

Quaternary Geologist & Geomorphologist

Newsletter of the Quaternary Geology and Geomorphology Division

<http://community.geosociety.org/gggdivision/home>

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2017 Kirk Bryan Field Trip Exploring the Mechanics, Frequency, and Impacts of Deep-Seated Landslides in Washington State



Photo courtesy of Robert G. Marvinney, Maine Geological Survey

Join us this year!

The 2018 Kirk Bryan Field Trip is 407. At the Edge of the Laurentide Ice Sheet: Stratigraphy and Chronology of Glacial Deposits in Central Indiana, November 3, 2018.

Quaternary Geology & Geomorphology Division

--- Officers and Panel Members – 2017/2018---

Officers – 6 Members, three of whom serve one-year terms: Chair, First Vice-Chair, and Second Vice-Chair; and three of whom serve two-year terms: Secretary, Treasurer, and Newsletter Editor/Webmaster.

Management Board – 9 Members: Division officers and the Chair of the preceding year; also includes the Historian and the Student Representative.

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PANEL MEMBERS

2016-2018 Panel

Stephanie Shepherd
Mark Sweeney
Karl Wegmann

2017-2019 Panel

Greg Balco
Karen Gran
Joanna Redwine

2018 JTPC Representatives:

Tammy Rittenour, Grant Meyer

GSA Councilor Liaison – Frank Pazzaglia
QG&G Division Liaison – Dominique Olvera
(Both appointed by the GSA President)

Looking Ahead to Indianapolis and Promoting an Inclusive and Diverse Division

--- Message from the Chair ---

Fellow Quaternary Geology and Geomorphology (QG&G) Members-

Ah, spring is here and we are now shedding our bulky winter gear (and for some of us our academic schedules and obligations) and we are looking forward to getting outside, digging in the dirt, doing fieldwork and collecting data. But before everyone scatters like the wind to all four corners, I would like to remind you of upcoming dates related to the Annual GSA meeting and to get you thinking about nominating your colleagues and students for awards within the Division and promoting an inclusive and diverse environment within our field.

Annual GSA Meeting in Indy this year! We have a great line-up of sessions and field trips for the GSA Annual meeting, to be held on Nov 4-7th in Indianapolis Indiana. Thanks to everyone who submitted a session or field trip proposal! We have an excellent and innovative group of QG&G sponsored sessions (22) and co-sponsored sessions (30) on the docket. I think there will be something for everyone. Topics range from coastlines to craggy mountain tops, river and glacial records to dust and desert dunes and span the Anthropocene to the Pleistocene. A list of topical sessions and guidelines for abstract submission can be found on the GSA Annual meeting website (<http://community.geosociety.org/gsa2018/home>).

Remember that Indianapolis is in the heartland of QG&G. I think I said that 'Q will rule Indy' during the last QG&G business meeting in Seattle (or something like that). There are many great pre- and post-meeting fieldtrips that will get you outdoors and provide access to 'dig up the dirt' on the Holocene and Pleistocene history of the region. Check them out! (<http://community.geosociety.org/gsa2018/science-careers/fieldtrips#pre>) I'm especially excited that our Kirk Bryan Field trip will take us 'To the Edge of the Laurentide Ice Sheet' on Saturday before the meeting (lead by Henry Loope, José Luis Antiaño and G. William Managhan).

Longstanding and highly respected professional awards. QG&G has a long history of honoring our most impactful colleagues and contributors to our field. These Awards are funded by donations from our members and include the Kirk Bryan Award (GSA Award associated with QG&G) for a publication of distinction in the last five years, the Distinguished Career Award and the Farouk El-Baz Award for Desert Research. Nominations for these awards are due February 1 (KBA) and April 1 (DCA, FEB). Please consider nominating one of your colleagues. List of past Awardees and directions for nominations can be found on the QG&G website under awards (<http://community.geosociety.org/qgdivision/awards/awardsoverview>). Consider diversity and gender balance when nominating your colleagues (note that less than 5% of awardees have been women).

NEW student awards! Long past are the days when our hard-working (starving?) QG&G students were limited to the top prized J. Hoover Mackin Award (for PhD students) and the Arthur D. Howard (for MS students). This year, in addition to the GSA-administered Robert K. Fahnestock Award (sediment transport) and John A. Black Award (coastal), we were able to award the Marie Morisawa Award for research by a woman, and the Pete Birkeland Award for research on soil geomorphology. The inaugural Stanley Schumm Award for fluvial research will be awarded in 2018. Thank you to everyone who has contributed funds to these awards and have mentored and advised the student awardees. QG&G student awards and past recipients are listed on the website (<http://community.geosociety.org/qgdivision/awards/awardsoverview>).

Respectful and Inclusive QG&G. During this past year there has been an important uprising in the awareness of sexual harassment and racial discrimination across the nation, sparked by the #MeToo, #stopthehate and similar movements. Women and minorities at universities, research centers and scientific societies have not been immune to the injustice of harassment and discrimination, commonly propagated by a supervisor or person of authority over the victim. This includes a recently publicized case close to our own QG&G community (<http://www.sciencemag.org/news/2017/10/disturbing-allegations-sexual-harassment-antarctica>).

[leveled-noted-scientist](#)). While we may not be able to eliminate harassment and discrimination entirely, we do have the power to 'speak-up' and 'help-out' when we see cases of harassment and discrimination. We can also help make a change in the perception of what is acceptable behavior by setting good examples ourselves. Lastly, we can encourage greater gender and racial balance in our community by nominating and electing worthy woman and minorities to positions of influence and for awards with our field.

Speaking of which, I would like to encourage anyone who is a GSA Fellow to nominate a colleague for GSA Fellowship. I had the honor of helping to nominate a woman colleague-peer this past year and surprisingly, was nominated to be a GSA Fellow myself. Remember, that only GSA Fellows can take the lead on nominating someone to GSA Fellowship (although non-Fellows can write supporting letters), which might lead a skewed community of Fellows if we don't support our equally deserving woman and minority colleagues. Information in nominating someone to GSA Fellowship can be found at: http://www.geosociety.org/GSA/About/awards/GSA_Fellows/GSA/Awards/Fellowship.aspx

Ok, this letter is long enough already. Thank you for electing me to be your Chair of the Quaternary Geology and Geomorphology Division of GSA. Please contact me if you have any suggestions for what we as your QG&G Leadership can do better to support you and our members. I hope to see you all in Indianapolis on November 4-7th!

Tammy Rittenour
Chair, Quaternary Geology and Geomorphology Division



Join us at the Annual Meeting
in Indianapolis, November 4-7, 2018

QG&G is sponsoring more than 50 technical
sessions, symposia, and field trips.

Check them out at:

<http://community.geosociety.org/gsa2018/home>

Abstract submission deadline is August 1.



4-7 November
Indianapolis, Indiana, USA

Division Awards - 2017

The following awards were given by the Division at our annual awards ceremony Tuesday, October 24, 2017 in Seattle, Washington.

