

FOUNDARIONS

Newsletter of the Geo2YC division of the National Association of Geoscience Teachers Volume IV, Issue 4: December 2015

Report From Our 2014 Outstanding Adjunct Faculty Award Winner

by Michelle Selvans, PhD

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Being given the NAGT 2014 Outstanding Adjunct Faculty Award has been a great honor, and has provided me with the highlight of my professional development experience this year: attending the Earth Educators' Rendezvous July 13-17 in Boulder, CO. The relatively small size and workshop-oriented structure of the conference allowed me to connect with and learn from a wide range of stakeholders in the field of Earth Science Education.

I particularly enjoyed the workshop Implementing the Next Generation Science Standards (NGSS): Strengthening student understanding of science and engineering practices; I was one of the few K-8 curriculum developers in the room (a position I have been in for a year now) and could therefore lend both that perspective and my experience as a community college instructor to workshop activities. The conversations about the (K-12) NGSS and how those standards can inform collegelevel Earth Science education were particularly interesting because of the wide range of interests in the room, from department heads to 2YC and 4YC faculty, adjunct faculty, K-12 educators, and informal education specialists. I came away with a better understanding of the structure and purpose of NGSS, and concrete ideas of how to use science practices rather than content to structure educational activities. I look forward to putting these into

practice in my courses when I teach again at the college level!

I was asked to co-chair the Teaching Controversial Topics session, which was a great collection of presentations on successful approaches to teaching timely Earth Science topics in both the classroom and informal education settings. I also had several useful conversations with colleagues at my poster Addressing student misconceptions by explicitly discussing values. I drew on my dual background in the Geosciences and Sociology to discuss how I had used a debate structure to give students in one of my Physical Geology courses at Northern Virginia Community College (NOVA) the opportunity to research and discuss federal-level hydraulic fracturing (fracking) policy, and then to summarize their own evidence-based ideas about fracking by writing an editorial that included their values as context.

I am grateful to the NAGT community for the opportunity to have attended this conference, and hope to attend another Rendezvous in the near future. I would also like to thank my colleagues at Alexandria and Annandale NOVA campuses, particularly Victor Zabielski and Callan Bentley, for being excellent resources and support to me while teaching there as an adjunct.



Editor's note: The OAFA annual winner receives a \$700 stipend provided by Pearson to use toward professional development.

President's Column

by Kaatje Kraft

Whatcom Community College, Bellingham, WA

As I sit with a stack of finals to grade, I find this is the time when I'm feeling most reflective about the past year (it's not procrastinating if I'm reflecting, right?). I recognize I have a lot to be thankful for all the while also acknowledging that there is much still to do. Let me start by thanking outgoing president Ben Wolfe, leading us through some rather rocky waters this past year and continuing to serve with fortitude and vision. As you may recall, we lost some of our division officers in this past year and I'm pleased to say that Wendi J.W. Williams from NorthWest Arkansas Community College and Chris Johnson from Salt Lake Community College have both agreed to serve as interim secretary/treasurer and webmaster respectively. I'm grateful to be surrounded by such a great group of leaders in our community and appreciate their willingness to serve. Lastly, I am pleased to formally welcome Brett Dooley as our incoming vice-president currently at Patrick Henry Community College soon to be a San Jacinto College (East Coast to West Coast!).



This quarter has been a busy one (not sure I'd know what to do with a slow quarter), but has also reminded me of the importance of the community we build in our classrooms for our students. As many of our students represent those on the fringe of society, it's the community we build for them in our classrooms and on campus that helps them to keep persisting in spite of their ongoing challenges.

As faculty of this population, supporting each other is just as important. My goal as president is to think about how we create that community for ourselves so we keep rejuvenated and remember why we work as hard as we do. If you have thoughts, please don't hesitate to contact me.



This is an exciting time to be teaching at a 2YC there are some great new resources now available online for us as instructors (and really are great for 4YC/U faculty as well), as described elsewhere in this newsletter. In addition, I'm glad we can continue to celebrate the outstanding work of our overworked and underpaid adjunct colleagues with the Outstanding Adjunct Faculty Award—don't forget to nominate your own adjunct or nominate yourself as an adjunct! Another important reminder is that the Annual GSA Meeting is early next year (9/25-9/28/16), as a result, so are their deadlines. If you're thinking about proposing a session or short course that you think would benefit the 2YC community, be sure to ask for our endorsement (proposals are due by 1 February).

