



FOUNDATIONS

NEWSLETTER OF THE GEO2YC DIVISION OF THE NATIONAL ASSOCIATION OF GEOSCIENCE TEACHERS

In this issue:

- From the President
- Outstanding Adjunct Faculty Award
- GSA Session to Honor Heather Macdonald
- Career Connections Mentoring Workshop
- Opportunities for 2YC students and faculty
- Earth Educators Rendezvous
- Members Gallery - Pencil Photos and Payson Field Trip
- Editor's Note and Submission Deadlines



[Link to Geo2YC Webpage](#)

Cover image: West Peak, Superstition Mountains, Payson, Arizona. Jeff Simpson



From the President

Joy Branlund, *Southwestern Illinois College, Granite City, IL*

The grades on my first college geology exams were not encouraging; I was not a natural geologist. I empathize with my students when I return that first graded exam, and hope that they can be motivated by something other than grades.

Thinking back, the realization that I could be a geologist came when a faculty mentor commended my observational skills during a field trip. I remarked that a certain rock closely resembled another that we saw earlier – and didn't think this was very insightful. The compliment that I received made me think that I had some skill at being a geologist! And while that was only my first year of college, that sense of

belonging led me to change my major to geology during my sophomore year and keeps me grounded in my geoscience career today.

For people who don't yet share the geoscience identity, or even the college-student identity, words of welcome (like the compliment I received from my professor) are incredibly important. They can provide motivation - students who struggle on their first exams can learn to thrive in college and maybe even become exceptional geoscientists.

We don't have to compliment all of our students, but we should look them each in the eye, greet them by name, and express interest in their lives. We should make them feel welcome.

Keep in mind that it's even harder for students from certain cultures to feel welcome at college and in geoscience. When possible, provide examples of female and minority scientists, mention the Native Americans or other disenfranchised populations affected by land use decisions, and discuss topics like cultural context and imposter syndrome with your students.

We should also remind our students that they not only belong in the college classroom, but that they belong in the greater world which is the context to our course material. For:

“...the world offers itself to your imagination,
calls to you like the wild geese, harsh and exciting-
over and over announcing your place
in the family of things.”
Mary Oliver (1986)

By the way, I remember in college that two other faculty members encouraged me to join their subjects because they saw some flicker of potential in me. Words of welcome are very powerful; I came very close to changing my field of study to labor history! -Joy

Outstanding Adjunct Faculty Award



Sadie Kingsbury

Mount San Antonio College
Walnut, California

On behalf of the Outstanding Adjunct Faculty Award Committee, we would like to honor and celebrate our Winter Awardee, Sadie Kingsbury from Mount San Antonio College. Her nominator, Dave Mroka stated that, “Sadie strives to engage her students, she is lively, energetic, always in a good mood, and builds relationships with students. I have visited her classroom 3-4 times, and her students are almost always working energetically as teams as she walks around and checks on their progress, and explains something if necessary. I have also been impressed with Sadie's efforts to improve her instruction. She has attended the last three of the SAGE workshops that have been offered in the area. For the last workshop she worked with the workshop leaders and introduced and managed the part of the workshop where instructors and students were introduced to various professional development activities. Sadie would be the first to tell you she has a lot to learn, but she's

always working to learn it. I wish she was a full time member of our department!”

Sadie works hard to find ways to bring students into the geosciences. “I want them to buy into the reality that this indeed is a pathway they could take in their efforts to find a career path and provide for their families. It's all about the buy in. I also do my best to find ways to teach the material in a way that the students can find a connection with it.”

It is clear she has been taking advantage of the SAGE2YC workshops she has attended as she also

mentions, "This semester I continue to utilize strategies I have learned through SAGE 2YC to get the students to really think about how they learn and how they relate to others in the class. I do reflective exercises regularly. I also love to find ways for students to find commonalities with others in class. They have name cards, there is collaborative work, and low stakes group Kahoots and IF-ATs. Implicit bias can certainly play a role in classroom interactions so connections with people who are different really helps break down stereotypes. This can absolutely flow into their other actions on campus. Finally, I think that the power of positivity plays a huge roll in their success as students. I let them know that THEY MATTER every day. I also tell them to "make it a great day," putting the onus on them to shape their day."

Sadie, we are grateful for your service to the Geo2YC Division and appreciate all you do for your students! We are pleased to support Sadie with a one-year complimentary membership to the NAGT Geo2YC Division, and she will be entered into the pool of honorees under consideration for the Annual Outstanding Faculty Award, which is sponsored by a professional development stipend of up to \$750 from Pearson Publishing.