--- The Kirk Bryan Award ---

The Kirk Bryan Award for Research Excellence was established in 1951 and given for a publication of distinction (within the past 5 years) advancing the science of geomorphology or Quaternary geology or a related field. Our 2017 award was presented to **Les McFadden**, 2013, [Strongly dust-influenced soils and what they tell us about landscape dynamics in vegetated aridlands of the southwestern United States](#), in Bickford, M.E. ed., *The Web of Geological Sciences, Impacts and Interactions*: Geological Society of America Special Paper 500. p501-532.

Citation by Amy Brock-Hon

In his 2013 paper, McFadden asks “Why do numerous soil scientists, mainly geomorphologists and other Earth scientists seemingly remain unaware of this model [of aeolian inflated profiles], or even reject it?”. This question, seemingly asked out of frustration, is evident to me as the impetus for this paper. McFadden (2013) is deserving of the Kirk Bryan Award because it provides a foundation of soil-development knowledge that should be read by anyone working on soil geomorphology and related problems in aridlands. Importantly, it elucidates the role of dust in soil development and landscape dynamics, something that still should be emphasized, even after over 5 decades of research in the southwestern United States and in aridlands around the world.



Kirk Bryan Award winner Les McFadden (center), with Division Chair Glenn Thackray (left) and citationist Amy Brock-Hon (right).

In this paper, McFadden has written a concise review of the evolution of aridland models of soil development, from the application of Jenny's classic A/B/C weathering profile to the contributions of the Desert Soil Geomorphology Project, and identification of dust-inflated desert pavement formation at the Cima volcanic field. In doing so, he not only highlights our current understanding of aridland soil-profile development, but also explains the importance of dust and aeolian materials as major contributors to chemical and morphological changes tied to landscape processes. More importantly, McFadden presents the inclusive AIP (Accretionary and Inflationary Profile) model and its application to numerical modeling of soil-landscape processes and soil-production rates, hillslope evolution, and influence on biotic communities and their response to climate change (just to name a few).

With aridlands as the locales of recent and ongoing wars, population growth, and sites of new energy resources including solar and wind farms, the impact of fully understanding aridland processes discussed in this paper reaches beyond the disciplines of Quaternary Geology and Geomorphology.

In constructing this citation, I was reminded of how recognition of aeolian inflated soils has impacted my own research, and in how I teach aridland soil and landscape development. So, I am honored to stand here, and recognize Les McFadden, for writing a paper that so eloquently lays the foundation for this model and stresses the importance of its understanding and use. With that, I'll say congratulations Les and thank you.

Response by Les McFadden

I am deeply honored to have received the 2017 Kirk Bryan Award, and would like to thank Amy Brock-Hon, who spearheaded the nomination, those who submitted supporting letters, and the GSA Kirk Bryan Award committee for selecting this paper, which was published in the GSA Special Paper 500 in 2013. In late 2011, I was contacted by Pat Bickford, who offered me the opportunity to contribute a paper to a volume he was editing as part of the 125th anniversary of GSA that celebrated advances in geosciences over the last several decades. Initially, Pat asked me to contribute a paper addressing “Weathering, development of soils, and/or regolith”. Period. Ultimately, Pat graciously agreed to my counterproposal to contribute a paper focusing on research concerning soils and landscapes, primarily in sparsely vegetated aridlands. I was inspired to take on the task for a few reasons, one being my great admiration of the contributions of scientists such as Hans Jenny, Daniel Yaalon, Ran Gerson, Robert Ruhe, Lee Gile, and B.L. Allen towards the understanding of pedogenesis in aridlands; a second one being, as Amy Brock-Hon alludes to in her citation, my sense that many of the key lessons of these scientists and more recent soil geomorphological research were, to try to put it diplomatically, rather underappreciated by a new generation of geomorphologists in the study of, for example, desert pavements or weathering rates and soil development in hilly landscapes.

Like all others who have received the Kirk Bryan Award, many of the ideas or concepts included in the paper reflect the influences of many others, such as those aforementioned scientists, but also former mentors and those with whom I have collaborated in soils and geomorphological research during the past nearly forty years. I have had, as the current president of our country might put it, the tremendous fortune to have had many such colleagues during my academic career, and it would be wonderful to be able to identify them all. But given huge time and space limitations, I cannot at this time do that. Sad. But I do think it essential to note those who, in the end, really have very critically affected my methodological and philosophical approaches to soil geomorphological research. Ultimately, they include: Pete Birkeland: his greatly influential textbook, *Pedology, Weathering and Geomorphological Research*, was that used in my first soil class. The second edition of this textbook, much of which was organized around the CLORPT Fundamental Equation of Jenny, ultimately received the Kirk Bryan Award. Regina Capuano: she finally convinced me of the great potential of numerical modeling of low temperature rock-water systems as applied to many areas of soil geomorphological research. Steve Wells: Steve introduced me to the beautiful and sublime landscapes of the Colorado Plateau and with whom I began to see desert pavements and soils in a very different light as we embarked upon collaborative research in the Mojave Desert in the early 1980s. Joe McAuliffe: Joe, a truly gifted ecologist, has opened my eyes to the profound impacts and intricate relationships of desert plants to aridland soils in diverse geomorphic circumstances, beyond those related to soil respiration and limited organic matter accumulation. Finally, Bill Bull, who first recommended that I consider taking that first soils class at the University of Arizona all those years ago. His textbook, *Geomorphic Responses to Climate Change*, also received the Kirk Bryan Award. I see landscapes—and in many ways, soils-- largely through the eyes of this great scientist.

--- The Distinguished Career Award ---

The Distinguished Career Award was established in 1985. It is presented to Quaternary Geologists and Geomorphologists who have demonstrated excellence in their contributions to science. We presented the 2017 award to **David Dethier**, Professor at Williams College.

Citation by Paul Bierman

David Dethier has influenced Quaternary Geology and Geomorphology in so many ways. Not only are his research contributions broad and published in a wide variety of formats and high quality, peer-reviewed journals but his impact on the field is magnified many times over by the generations of students who he has trained and mentored.

Those students have trained students of our own – his legacy can be noted across the US in academic departments, in schools, and in geologic consulting companies where Dethier students and the students of Dethier students' have made their mark.

We can start with David by the numbers: 2 kids; 4 years of QGG service; 6 students who are now geoscience faculty; 11 courses taught at Williams; 35 years at Williams College; 38 support letters for the DCA; 43 undergraduate theses; and 60+ publications.

But really, it's what David has done for all of the people's lives he's touched that matters the most. Be it his hands-on teaching style, his support for any number of athletic endeavors (as long as they have some relation to frozen water) or his desire to dig deeper in many different ways, David has long sought to better understand and improve the world in which we live. He's always worn many different hats - the dad hat, the mentor hat, the professor hat, the Williams hat, the family hat, and the unicorn hat – what is that? All of these while communicating in his own special way be it to Geology majors or, well, cats, who seem to respect and adore him as much as the hundreds of students whose lives he's touched. Throughout all of this, David always has time for the people close to him, especially Nancy, Evan and Dylan. He's always a fan of technology in the field (just what was the soil temperature in Hopkins forest in Dec 2016, the stream flow 6 months before, how many cameras should I carry to get just the right shot for Geomorph class?). Well, Ok selfies and cell phones might be the limit.

