

February 2015 News Notes

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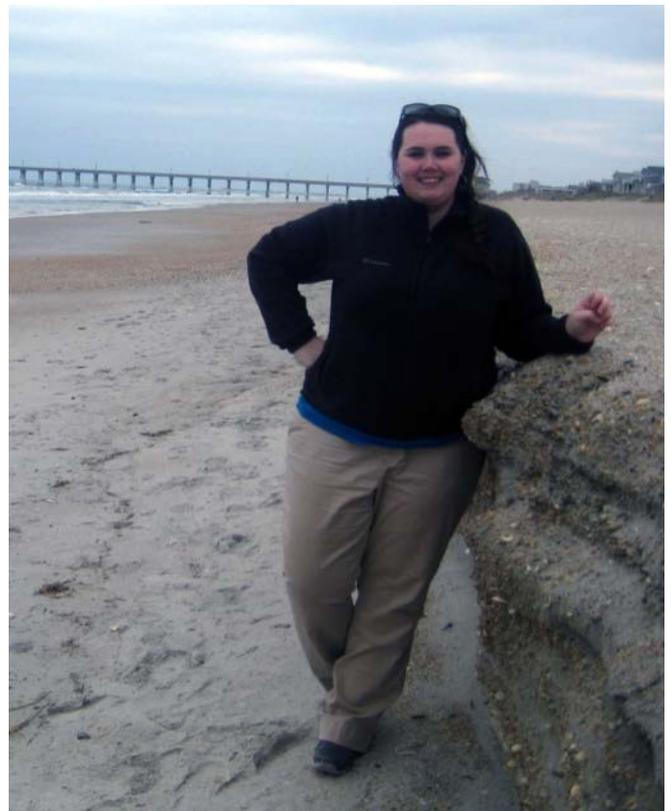
Alumni Change Lives

Kelly Lazar (PhD, 2014) worked with Dr. Leonid Polyak, at the Byrd Polar and Climate Research Center. Here Kelly describes how the Friends of Orton Hall fund helped to further her graduate studies.

The modern Arctic is becoming increasingly vulnerable to the negative effects of climate warming that are disproportionately effecting this region. The rapid retreat of Arctic sea ice is arguably the largest factor effecting this shift towards a warmer climate. My research aims to better understand the ramifications of current sea-ice retreat by reconstructing how sea-ice has changed in the past. This was done by identifying ecological patterns of foraminifera (microscopic protists) collected from sediment cores in the western Arctic, combining this data with sedimentological and geochemical data, and using it to interpret past changes in sea-ice extent during the Quaternary. I defended my PhD dissertation in December of 2014.

I am deeply grateful to the Friends of Orton Hall for covering my travel expenses to the Geological Society of America (GSA) national meeting in Vancouver, BC,

Canada in October of 2014. I would likely not have been able to attend without this alumni support. At this meeting I was able to give a talk summarizing the past four years of work on my dissertation and listen to other talks given by other researchers in micropaleontology and paleoceanography. This meeting is also a great opportunity to meet and develop relationships with other researchers in your field and hear them discuss their current research. I took advantage of this opportunity by attending many talks over the three days I was there, as well as attending the Cushman Foundation Awards Banquet, a dinner sponsored by the foraminiferal society of the Smithsonian Institution. Many high profile researchers in my field were in attendance, which allowed for a unique chance to network within this community. GSA also runs an employment center during the meeting for prospective employers to meet candidates, and I was given the opportunity to interview for a teaching job during this time. It is important that alumni know that giving makes a tremendous difference. In the future, I hope to make similar contributions to Friends of Orton Hall to assist other students in completing their research.



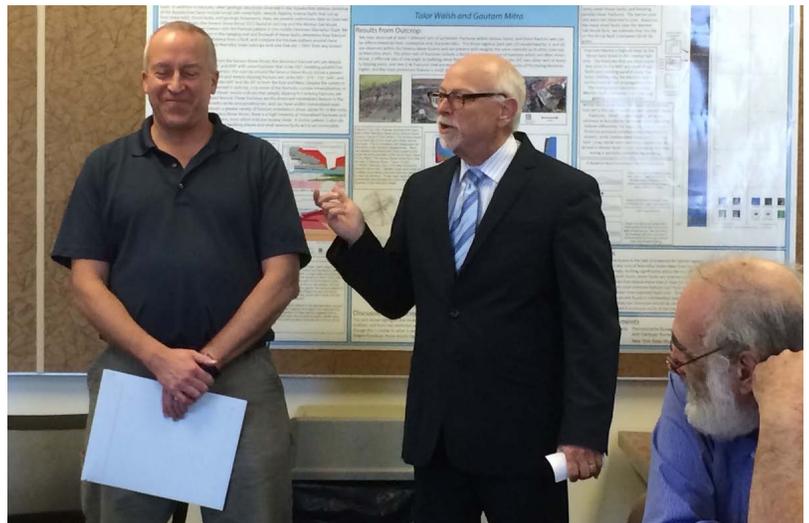
Profs Howat and Bevis study sub-glacial lakes

Prof Ian Howat and Prof Mike Bevis were recently involved in two separate studies that observed rapid drainage of sub-glacial lakes in the Greenland. These two studies were recently summarized [here](#). Prof Howat's group identified an elevation anomaly corresponding to rapid draining of a sub-glacial lake while building high-resolution elevation maps of the Greenland ice sheet using photogrammetric methods. The aerial photo at right shows the crater left behind after draining of the lake (via news.osu.edu). For more on the two studies, check out the full story at the links, above.