Being a 2YC faculty member isn't without its challenges. Fortunately, when we speak up, people generally listen. I have the good fortune to be attending the upcoming "Heads and Chairs Summit on the Future of Undergraduate Geoscience Education" at University of Texas at Austin (http://www.jsg.utexas.edu/events/future-of-geoscience-undergraduate-education/) in January. As *your* representative, I'm soliciting comments and recommendations of key issues and concerns that should be raised in this meeting. In addition, I'd love to hear about models that are working well. I look forward to hearing from you!

Many warm wishes for a rejuvenating and relaxing break and best of luck finishing up your quarters and semesters.

-Kaatje Kraft

First Regional Traveling Workshop Focused on Course Design held at UWTacoma

by Kaatje Kraft

Whatcom Community College, Bellingham, WA

On October 23, 2015, eighteen instructors from the Pacific Northwest (and one from Houston, TX!) came together for a 1-day workshop titled (Re)Designing your Earth-related course for improved student learning, hosted by Peter Selkin at the University of Washington-Tacoma http://nagt.or g/nagt/profdev/workshops/puget_sound/index.html. Of the 18 faculty who attended, 10 were from twoyear colleges. The four workshop leaders led a series of sessions that helped participants work through one of their existing courses and drill down from the course-level goals and enduring understandings they hoped to achieve, through learning goals and aligning assessments and activities with learning goals, addressing student metacognition, and getting feedback on the changes that they make in their courses. In the workshop evaluation, participants reported that they found the structured time to think critically about their course very valuable, as well as getting feedback from and interacting with their peers who were facing similar issues. All appreciated the active learning aspect of the workshop and the fact that they were engaged in many ways throughout the day. The workshop was the first of NAGT's traveling workshop series focused on course design. You can apply to host a traveling workshop at your institution or in your region - find out more at NAGT's website for the Traveling Workshops Program [http://nagt.org/nagt/ profdev/twp/index.html]. The spring application deadline is March 15, 2016.

If you have questions about the traveling workshop program, you can contact Kaatje Kraft (kkraft@whatcom.ctc.edu) or Erica Zweifel (ezweifel@carleton.edu) in the national NAGT office.

Congratulations to Karen Bridges, 2015 Annual Outstanding Adjunct Faculty Award Winner!

by Karen M. LayouReynolds Community College
Richmond, VA



The Geo2YC OAFA Committee is pleased to announce Karen Bridges as our 2015 Annual Outstanding Adjunct Faculty Winner! Karen was selected from an outstanding group of past Quarterly OAFA Honorees by votes cast by NAGT members. Karen was recognized in the May 2015 issue of Foundations for her efforts to engage oceanography students at Howard Community College, including her work on a study abroad program in Bermuda. In addition to a complimentary 2016 membership to NAGT and the Geo2YC Division, Pearson Education has generously agreed to provide Karen with a \$750 honorarium to support her professional development, such as attending a regional or national conference, participating in a professional development workshop, or the development of a classroom activity. Thanks to Pearson for their continued support of this award for our adjunct colleagues. Congratulations, Karen, and thank you for your hard work as part of the Geo2YC community.

Congratulations to Bernie Dougan, Outstanding Adjunct Faculty Quarterly Honoree!

by Karen M. LayouReynolds Community College
Richmond, VA

The OAFA Committee is pleased to recognize Bernie Dougan of Whatcom Community College as this quarter's honoree. Bernie teaches a wide variety of geoscience courses, including Physical, Historical and Environmental Geology, Honors Seminars, Discovering Geology for pre-service teachers, and even Intro to Hiking!

Kaatje Kraft, also of Whatcom CC, writes in Bernie's nomination, "Bernie is an instrumental part of the geology department at Whatcom. We are a department of two, and he helps to make this program thrive. [W]hen I first arrived, Bernie helped to bring me up to speed in the basics of materials, equipment, and workspace. Every quarter, he offers field trips for his students on the weekends. This quarter, he has arranged (and has for every other year) for a geology field trip by boat to the San Juan Islands for a mapping project of his [historical geology] students. Because he made this arrangement before I got here, [my students and I] are able to benefit, by making it a combined historical geology and oceanography field trip.