It's difficult to condense a career's worth of stories into a few paragraphs so, in the age of the internet, I've posted lots more information including the nomination packet, the Powerpoint from GSA, a movie of my nomination and David's acceptance speech, and more than 100 photos sent to me by his students, friends, and family. Have a look at: <http://www.uvm.edu/~pbierman/dethier>

And David, thanks for everything you have done for all of us for so many years.

Response by David Dethier

Thanks so much—I am not worthy of this award...and when I think of those who stood in this spot recently—Bill Ruddiman, George Denton, Tom Dunne, Gail Ashley and Ken Pierce, I am really unworthy! I do love that my nomination by Paul Bierman and many former students and its embrace by the panel emphasizes that teaching and mentoring are essential to our profession and that our former undergraduates view these relationships as important. Being an undergraduate or a graduate student is a temporary condition, after all—you will soon replace us!



Distinguished Career Award winner David Dethier (center) with citationist Paul Bierman (left) and Division chair Glenn Thackray (right).



Distinguished Career Award winner David Dethier surrounded by current and former Williams College students at GSA in October 2017.

I am supposed to reflect on my research, but I did that at length yesterday and it was a soporific experience for some. With my academic and federal colleagues and my undergraduates I've studied many things surficial over the past four decades, including the nature of ice retreat from where you sit, the evolution of the Rio Grande in northern New Mexico, weathering rates in the Cascades and in the Boulder Creek critical zone, and surficial deposits and catchment-scale hydrogeochemistry near Williams College.

This award is all about mentoring and community at different scales, and as Tom Dunne said three years ago, community is essential! GSA and QG and G have been welcoming communities of scholars and friends since I was a graduate student and to my students since I began to teach.

For many of us community starts with family. My father was a teacher as was his father before him, so teaching seemed like a reasonable profession as I was growing up. But it was really my mother. She took me to places where she could walk and look at birds and I could collect pretty rocks. And she took me to visit the late Edward Watson of Bryn Mawr College, which had been the home of Florence Bascom, perhaps America's first female geologist. Dr. Watson had taught my mother in a single geology class in 1943. But he spent an hour looking at my box of rocks and minerals and commenting favorably on what a 10-year old had collected. I was sold.

My own undergraduate mentors from Dartmouth College are gone as is Larry Hanson, who infused a love of teaching in a generation of graduate students at Washington. But Tom Dunne, my thesis advisor and mentor at UW, is here and Pete Birkeland, my 83-year-old editorial advisor, is here in spirit. T. Dunne appeared belatedly at the UW—there was some trouble getting him across the border—but he arrived just in time to save me. Tom taught me countless things, the most important of which is how to estimate a value before or even without making a measurement. The UW was an exciting place to be a graduate student in the 1970s. You could buy a house for 20k. Linc Washburn, Steve Porter and in time Estella Leopold made the Quaternary Center hum and a constant parade of best-in-show scientists came to lecture about every aspect of Quaternary Studies. The graduate community at UW included Bill Dietrich and Mary Power, Wes Ward, Tom Pierson, Willy Scott, Matt Brunengo, David Borns and Mike Dungan, Bob Burk and Sue Cashman, postdoc Thom Davis and eventually Robert Thorson and Derek Booth and Leslie Reid and Mary Anne Madej and a list of other luminaries too long to recite here.

Before I finished at the UW I was lucky enough to begin working for the USGS and my mentor, Skip Pessl, taught me just enough about field mapping of glacial deposits to make me dangerous. When I moved to Los Alamos, I shared an office with John Hawley, and he and Chuck Harrington were gracious enough to go in the field with me. I loved putting lines on maps. But Los Alamos at the beginning of the Reagan era was no place for a child of the 60s, and in the fall of 1982 I was lucky enough to return to New England to teach! Paul Bierman was the first student I met! Williams College has been a wonderful home for me, and my colleagues in the Geosciences department have always been welcoming and enthusiastic.

Of course, none of this would have happened without the love, faith, and support of Nancy Nylen, whom I was lucky enough to meet in this city some 40 years ago, and our children Evan and Dylan. Evan just flew in from teaching Dartmouth's Stretch and thinks about fluvial systems. Dylan writes about and plays a mean game of golf, and all other sports, and no home should be without a copy of his book "18 in America". Nancy says that I was away in the field during every catastrophic event when they were growing up, whether it was tornados or just garden-variety trips to the ER. But



2017 Distinguished Career Award winner David Dethier, with his PhD advisor 2014 Distinguished Career Award winner Tom Dunne

who was I with? Why the very people who brought me to this podium, thanks!

The young women coming up in this community are clearly dominant, as you have seen tonight and would have seen last year and the year before. However, making the earth science community more welcoming and inclusive for underrepresented groups must be a long-term and challenging goal for us and for the educational communities of which we are a part. The encouraging, welcoming and mentoring we provide as educators and supervisors and at meetings like this is critical. Our long-term survival as a community depends on it.

As Alan Gillespie said of Paul Bierman decades ago, we don't really shape good students, but we can stand and point them to the correct door and cheer at the right time. I've cheered undergraduates in classes and in the field for some 35 years and I've been fortunate enough to work with many schools that contributed students to Keck Geology projects, and with Will Ouimet. I love the fact that many of these ex-undergraduates, including some that I didn't mentor but claim as my own anyway, are continuing as professors and teachers, as government employees, as consultants and, most important to me, as people trying to make the world a better place.

I helped teach Geology 101 to 540 students each trimester at the UW, so I have a vague sense, looking back 40 years, of what many of you face every day in crowded classes and labs and with students who may not measure up all the time. But I am feeling warm and fuzzy. What a hook we have for undergraduates—the earth, its surficial processes and their interactions with people. What could be more exciting or more important to teach about than our surroundings, and their beauty, fragility and strength, *and* to be able to teach students who share those qualities and will soon inherit the earth. Thanks to all of you.

--- The Farouk El-Baz Award for Desert Research ---

The Farouk El-Baz Research Award was established in 1999 and given for outstanding work in the field of warm desert research. The award is intended to encourage and reward arid-land studies. The 2017 award was presented to **Haim Tsoar** of Ben-Gurion University of the Negev.

Citation by Daniel Muhs

It is an honor and a pleasure for me to present Professor Haim Tsoar of Ben-Gurion University of the Negev (Beer-Sheva, Israel) for the Farouk El-Baz Award for Desert Research for 2017. For more than 40 years, Haim has been an important contributor to our knowledge of the geomorphology of the world's hot deserts.



Farouk El-Baz Award winner Haim Tsoar (center), with citationist Daniel Muhs (right) and Division chair Glenn Thackray (left.).