To our readership—tell us about yourself or your adjunct colleagues! What wonderful ideas and strategies are you bringing to your corners of the geoscience world? Please complete an [Outstanding Adjunct Faculty Award](#) nomination today.

submitted by Kaatje Kraft, Whatcom College, Whatcom, Washington, on behalf of the OAFA Committee

Honoring a Leader in 2YC

Heather MacDonald

*College of William & Mary
Williamsburg, Virginia*

Heather MacDonald has a long-standing and crucial role in advocating for, and nurturing, the now burgeoning two-year college (2YC) geoscience community. Her endless energy and insight started in the mid 1990's, and has continued through to the recently completed project called [SAGE 2YC: Faculty as Change Agents](#). Throughout these many workshops and programs, she has devoted countless hours to the recognition, development and future of geoscience education at 2YC's.



We are proposing a **session at 2019 Geological Society of America** meeting that will highlight these many contributions and outcomes, and to thank her for her long-standing support of geoscience education at 2YC's. Please consider contributing an abstract to this session in the upcoming GSA meeting in Phoenix, AZ, 22 to 25 September. Presentations should describe outcomes of the workshops and programs organized and co-organized by Heather through to [SAGE 2YC: Faculty as Change Agents](#) project. We have obtained the support of Geo2YC, NAGT and the Geoscience Education Division of GSA. As of this writing, the session has not yet been officially approved. Please note that **abstracts are due 25 June 2019**.

We are planning on other activities during the session(s), in addition to the presentations, so please make sure to put this on your calendar for GSA. If you cannot attend GSA in Phoenix, and you would like to contribute, please send your thoughts, reminiscences and congratulations via David Voorhees, either by email (dvoorhees@waubonsee.edu) or mail (Waubonsee Community College, Rt 47 @Waubonsee Dr., Sugar Grove, IL 60554). Selected comments will be read at the session, and all comments and other memorabilia will be compiled into a future article in Foundations.

Come ready to share and celebrate.

David Voorhees, Waubonsee Community College; Callan Bentley, Northern Virginia Community College; Kaatje Kraft, Whatcom Community College

Image: wm.edu

Article

Career Connections: Mentoring Workshops for Geoscience Students Held in Conjunction with Other Professional Events

SAGE 2YC Career Connections

[2017 Workshop](#)

[2018 Workshop](#)



Students from Reynolds and Thomas Nelson Community Colleges at the 2018 VGFC Career Mentoring Workshop. Photo by Karen Layou

As members of the Virginia team of the SAGE 2YC Change Agents project, one of our goals has been to leverage currently existing opportunities for geoscientists across the state to advance the broader objective of connecting students to geoscience careers. Each year, the Virginia Geologic Field Conference (VGFC) provides an opportunity for geoscientists to come together to do what we love—get out and see the rocks while discussing some of the latest research on the various physiographic provinces of Virginia. Traditionally, conference attendants are primarily academic and professional geologists, with a few graduate students, and even fewer undergraduates thrown in the mix. In recent years, members of our team have served as leaders of the field conference, and have begun to encourage their two-year college students to participate. This is a fantastic chance for two-year college students to not only interact with other two-year and four-year college students, but also to network with a variety of geoscientists and to gain more field experience. After one recent trip, a student commented that while some of the content was beyond his experience, he loved hearing scientists debate in the field and argue for their interpretations at a given outcrop.

In an attempt to encourage more student attendance and highlight geoscience careers, the Virginia Change Agents team upped the ante in Fall 2017 by running a career mentoring workshop in advance of the VGFC. We contacted six professional geologists, who are personal professional contacts to the Virginia Change Agents, and were also likely attending the field conference. Amazingly, all replied that they would happily participate. These were a diverse group of geologists in terms of employment, educational background, race, gender, and age. The workshop was held the Friday afternoon before the Saturday day-long field trip, in advance of a business meeting and social that opens the conference. Nineteen students participated, and eight were from two-year colleges. Three additional professionals who were attending the conference heard about the event and joined in the discussion, too! Students who participated brought resumes for the professionals to review and received quality feedback on how to structure their experiences, as many of the professionals are responsible for hiring in their respective positions. Two panel discussion sessions followed where students were able to ask the professionals about their daily work responsibilities, their educational backgrounds, and more. We initiated the conversation with questions we asked the panelists to respond to in advance, and the students provided many diverse