Prof Krissek receives service award

Prof Larry Krissek has received the Ohio State University Distinguished Service Award. The Award is presented annually to just a handful of faculty at OSU, and is a great honor. The award was presented in person by the provost, Dr Joseph Steinmetz, during a surprise visit to an SES faculty meeting. The photo at right shows Provost Steinmetz describing the award, as Prof Barton looks on. Congratulations, Larry!



SES Undergrad presents research in Saudi Arabia

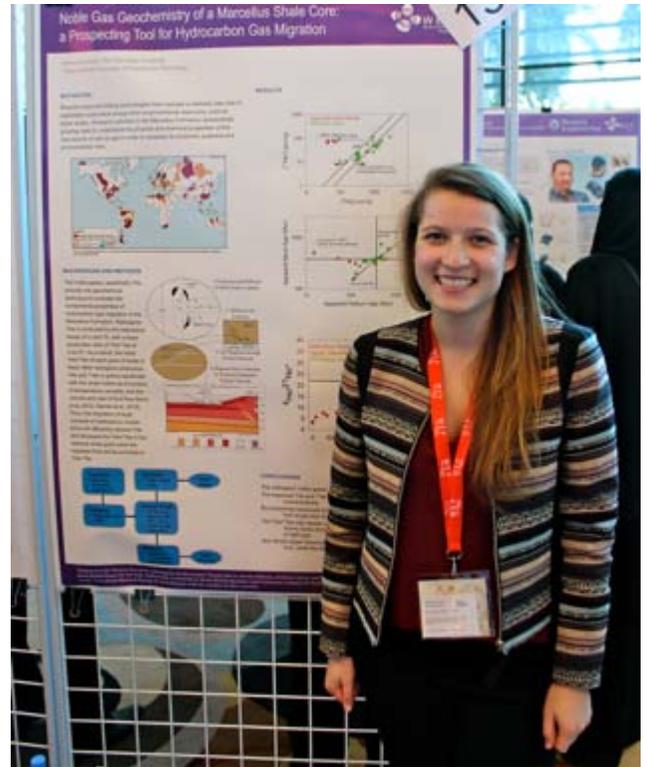
Earth Sciences undergraduate major, Hanna Brouman, BS track in petroleum geology and geophysics and with research distinction, expected Spring 2015, recently attended the Winter Enrichment Program at King Abdullah University of Science and Technology (KAUST) in Saudi Arabia. Hanna was among 50 undergraduate students chosen in a competitive process to which more than 600 students from all over the world applied. All expenses for Hanna's participation in this program were funded by KAUST.

At the KAUST Winter Enrichment Program, Hanna presented her thesis research entitled "Noble Gas Geochemistry of the Marcellus Shale as a Prospecting Tool for Hydrocarbon Gas Migration." Her research was presented in an extensively judged poster competition with judges coming from all scientific fields and from all over the world. As part of the week's activities, she had the opportunity to attend keynote lectures given by distinguished researchers in many different fields including astronomy, the desalinization of water, and recent

developments in robotics. She participated in workshops to learn about the facilities on campus including their incredible machinery. Hanna particularly enjoyed a workshop in their CORE lab which focused on learning how to use several different NMR instruments. She also enjoyed learning about data processing from a SEM.

Hanna intends to continue her research, under the direction of assistant professor Thomas Darrah, for the remainder of her time here at Ohio State and to defend her thesis at the end of Spring 2015 semester. Besides presenting her research at KAUST, she presented her research as a poster at the AAPG student expo last fall in Houston, Texas. She also gave a talk on this same topic at the 2014 annual meeting of the Geological Society of America in Vancouver, British Columbia in last October.

Hanna is very involved in SES. She serves as the president of the Sigma Chapter of Sigma Gamma Epsilon, the Earth Sciences honorary society, and as secretary of the student chapter of AAPG. She is very grateful for her opportunity to travel to Saudi Arabia to represent Ohio State and SES on the global scale and for KAUST for funding her trip.



Brevia

John Shrider (B.S., 1956) has passed away. From the Journal Enquirer ([link](#)), “Prior to retiring in 2004 Phil had been the owner and operator of the former Shrider Fluid Power Company in Manchester for over 40 years.”

The “golden link” between Prof Emeritus Charles Herdendorf and the ongoing story of Tommy Thompson and his (successful) hunt for sunken treasure was described in a piece in the Chronicle-Telegram ([link](#)). Prof Herdendorf’s career and science are highlighted, and the story of Thompson’s expedition is also worth a read.

Prof Lonnie Thompson was highlighted recently in the January edition of [The Polar Times](#). The article focuses on the early days of his career. Congratulations, Lonnie!