Haim was born and raised in a desert country—Israel—and has dedicated his career to understanding how the desert landscape evolved there and in other parts of the world, including Asia, South America, and even the planet Mars (though we would certainly consider the latter to be a “cold” desert...!). For his M.Sc. degree at Hebrew University (awarded in 1970), Haim demonstrated his love of the desert early in his career. Inspired by the famous Ralph Bagnold, Haim studied the origin of dunes in the northern Sinai Desert of Egypt. He published this work in 1974 in the *Zeitschrift für Geomorphologie* and it is the first systematic study in this desert relating dune forms to wind regimes and wind strengths. Haim's Ph.D. degree, also from Hebrew University, was awarded in 1977 and here Haim studied under the late Dan H. Yaalon, himself one of the pioneers of desert soils, geomorphology, and sedimentology (and a hero of mine since my graduate student days). Since his Ph.D. was completed,

Haim has published more than 70 papers, in highly regarded journals such as *Sedimentology*, *Geomorphology*, *Journal of Geophysical Research*, *Quaternary Science Reviews*, *Quaternary Research*, *The Holocene*, *Climatic Change*, *Earth Surface Processes and Landforms*, and *Proceedings of the National Academy of the United States*.

Haim's contributions to desert geomorphology span an incredible range of topics. Dunes have been an enormous part of his research of course, with contributions on the diversity of types of linear dunes, the processes of dune elongation, the conversion of one dune type to another, internal structures of dunes, wind flow dynamics and how they shape dunes, and the flip side, how dunes change wind flow regimes. External controls on dune formation have been a recurring theme in his research. Haim has made important contributions to the role of vegetation in dune dynamics and was among the first to recognize the subtle but powerful effect of biogenic soil crusts on dune stabilization, pioneering this work with both field studies and remote sensing. He also challenged the established concept that dune stability is a function primarily of degree of vegetation cover, as conditioned by overall moisture balance, and emphasized instead the role of wind power in determining the degree of dune stability. Haim has also studied human impacts on desert dunes, not only from the historic perspective, but in the context of how human adaptations to desert landscapes must consider the dynamics of dune behavior. Not limited to dunes in deserts, Haim has also written on the processes of desert loess formation, its transportation and controls on accumulation.

Although Haim has been a regular contributor to the scientific community through journal articles, one of his greatest achievements was the publication, with Kenneth Pye, of the book *Aeolian Sand and Sand Dunes* in 1990. This book was the first volume since Bagnold's 1941 classic (*The Physics of Blown Sand and Desert Dunes*) to be dedicated solely to the explanation of the properties of sand-sized particles, the mechanics of sand particle entrainment and transportation, the formation of dunes, the evolution of dune fields, the relation of dunes to climate, and post-depositional modification of dune sands. The book has received glowing reviews and has been the standard text for aeolian geomorphologists and sedimentologists the world over. A second edition, with additional material, appeared in 2008. As of this time in 2017, the book has been cited over 1,000 times.

As a researcher, Haim has made important contributions to desert geomorphology, but he is also a teacher. As a professor at Ben-Gurion University of the Negev, in the heart of the desert, he has helped develop a new generation of researchers. His recent students have made contributions of their own to the stratigraphy, age, and origins of desert dunes in the Sinai and Negev deserts and remote sensing and age of central Asian dune fields. Haim has been an encouraging mentor to students not only in Israel, but also around the world. He is a frequent leader on field trips to the desert and gives clear, exciting, and enlightening lectures, always sprinkled with a fine sense of humor.

It is truly an honor to present Haim Tsoar for this prestigious award.

Response by Haim Tsoar

This award concludes 49 years of a life work on aeolian processes in general and sand dunes in particular. I was first impressed by big sand dunes in summer 1967 in northern Sinai when I was an undergraduate student. The power and magnitude of the active sand dunes were the main reason to ask my mentor at the Hebrew University of Jerusalem to do my master studies on the sand dunes of El-Arish in NE Sinai. Little attention was paid in these years to the field of aeolian processes by geomorphologists and all the chapters on sand dunes in text books referred to the seminal works of Bagnold done on the 1930s. My supervisor came from the field of fluvial processes and could not help me much. I adopted



Farouk El-Baz Award winner Haim Tsoar with Division chair Glenn Thackray and Farouk El-Baz. Photo by Dan Muhs.

Bagnold's book (1941) as my "mentor" and learned from the works of some others who had published original and creative papers on sand dunes, such as Eddie McKee and Andrew Warren.

My master's thesis was on the sand dunes of El Arish and resulted in one paper presented in a meeting and published in 1974 in *Zeitschrift für Geomorphologie*. I continued working in Sinai for my PhD and this time on seif dunes. When I finished my dissertation in 1977, the field of aeolian processes was boosted by the discovery of sand dunes on the planet Mars. It was naturally that I would integrate with planetary scientists to study aeolian processes on planets. That brought me to Arizona State University, to study the dune fields on Mars for two years under the supervision of Prof. Ronald Greeley.

When I returned to Israel, I realized that the sand dunes of northeastern Sinai, where I did my research in the 1970s, were active because of human impact, such as grazing and shrub gathering. That brought me to devote my research to dunes covered by vegetation and the effect of climate and climate change on mobility and stability of sand dunes. These studies integrated with the issue of desertification that was highlighted in the 1980's.

I would like to thank Dr. Dan Muhs for nominating me for the honorable Farouk El-Baz Award for Desert Research and other colleagues who helped with strong letters of support. I am grateful to the Council of the Geological Society of America for selecting me. I am honored and grateful to receive this award which embeds close to 50 years of scientific work on aeolian processes.

Special thanks to my wife, Sarah, who traveled with me to the four corners of the earth in search of sand dunes and appreciates their beauty, my children and grandchildren, that not only supported my absences due to travel but were also enthusiastic to go with me to the field and climb the sand dunes when the opportunity presented itself.

--- Newly Elected Fellows ---

Congratulations to the following Quaternary Geology and Geomorphology division members elected to fellowship in the Geological Society of America in 2017:

Joan L. Forsheim
Kathy J. Licht
Carrie Ann Masiello
Joseph D. Ortiz
Janet L. Slate
Scott D. Stanford
Robert S. Thompson
Todd A. Thompson
Cathy L. Whitlock

Thank You

The Quaternary Geology and Geomorphology Division management board thanks the following people for their help in evaluating this year's award applications for the Farouk El Baz, Mackin, Howard, and Morisawa awards: Ken Adams, Greg Balco, Sharon Bywater-Reyes, Jean Dixon, Amy East, Yahouda Enzel, Missy Eppes, Karen Gran, Greg Hancock, Jon Harvey, Judy Haschenburger, Vance Holliday,

Steve Kite, Isaac Larson, Joe Mason, Eric McDonald, Les McFadden, Jeff Munroe, Phil Pearthree, Eric Portenga, Don Rodbell, Amanda Schmidt, David Thomas, Dylan Ward, Karl Wegmann, and Ellen Wohl.