Bernie is here during breaks and on his non-teaching days preparing and making the learning experience for his students an outstanding one. His [Discovering Geology] is part of a series he helped to develop with chemistry, physics, and biology faculty that support future teachers as part of an innovative and inquiry-driven curriculum. Students rave about their experiences in his classroom and faculty at our transfer institution (Western Washington) describe how well prepared students are coming from WCC. This is largely attributable to Bernie's dedication. He is an outstanding faculty member and I am privileged to work with him as a colleague."

Congratulations, Bernie, from the executive committee, and thank you for your efforts to foster a strong geoscience program for your students and peers. Bernie will receive a one-year complimentary membership to the NAGT Geo2YC Division, and will be entered into the pool of quarterly honorees under consideration for the Annual Outstanding Faculty Award which is sponsored by a \$750 professional development stipend from Pearson Publishing.

If you are an adjunct faculty working to enhance your classrooms or department, or if you have adjunct colleagues who are doing great things the Geo2YC community should know about, please consider completing a nomination form available at: http://nagt.org/nagt/divisions/2yc/oafa_nomination.html. Your nominees may be recognized in future issues of Foundations!

2016 Virtual Research Presentation Opportunities for Students

by Pranoti Asher

American Geophysical Union pasher@agu.org

The 2016 dates for Virtual Poster Showcases (VPS) have been announced. Now is the time to consider incorporating VPS into a capstone or research or capstone experience for your students.

The effective communication of results is an essential part of the research process; this is a necessary skill for students to develop, whether they are pursuing a career in or out of Earth and space sciences.

Virtual Poster Showcases (http://education.agu.org/undergraduate-students/virtual-poster-showcase/) allow Earth and space science undergraduate (and graduate) students to practice presenting and evaluating research online, eliminating the need to travel. This is an affordable and accessible option for them to build their academic résumé and develop these valuable skills. AGU membership is not required to participate.

You should consider incorporating VPS into a capstone or research experience to:

- 1. Help *all* of your students gain experience presenting their research.
- 2. Maximize your resources with this costeffective option.
- 3. Allow students to complete the research process with the opportunity to present results and learn from peer review.

They only need to take these three simple steps:

- 1. Submit an abstract to Virtual Poster Showcases.
- 2. Prepare and upload their poster and video presentation.
- 3. Judge the posters of their peers online, and receive the comments of peers and expert judges.

Virtual Poster Showcase #1 (for undergraduates) will take place in the spring, and will culminate in a virtual conference.

Virtual Poster Showcases #2 (for undergraduates) and #3 (for graduate students) will take place in the fall, providing an alternative for those who cannot attend Fall Meeting.

>> View the 2016 dates:

http://education.agu.org/undergraduatestudents/virtual-poster-showcase/2016-virtualposter-showcases/

>> Ready to incorporate this into a capstone experience for your students? Email Pranoti Asher.

Where Have You Taken Your Geo2YC Pencil This Year?



The following collection of images are all excellent reasons why you need a NAGT Geo2YC Division pencil – if you haven't already picked one up. If you have, and you've been taken photos of it in use please consider sharing. The images below are submitted to us this quarter by Karen Layou (KL), Pamela Gore (PG), and Randall ("Randy") Richardson (RR).





RR. Location: 39°17'12"N, 76°37'09"W, GSA 2015 Annual Meeting, Baltimore









KL. Location: 41.385, -124.029, Redwood National Park



KL. Location: 48.768, -113.775, Glacier National Park



KL. Location: 41.385, -124.029, Redwood National Park (pencil on lower right)



KL. Location: 40.703, -74.016, Castle Clinton National Monument



KL. Location: 48.767, -113.757, Glacier National Park



KL. Location: 37.410, -76.705, York River State Park

Letter from the Editor

by Tom WhittakerTemporarily unaffiliated
thomasewhittaker@gmail.com

Dear Colleagues,

Thank you for all of your submissions for this newsletter. I apologize that we were not able to get this issue out a little sooner.

If you have the opportunity to recharge the batteries over the holiday season may I encourage you to keep Geo2YC and the newsletter in your thoughts. We are always on the lookout for contributions that will inform and stimulate conversation. Maybe your "Resolution" for 2016 will be to finally write up those musings and get in touch!

If you have questions or comments about the content of FOUNDATIONS, or have suggestions for future newsletter items please contact me at my new e-mail address (see above).

Thank you!