colbecki as an Antarctic paleoenvironmental proxy for patterns of glacial meltwater and primary productivity

Chris Smith

Foraminiferal response to potentially toxic elements: An examination of uptake and the calcification process using the propagule method

Joseph W. Berg Award

Erik Alberts

Crustal reflectors beneath the SESAME broadband array imaged with global and teleseismic phases

Devon Verellen

Investigation of the crust-mantle transition beneath the southern Appalachians using the SESAME broadband array

UGA Excellence in Research by Graduate Students Award 2016

Elias Horry Parker

Schlumberger Faculty for the Future Fellowship Award

Ny Riavo Voarintsoa

UGA Outstanding Teaching Assistant Award

Khalil Lezzaik

Rachel Rotz

Graduate Students of the Year

Michael Lukas

Wondwosen Seyoum



Faculty Accolades

Associate Department Head

Ray Freeman-Lynde

Undergraduate Advisors

Rob Hawman

Paul Schroeder

Graduate Coordinator

Sue Goldstein

Professor of the Year

Rob Hawman

Teacher of the Year

Mike Roden

UGA Academic Entrepreneur of the Year Award

Valentine Nzengung



Staff Accolades

A Group of Extremely High Performing Individuals

Rachel Ashton
Ashley Arnold
Cindy Fouche
Julie Cox
Michael Lewis

Chris Fleisher
Laura Dupont
Elyse Stempinski
Gian Cella



Recognition of Geology Club

2015-2016 Officers

Lauren Carter and Joe Booth – Presidents

Morrison Nolan- Secretary

Michael Torcivia- Treasurer

Tony Moraes– Outreach

Victor Truong and Sarah Hickey- Fundraising

Matt Quinn and Bobby Ikebudu - Events

Austin Poncelet – Professional Liaison

Kunal Sinha – Web page