Student Research Awards

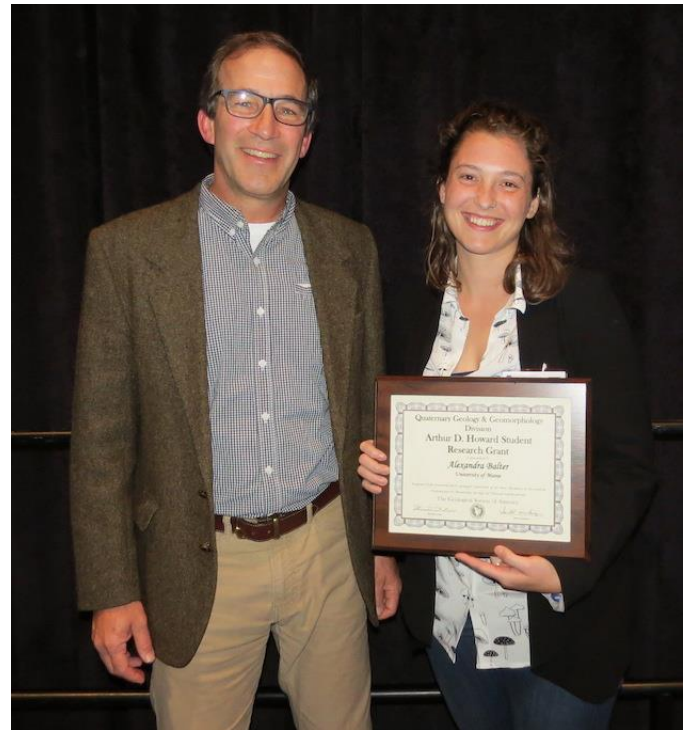
--- J. Hoover Mackin Award ---

The **J. Hoover Mackin Research Award** was created in 1974 to support graduate student research in Quaternary geology/geomorphology. The 2017 Mackin Award for PhD research was given to **Sarah Crump**, University of Colorado-Boulder, for her proposal "*Arctic ecosystems in a warmer world: Reconstructing past vegetation and climate using ancient DNA and paleothermometry on Baffin Island, Arctic.*" Advisor: Gifford Miller.



--- Arthur D. Howard Award ---

The **Arthur D. Howard Research Award** was established in 1992 to support graduate student research in Quaternary geography or geomorphology. The 2017 Howard Award for MS research was given **Alexandra Balter**, University of Maine, for her proposal "*Potential direct geologic constraint of ice sheet thickness in the central Transantarctic Mountains during the Pliocene warm period.*" Advisor Gordon Bromley.

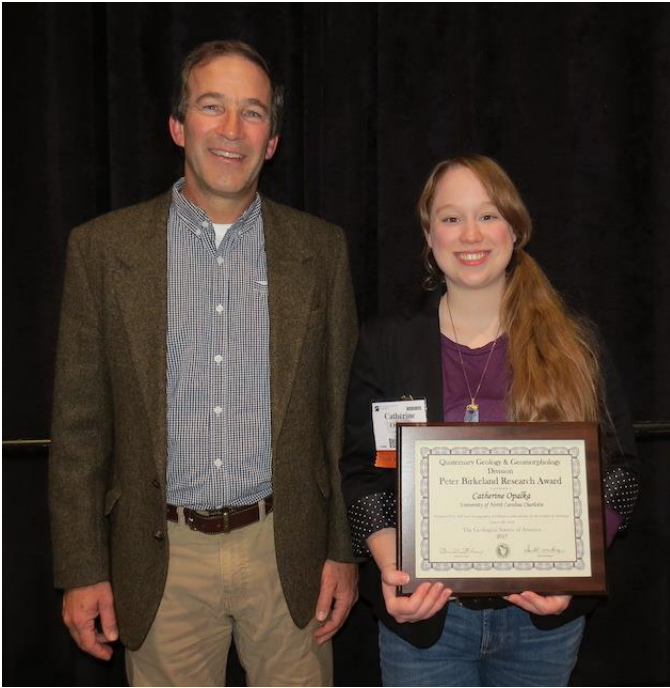


--- Marie Morisawa Award ---

The **Marie Morisawa Award** was established in 2006 to support promising female graduate students in geomorphology. The 2017 Morisawa Award was given to **Elizabeth Olson**, Northern Illinois University, for her proposal "*Holocene climate change in the Atacama Desert reconstructed from the stable isotopic composition of Prosopis tamarugo tree-rings.*" Advisor Justin Dodd.

--- Peter Birkeland Award ---

The **Peter Birkeland Soil Geomorphology Award** was established in 2016 to contribute to the advancement of soil geomorphology. The 2017 Birkeland Award was given to **Catherine Opalka**, University of North Carolina-Charlotte, for her proposal "*Soils and stratigraphy of tributary alluvial fans in the Uwharrie National Forest, NC, USA.*" Advisor: Martha C. Eppes.



--- Robert K. Fahnestock Memorial Award ---

The Fahnestock Memorial Award from GSA honors the memory of the former member of the Research Grants Committee, who died indirectly as a result his service on the committee. The award is given for the best proposal in sediment transport or related aspect of fluvial geomorphology. The 2017 recipient was **Hima Hassenruck-Gudipati**, The University of Texas at Austin, for her proposal "*Advection Sediment Transport signatures on Levees*" Advisor: David Mohrig.



--- The John A. Black Award ---

Through the Black Family's generosity, the Black Award for coastal geomorphology was given by GSA for the first time in 2015. The 2017 recipient was **Paul Russell**, The Ohio State University, for his proposal *Stratigraphic Record of Virgin Island Tsunamis* Advisor: Derek E. Sawyer

Management Board Meeting Minutes

Sunday, October 22, 2016

7:00 PM-9:00 PM, Sheraton Seattle, Issaquah Room

Attending:

Management Board: Anne Chin, Past Chair; Glenn Thackray, Chair; Tammy Rittenour, 1st Vice Chair; Grant Meyer, 2nd Vice Chair; Missy Eppes, 2nd Vice-Chair elect; Scott Burns, Treasurer; Sarah Lewis, Secretary; Anne Jefferson, Newsletter Editor/ Webmaster; Thom Davis, Historian; Lee Corbett, Student Representative; Sarah Crump, Student Representative (incoming)

Panel: Stephanie Day, Amanda Keen-Zebert, *Jeff Munroe, *2015-2017 Panel (outgoing)*

*Stephanie Shepherd, Mark Sweeney, Karl Wegmann, *2016-2018 Panel*

Greg Balco, Karen Gran, Joanna Redwine, *2017-2019 Panel (incoming)*

**Sent regrets for not attending*

Meeting was called to order at 7:20pm and began with introductions.

Treasurer's report:

Scott Burns (Treasurer) reported that in fiscal year 2017 (July 2016 to June 2017) the Division had a total income of \$11,589, and total expenses of \$12,182 for a net loss of \$593. This reflects a decrease in income from dues for the second year in a row. For fiscal year 2018, Scott presented a budget with projected income of \$8000 from dues, \$5000 from donors (including a \$1250 subsidy for students for the Kirk Bryan field trip), and projected expenses of \$13,480, including \$800 toward supplementing awards and International Association of Geomorphologists (IAG) dues of \$665 for a projected surplus of \$185 (see attached report). Despite net losses in the last two fiscal years, the Division still has a healthy reserve balance of close to \$5000. Motion to approve the proposed budget for 2017-18 was seconded and unanimously approved.