questions of their own. At the end of the sessions, all parties agreed that it was an afternoon well spent, so in Fall 2018, we ran the workshop again. During this second workshop, we used a geoscientist “speed-dating” model, where eleven two-year college students rotated among eight professionals to have small group conversations. Students appreciated hearing about the diverse applications of geoscience, and were surprised to hear about how much on-the-job learning and training happens. The professionals enjoyed the opportunity to share their experiences with students--many commented they wished they had more exposure to various geoscience options earlier in their careers. As leaders, we found it to be incredibly exciting to see the interactions in the rooms, not only among students and professionals, but also among the two-year and four-year students. These social interactions seemed to pave the way for more engagement during the Friday evening socials, and on the Saturday field trips as well. Perhaps most exciting of all was a geoscientist who came to VGFC 2018 told us she found her position through networking at the 2017 workshop!

Opportunities

Middle Stone Age NSF Research Experience for Undergraduates in Ethiopia

Undergraduates from two or four year colleges and universities can apply to work in Ethiopia conducting research in archaeology, paleontology, geochronology, geochemistry, and geology.

Applications deadline 1 June 2019 (rolling admissions so apply early!)

This NSF-sponsored Research Experience for Undergraduates (REU) is designed to engage students in the study of early modern humans during the Middle Stone Age, the time period when our species evolved sophisticated foraging behaviors. The REU program combines a month of field work during the winter with a month of museum or laboratory research during the summer.

Students who are incoming college freshmen through juniors and US nationals or permanent residents are eligible to apply. The program pays all expenses associated with the field work, museum or laboratory research, and participation in a national scientific meeting. In addition, students receive a generous stipend for their month of field work and month of museum or laboratory research.

For more information, visit [MSA Undergrad Research.org](http://msaundergradresearch.org) or email MSA-REU@austin.utexas.edu



<http://msaundergradresearch.org/>

Announcements



**EARTH EDUCATORS'
RENDEZVOUS**
NASHVILLE, TN, JULY 15-19, 2019

The Earth Educator's Rendezvous will be held in Nashville this summer

from July 14 to July 19. We are planning a formal GEO2yc social event - probably on Wednesday evening.

There are **opportunities for help with funding**. Participants in the two-day Marine Geology Using GEODE workshop can receive a travel stipend – applications for these stipends are due **March 15**. Some [general travel stipends](#) are available; the applications for these are due **April 7**. You can also earn a stipend (which helps defer travel expenses) if you participate in the Activity Review Camp; applications for the Review Camp are due **May 1**.

If you haven't been to a Rendezvous, it offers a great opportunity to learn new things and network with geoscience educators. The two-year colleges are well represented, so please plan to join us there - the early [registration](#) deadline is **May 1**. Standard registration deadline is July 4.



*Downtown Nashville, Tennessee on the Cumberland River
(worldatlas.com)*

Virtual Poster Showcase



Doing research
this summer?
Present your
research online.

Abstracts
open July

Members' Gallery

Pencil Photos

Callan Bentley in the Franciscan Formation, San Francisco, California



Pillow Basalts



Tafoni (salt crystal) weathering



Blueschist

Payson Area Field Trip

Images by Jeff Simpson

**Payson, Arizona area with Dr. Roy
Scheisser,**
Arizona State University

eology classes from Chandler Gilbert Community College in Arizona took field trips to the west face of the Superstition Mountains to view a complex volcanic history and also to the Payson, Arizona area to view our local sedimentary history. The trips were led by Dr. Roy Schiesser. Jeff Simpson accompanied as did Mike Santoro and Leanne Hegstad and Fabrizio Alfano.



Students explore mudcracks in sedimentary rocks.



Chandler Gilbert CC students explore the granitic rocks around Superstition Mountains.



Students listen carefully to Payson area geology introduction.

As you can see I'm trying a new format for this Volume. I hope that it makes viewing and reading easier for all. Unfortunately, I figured out how to tag the photos after I loaded them and it needs to be done before uploading, so only a few of them have alt text. Future issues will be more accessible. We are never limited by space so please, continue to submit your articles, announcements, opportunities and photos as you create them. The more I get ahead of the deadline, the more timely it can be published. See the modified deadline dates below. -Suki

Deadlines for future *Foundations* issues. Submit your stories, experiences, experiments, photos, awards, etc. to the editor sukismaglik@gmail.com any time prior to each deadline.

- Friday, May 24 for Summer issue
- Friday, August 30 for Fall issue
- Friday, November 22 for Winter issue
- Friday, February 21 for Spring Issue