Scott also presented a review of the QG&G accounts with GSA Foundation. Most accounts have recovered from losses in 2016 and have continued to grow. Due to a decrease from 5% to 4% in the allowed distribution by the GSA Foundation for 2017 awards (FY2018), the Kirk Bryan and Howard Awards required supplements from the QG&G budget to bring them to standard amounts. For those considering donations (tax-deductible), the Kirk Bryan and Howard Awards are the funds of highest need, followed by our newest funds the Schumm & Birkeland Awards. The inaugural Birkeland Award was given in 2017. The Schumm Award will be given for the first time in 2018. 2016 was the last year that the John Montagne Fund supported a student award, and the money has been redirected by the Fund managers to a Media Fellow at GSA (no award was made in 2017).

GSA Division Chair's Meeting Report:

Items on the chairs' meeting agenda that **Glenn Thackray** (Chair) shared with the division:

- (1) The 2017 Seattle meeting has 7100 attendees, and 393 sessions and 4950 abstracts; QG&G remains a very active Division; as one of 21 divisions or IIGs, QG&G is 6.5% of GSA membership, and 8-10% of abstracts submitted.
- (2) The 2018 Annual Meeting will be held in Indianapolis, Indiana from November 4th - 7th; Field Trip Proposal Deadline is December 1, Session Proposals, Student Award Applications & GSA Fellow nominations due February 1, Abstract Deadline August.
- (3) GSA has launched a long-term strategic planning effort and is broadly seeking nominations for the committee across the membership (anyone interested?)
- (4) There has been an ad hoc committee established to evaluate the GSA [Code of Conduct](#). Accepting the Code of Conduct is required when joining or renewing membership, but is largely expectation-based and lacks both reporting procedures and defined consequences for violations.
- (5) The result of the collective Division self-study requested last year by Council was that the Divisions and the Division structure generally operates well. Divisions have significant influence on the direction of the society (perhaps more than we realize). Interdisciplinary Interest Groups have been re-designated as Divisions.

- a. One of the outcomes of GSA's review of the division self-studies is a recognized need for Bylaw standardization. This is not intended to challenge division autonomy, but to ensure procedures in place if problems arise. For example, in 2014, GSA "administratively added" text on how to remove an officer to the QG&G bylaws. Adding this text did not require a membership vote, as the QG&G bylaw Article I.1 states the Division "...is organized in accordance with Article IX, Divisions of the Society, of the bylaws of GSA and is governed by provisions of that article". As QG&G already has strong governance documents, we should pay attention to this, but do not anticipate significant changes.
 - b. QG&G received a review of our division self-study and was characterized as a strong, well run, and active Division. Our GDD and new procedure for requesting session sponsorship were given as examples that other Divisions might adopt. Retaining our student and early career members and communicating our science were self-identified challenges that GSA encourages us to work on.
- (6) There is discussion of a possible restructuring of the GSA funding model, including increasing annual membership or meeting registration and dropping dues to divisions. This would significantly change our Division budget and warrants close attention.
 - (7) Headquarters continues to report declines in GSA membership, this year noting that student membership is down 19%. GSA continues to express interest in remaining relevant and maintaining a diverse membership.
 - (8) There was little discussion of the JTPC scheduling process despite the long-standing recognition that it needs improvement. (see below) The JTPC chair for 2018 is Kevin Mickus.

Joint Technical Program Committee (JTPC):

Tammy Rittenour (1st Vice Chair) and **Glenn Thackray** (Chair) our 2017 JTPC "no one died in the process of making this meeting" Reps, shared their experiences to inform a discussion of known difficulties and desired changes to take forward into this year's process. Ultimately, the time that JTPC reps have to influence the process after both the session proposals and abstract submissions is woefully inadequate, and there is very little flexibility in the structure of sessions. While our ability as a Division may be limited in influencing structural changes to the meeting, the following constructive thoughts emerged. First, that we encourage the liberal use of Pardee Symposia and other "special" sessions to expand the platforms and styles of sharing our science, such as creating a half-day QG&G symposium to include all award lectures or other division gathering scientific endeavors. Second, to creatively use the GSA format. For example, allow 5 minute talks with 10 minutes of discussion. Third, in addition to continuing the online advance request system for Division sponsorship, we also give the Division (session proposers & abstract submitters) some guidelines for how they can help give the Division optimum flexibility. Tammy and Grant our 2018 JTPC "we won't get it if we don't ask for it" Reps have the board's full support in continuing to ask for more flexibility throughout the process.

Division T-shirts & Hats:

The Division T-shirts and hats were purchased in 2013, largely as a response to development of a Division logo. While they have been offered above cost (we are not allowed to "sell" them), as of the end of the 2016 Denver Meeting, we had not yet covered the original expense. Selling the merchandise each year requires large tubs to be transported to and from each meeting and stored by GSA at Headquarters, and arrangements made for the sales at the Annual Meeting by the Board. This is no longer a good use of our time & resources. **Sarah Lewis** (Secretary) proposed that the Division T-shirts and hats be liquidated at the 2017 Award Ceremony & Reception at \$5/each (\$10/hat), and then offered FREE at the end of the evening, with any remaining items to be donated or used as give-aways by the Board. The motion to liquidate the merchandise was seconded and approved unanimously. The board does recognize that there is general interest in QG&G merchandise available among the membership, and might consider future items such as stickers or hats.

Inventory and Donation History for QG&G Merchandise:

	Inventory of Items (No.)	Donations Received	Cumulative Profit or (Loss)	Approx. Market Value of Items
2013 Purchase	425	~	(\$4275)	\$6375
2013 Meeting	285	\$2100	(\$2175)	\$4275
2014 Meeting	239	\$690	(\$1485)	\$3585
2015 Meeting	210	\$435	(\$1050)	\$3150
2016 Meeting	145	\$315	(\$735)	\$1735
2017 Meeting	16	\$330*	(\$405)	0

2018 Inventory: Hats Only (short bill): 16.

**Mary Kerns of GSA reported (post-meeting) that we collected \$330 in the 2-hour window at the awards ceremony. The 16 hats remaining will be used as give-ways by the board in 2018.*

Review of Groundhog Day Document (GDD):

Sarah Lewis (Secretary) requested feedback on the draft revision of the Groundhog Day Document distributed to the board and panel prior to the meeting. The feedback regarding the revised position descriptions and general organization of the document, including the adoption of a single-page calendar listing key activities and deadlines to be distributed at or closely following the annual meeting and maintained online (see attached example). Edits and contributions should be directed to Sarah, who will keep a running list of changes that require board attention to be discussed via email in the coming months. The motion to continue the revision with the intent of formally adopting prior to the Indianapolis Meeting (ideally on February 2, 2018, so we can keep calling it the **Groundhog Day Document**) was seconded and unanimously approved.

Student Awards Evaluation Procedures:

Grant Meyer (2nd Vice Chair) reported that the student award evaluation process went smoothly this year, utilizing a large review committee (24) and obtaining 5 reviews for each proposal. With the addition of new student awards, Grant requested a board feedback on the appropriate order of selection of award winners. Currently, the Mackin (PhD) and Howard (MS) are chosen first, then the Morisawa (female). (Because of past complications, the board ceased to award honorable mentions, and does not allow “ties”.) With the addition of discipline specific awards, such as the Birkeland (soils) in 2017, the Schumm (fluvial) expected in 2018, and the Shroder (mass movement) in development, there could be potential conflict in awards. After discussion, the board agreed that the 2nd Vice Chair and Secretary will work together to include such guidelines in the revision of the Student Award procedures.

Division response to harassment within the QG&G community:

Anne Jefferson (Newsletter Editor/Webmaster) facilitated a discussion around the role of QG&G in promoting diversity and inclusion within our discipline. The appearance of RISE (Respectful, Inclusive, Scientific Events) information on the meeting website, the prominent signage throughout the meeting venue and the information that GSA is evaluating its Code of Conduct, suggests that GSA is aware of the issues within the community. However, the QG&G knows of no formal response from the Society to recent high profile events. In the absence of guidance from GSA, we considered taking proactive steps. Some possibilities:

- Include statements of inclusivity (including RISE) on the QG&G homepage and in messages to the membership.
- Explicitly promote the nomination of women for our Division Awards and GSA Fellowship.
- Recommend that the GSA include procedures for reporting and consequences for violations in their revised Code of Conduct.
- Request that GSA develop or support the development of formal guidelines for field safety, and that these be made widely available including direct distribution to student grant recipients.

The board concluded that while it is not appropriate for the Division to develop or adopt policies on harassment, explicitly addressing this difficult issue is in the best interest of the community. The Division encourages members (as individuals) to start conversations within their own research groups and institutions.

Other Business:

Bill Monaghan, Henry Loope and Jose Antinao, emailed the Division officers (4/10/18) offering to lead the Kirk Bryan Field Trip for 2018 in Indianapolis. The proposed trip will “focus on chronology, stratigraphy, and processes related to the advance and retreat of the Laurentide Ice Sheet as it arrived and retreated from the “terminal moraine” 28-20 ka”. The motion to accept this proactive and appropriate offer was seconded and approved unanimously. Tammy and Grant as JTPC reps will work with Bill Monaghan to make sure his trip is identified as the Kirk Bryan Field Trip, and strongly encourage them to run the trip on Saturday or Thursday, and not during the meeting.

The selection of candidates for the Management Board and Panel has fallen to the outgoing past chair and the secretary since at least 2005, despite the bylaws and GDD stipulating that this is a duty of the Past Chair. The inconsistency in Outgoing/Past Chair likely developed because of the timing of the nomination process relative to the Fall Meeting. As the timing of the election has shifted to later in the year, there is no longer a compelling reason why the Past Chair cannot take on this duty. The motion to reinstate the Past Chair as head of the Election Nominating Committee was seconded and approved unanimously.

Recognition of Service:

We thank outgoing Past Chair Anne Chin, outgoing Student Representative Lee Corbett and 2015-2017 Panel Members Stephanie Day, Amanda Keen-Zebert, and Jeff Munroe for their service to QG&G.

Business Meeting and Awards Ceremony:

The annual awards ceremony and reception was held Tuesday, October 24th, 7-11 PM at the Washington State Convention Center. In addition to presenting the Division’s student and professional awards, the management board provided an update to the membership on the financial status of the division and solicited nominations and proposals for the coming year and the Indianapolis 2018 meeting.

Meeting adjourned at 9:20 pm

Minutes approved via email vote November 2017.

QG&G Division Photo Contest

We’re looking for photos of the landscapes, activities, and people that make Quaternary Geology and Geomorphology great. We’d like to feature your photographs on the QG&G Connected Community web page, on our Facebook page and Twitter feed, and in future editions of the newsletter. We particularly need banner photos (1200 by 250 pixels) for the web page. If you have a photo you’d like to see featured, please send it to Newsletter Editor/Webmaster Anne Jefferson at ajeffer9@kent.edu. The top three photos submitted by November 1, 2018 will receive an exclusive, limited edition QG&G division short-bill hat.



Dry Falls, Washington, featured on a GSA 2017 pre-meeting field trip. Photo by A. Jefferson.

Division Elections

Your voice is important in our upcoming June election. There are two important sections on this year's ballot: bylaw revisions and election of officers. Read on for more information on each.

--- Bylaw Revision ---

Bylaw review and revision was requested of all Divisions by GSA Staff in 2018. The intent was to ensure that each Division's bylaws included the minimum basic information to legally and ethically inform governance of the Divisions. A template was provided with suggested organization and language.

QG&G's bylaws have seen little revision in recent years, largely due to the development of the Groundhog Day Document (GDD) in 2000, which contains extensive information on the procedures and policies of the Division. The last bylaw revision was approved by membership vote at the 2013 Business Meeting & Award Ceremony, and confirmed by GSA Council in April 2014.

In April 2018, Division Secretary (Sarah Lewis) and Chair (Tammy Rittenour) compared the 2014 QG&G bylaws to 1) current structure and practice of the Division and 2) the template provided by GSA. In addition to rewording to improve clarity, bring into alignment with current practice, or conform to template (see track changes version), the following changes are proposed:

- Addition of *Article VIII on Awards* to explicitly define primary Division Award and handling of other awards.
- Addition of Sections on *voting rights, bequests, expenses of the management board, election procedures, re-election, **impeachment**, appointed members of the management board, program committee, other division representatives, and other awards*. **The addition of the section on *impeachment* is REQUIRED by GSA.** All other sections are strongly suggested. The wording in the new sections may be a) from template, b) pre-existing text moved from elsewhere in document, c) new language drafted by Sarah & Tammy.
- Addition of language to individual existing sections including *financial responsibility*, and *changes to bylaws*. This language is from the template.

The actual policy changes (blue highlighting in track changes document) are:

- Article IV.4 Resolution of a tie-vote for Second Vice Chair would be decided by the Management Board (proposed, template text) rather than a run-off vote (current practice).
- Article IX.2 In addition to a vote by the Management Board (current practice), an amendment to the bylaws may also be put before the membership for vote if requested by 10% of division members (proposed, and conforms with procedures to modify GSA Constitution)
- Change of position name from Newsletter Editor / Webmaster to Communications Coordinator. While the position still edits the newsletter and has responsibility for the website, this position also has responsibility for coordinating outreach and social media. The title of Communications Coordinator better reflects the current office.

--- Candidates for Election to the Management Board and Panel ---

To help you make an informed choice among candidates, here are the biographies for the two candidates for Second Vice Chair. The Second Vice Chair serves one year, before running for election for First Vice-Chair, then Chair and Past Chair.

Second Vice-Chair 2018-2019 (1 year term)

Eric Leonard. *Education:* BA, University of California, Berkeley (History); MA, Simon Fraser University (Geography); PhD, University of Colorado, Boulder (Geological Sciences). *Experience:* 1981-present Inst./Asst./Assoc./Full Professor, Dept. of Geology, Colorado College; Chair of Geology Department 1996-2001, 2005-2006; Director of Southwest Studies Program 2012-2015. *Professional Affiliations:* GSA, AGU, AMQUA. *Awards:* Colorado College Thomas M. McKee Professor of Natural Sciences; GSA

Fellow. *Research Interests:* Glacier chronology, paleoglaciology and paleoclimate in the Rocky Mountains; glacial lake sedimentation; alpine glacial and periglacial processes; active tectonics and landscape evolution in the Rocky Mountains and Chile.

Julie Brigham-Grette. *Education:* B.A. Geology, Albion College; M.Sc. and Ph.D., Univ of Colorado-Boulder. Post-doctoral Fellow, Univ of Bergen, Norway, 1984-1985; Univ of Alberta, Edmonton, 1985-1987; At UMass-Amherst since 1987. *Professional Affiliations:* Member, Arctic Logistics Task Force for NSF Polar Programs 1996-1999; 2000-2003, Member of NSF -OPP Office Advisory Council 2002-2004; 2-term Chair, International Geosphere/Biosphere Program's Science Steering Committee on Past Global Change (PAGES) 2004-2008; President of the American Quaternary Assoc, 2004-2006, Secretary 1990-1998; US representative to Intern. Continental Drilling Program, 2003-2008; Member, US co-chief scientist of the Lake El'gygytgyn Drilling Project 2000-present; Polar Research Board, National Academy of Sciences 2008-present, Chair 2014 to present; External Advisory Committee to LacCore, University of Minnesota, 2007-present; Chair, AGU Paleoceanography & Paleoclimatology Focus Group 2010-2012; *Awards:* Geological Society of America Fellow, 2002; American Geophysical Union Fellow, 2016. *Research Interests:* Arctic marine & terrestrial paleoclimate records of the Late Cenozoic to recent, the evolution of the Arctic climate, especially in the Beringia/Bering Strait region.

Other officer positions up for election on the ballot are Chair, 1st Vice-Chair, and Secretary. Candidates for Chair and 1st Vice-Chair were previously elected to 2nd Vice Chair and are continuing the rotation through the sequence of one-year positions. The Secretary has volunteered to serve an addition two-year term.

Chair (one-year term): Grant Meyer (or Write-in)

1st Vice-Chair (one-year term): Martha-Cary "Missy" Eppes

Secretary (two-year term): Sarah Lewis (or Write-in)

Panelists

Panel members comprise the committee that selects the winner of the Kirk Bryan Award and may be asked by the Chair to assume, in accordance with their interests and skills, tasks or projects that contribute to the Division's success. Panel members serve a **two-year term**. You may **vote for three (3) candidates**:

Mark Bowen. *Education:* BS and MS, Missouri State University; PhD, University of Kansas. *Experience:* Assistant/Associate Professor, Department of Geography and Urban Planning, University of Wisconsin Oshkosh, 2011 - present. *Professional Affiliations,* GSA, American Quaternary Association (AMQUA), American Association of Geographers (AAG). *Research Interests:* soil and fluvial geomorphology, paleoclimates and environmental change, spatial analysis / digital terrain analysis.

Kristin Jaeger. *Education:* BA, Colorado College; MS, University of Washington; PhD, Colorado State University. *Experience:* Geomorphology consultant, Hood River, OR, 2009; Post-doctoral fellow, University of Washington; 2010-2012, Asst. Professor, School of Environment and Natural Resources, Ohio State University; 2012-2015, Research Hydrologist, USGS Washington Water Science Center, Tacoma, WA, 2015-Present. *Professional Affiliations:* GSA, AGU. *Research Interests:* Flow permanence and intermittency; mountain headwater and alluvial river geomorphic processes; sediment production; large in-channel wood.

Brad Johnson: *Education:* BA, Hope College; MS Idaho State University; PhD, University of North Carolina - Charlotte. *Experience:* Assistant Professor, Davidson College, 2011-2017, Associate Professor, Davidson College, 2017 - present, Chair of Environmental Studies, Davidson College, 2018 - 2022. *Professional affiliations:* GSA; QG&G and Philosophy of History of Geology. *GSA service:* Field trip co-leader southeastern GSA Charlotte; Reviewer for QG&G Graduate Student Awards; Reviewer for GSA journals; convener annual Undergraduate Research Talks at National GSA. *Other service:* Soil and Water Conservation District Supervisor; consistent peer reviewer (grants and manuscripts) . *Research interests:* post-glacial landscape

evolution; soil geomorphology; climate-landscape feedbacks in rivers and dunes; headwater stream systems; human-landscape interactions.

Shannon Mahan. *Education:* BS, Adams State University. *Experience:* Geologist, USGS 1987-1997, Research Geologist and Luminescence Geochronology Lab Director, 1997-present. If you're counting that's over 30 years in one place. *Professional Affiliations:* GSA, AMQUA, FEW, and AWG. *GSA Service:* Rocky Mountain Section Executive Board Member-at-large (2015-2016), Rocky Mountain Section Executive Board Secretary (2017-2020). *Other Service:* AWG Laramide Chapter President (2008-2013), (Rocky Mountain Regional Manager for Federally Employed Women (FEW) (2016-2018), Editorial Board for *Ancient TL* (2016-2020), Member of the INQUA Commission on Stratigraphy and Chronology (INQUA-SACCOM) Advisory Board, Executive Secretary to the National Board of FEW (2018-2020). *Awards:* So far no one has seen fit to honor my stunning sense of good humor, intellectual merits, or the fact that I bring my best game to work every day. I will tell you I have nominated a lot of other people for awards so I know it can be done. *Research Interests:* All things luminescence chronology and radiation dosimetry. Also, I don't get out of the dark lab much, but when I do the natural hazards associated with paleofloods, earthquakes, and Pleistocene death traps get my attention.

Eric McDonald. *Education:* BS, Humboldt State; MS, Washington State; PhD, University of New Mexico. *Experience:* Research Associate in Soil Science, Washington State University 1985-1987; Post-Doctoral Research Associate, Washington State University 1994-1995; Post-Doctoral Research Associate, Los Alamos National Laboratory 1995-1998; Asst./Assoc./Full Professor, Desert Research Institute (Reno) 1998 to present. *Professional Affiliations:* GSA, AGU. *GSA Service:* Review of service and student awards. *Awards:* John Young Award: Best Senior Thesis, Humboldt State, 1985; GSA J. Hoover Mackin Award, 1991; Nazir and Mary Ansari Medal for Excellence in Science, Desert Research Institute, 2009. *Research Interests:* soil science, geomorphology, vegetation dynamics, geochronology, and Quaternary landscape evolution across the western U.S., Baja California, Spain, Chile, and Israel.

Dylan J. Ward. *Education:* BS & MS Virginia Tech; PhD University of Colorado. *Experience:* 2010-2012, Postdoctoral Fellow, University of New Mexico; 2012-present, Assistant Professor, University of Cincinnati. *Professional Affiliations:* GSA, AGU. *GSA Service:* 2015-2017, Alternate reviewer, GSA Student Research Awards; 2017, QG&G Student Awards panelist; 2016 GSA Annual Meeting session organizer. Reviewer for Geology. *Other Service:* Associate Editor, Catena; Reviewer for JGR, GRL, ESPL, Geomorphology, others; NSF proposal reviewer and panelist. *Research Interests:* Landscape evolution in response to rock type variability and climate change; landscape as a paleoclimate proxy.

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