

# The KU Geologic Record



---

## Construction to Begin

Contracts have been signed, and the architects are putting the final touches on the plans for the new Earth, Energy and Environment Center. Construction is expected to start soon on the new complex.

To be built in the parking lot of Lindley Hall, the Center will be connected to Lindley and Learned Hall, a part of the Engineering complex, by elevated walkways. The new Center will be a world-class facility, featuring two buildings with a courtyard between them.

Ritchie Hall, named in honor of donors Scott Ritchie (geology BS '54) and Carol Ritchie (music education BS '54) will stand on the corner of Naismith Drive and Jayhawk Boulevard. To the south of Ritchie Hall will be Slawson Hall, named in honor of Donald Slawson (political science '55). Among many other features, the new Center will include a state-of-the-art auditorium, a 3D visualization laboratory, and a multitude of state-of-the-art laboratories. Watch the Department's Facebook page for construction updates. *The GHawker*, which will be published in October, will feature a look at the final plans.

## New Treatise Issue Published

The KU Paleontological Institute has published a new issue of *The Treatise on Invertebrate Paleontology*. Part E (Revised) Volumes 4 and 5 covers the hypercalcified sponges (stromatoporoids, chaetetids, and their allies).

Produced by the world's experts on the fossils, the work includes authors from France, the United Kingdom, Australia, Estonia, Germany, Canada, Belgium, Russia and the United States under the coordinating authorship of Barry Webby, a retired associate professor of geology at Macquarie University in Australia.

Though barely known as living animals, the hypercalcified sponges are important to the fossil record. They have been variously classified with corals, sponges, algae, and a variety of animal and plant crops, before recently being shown to be true sponges (Porifera). But unlike most sponges whose skeletons are largely organic with or without microscopic spicules of calcite or silica, the hypercalcified sponges build a massive calcium carbonate framework.

They have a strange geologic history, being important in the Paleozoic, but then disappearing from the fossil record until well into the Mesozoic era. The group also covers a diverse array of forms. Recognition of hypercalcified sponges in the fossil record will aid paleontologists, paleoecologists, biostratigraphers, sedimentologists, and exploration geologists in their work.

This is the first new hard-copy edition of *the Treatise* that the Paleontological Institute has produced since moving initial publication to the Treatise Online. All chapters of the work were published first online, and then revised for this up-to-date treatment of a group of major reef-forming fossils.

## Stearns & Möller Earn Tenure

KU Chancellor Bernadette Gray-Little has announced that Leigh Stearns and Andreas Möller have both been given tenure and promoted to associate professor.

Stearns studies outlet glacier dynamics in both Greenland and Antarctica, using satellite remote sensing techniques, field based observations, and numerical modeling. Her research addresses questions of short- and long-term ice sheet dynamics by utilizing innovative geophysical technology, developing new remote sensing products, and building numerical ice-flow models. Stearns teaches environmental geology, geomorphology, glaciology and a number of independent studies and seminars.

Möller focuses on combining radiometric ages with petrologic pressure and temperature data to reconstruct the evolution of mountain belts, mostly by studying high-grade metamorphic rocks. Systematic studies on the growth and modification of minerals used for dating and their geochemical fingerprints help to better understand which geological processes are dated by the isotopic techniques. Möller also works in provenance analysis of sediments and sedimentary rocks and new methodological approaches to date the depositional ages of sediments. He teaches historical geology, igneous and metamorphic petrology, and geochronology, among other classes. He co-teaches the geochemistry and tectonics seminar and Field Camp.

## NASA Highlights Stearns' Research

Work published by Associate Professor Leigh Stearns and six colleagues in the *Journal of Geophysical Research* was highlighted in NASA's Image of the Day on May 20. The NASA website published an image that was taken by the Operational Land Imager on Landsat 8, showing Hubbard Glacier in Alaska. In the paper, Stearns and her co-authors show how the glacier is thickening and steadily advancing while other nearby glaciers are thinning and retreating.

## Sigma Gamma Epsilon Marks a Century

Sigma Gamma Epsilon, the national honor society for the earth sciences, celebrated a century of life by gathering in March at KU, the organization's birthplace. About 100 students, several past SGE presidents, and professors from universities that host SGE chapters met to plan the organization's future, learn about its past, and of course, take a field trip to examine the geology of Douglas County. Since its birth with only eight members and one chapter at KU, SGE has grown to include 1,400 members and 91 active chapters throughout the United States. Every year SGE's undergraduate research symposium at the Geological Society of America national convention draws nearly 100 poster entries. Watch *The GHawker* for photos and a more detailed story.

## **McCollums Find New Homes**

The portraits of geophysicist and oil pioneer Burton McCollum (1880-1964) and his brother Elmer McCollum (1879-1967) have been given new homes. Once the paintings adorned the lobby of the 900-student McCollum Residence Hall on Daisy Hill, but the 50-year-old dorm is being replaced by two new dorms this fall and is scheduled for demolition.

When Kevin Boatright, director of external affairs for KU's Office of Research, heard about the plan, he made certain the portraits found appropriate new homes.

Burton's pioneering work in geophysics led to breakthroughs in oil exploration. His portrait will hang at the Kansas Geological Survey. Elmer is credited with discovering vitamins A and D. His portrait will hang in the KU School of Pharmacy. The portraits were painted in 1966 by artist Daniel MacMorris, who is also known for his murals at the Liberty Memorial and The Public Library in Kansas City, MO.

Burton earned a bachelor's degree in electrical engineering from KU, while Elmer received his bachelor's and master's degrees in chemistry from KU.

## **Bowring Elected**

KU Geology is pleased to take note of the recent election of Sam Bowring (PhD '85) to the National Academy of Sciences. Bowring is the Robert R. Shrock Professor of Geology at the Massachusetts Institute of Technology. Congratulations Sam!

## **Heading Out**

Three KU Geology faculty members have been awarded sabbaticals. Heading out are Chair and Professor Luis González in spring 2016, Associate Professor Jennifer Roberts in fall 2015, and Kansas Geological Survey Associate Scientist Geoff Bohling in spring 2016.

## **Seals Named Self Fellow**

Leila Joyce Seals, of Mayagüez, Puerto Rico, a first-year doctoral student in geology, has been awarded a Self Fellowship – one of the most prestigious and lucrative fellowships a graduate student can win. Self Fellows receive financial support totally more than \$165,000 over four years. The fellowship also provides training in communication, management and leadership. Fellows interact with nationally prominent experts and participate in an intensive public policy seminar held in Washington, D.C. Since it was established, eight KU Geology students have been named Self Fellows.

## **KU Geology Carries Banner**

When Marquise Paige walked down The Hill on May 17 for KU's commencement ceremony, he was not only celebrating his own bachelor of science degree in geology, he was also leading the parade. Page carried the banner for the College of Liberal Arts & Sciences, leading the hundreds of graduating CLAS students.

---

# The KU Geologic Record

---

## In This Issue

- **Earth, Energy and Environment Center Construction to Begin**
- **KU Geology Wins Another Self Fellowship**
- ***Treatise* Publishes Two-Part Volume**
- **SGE Celebrates Its Centennial**
- **McCollums Find a New Home**
- **Professors Earn Tenure**

**KU Geology's Facebook page**, [www.facebook.com/KUGeology](http://www.facebook.com/KUGeology) hosts lively discussions, features the latest photos of faculty and students, and reports KU geoscience news. Visit and *Like* the page to keep up to date on all the happenings.

Non-Profit  
US Postage Paid  
Lawrence, Kansas  
Permit No. 229

The University of Kansas Department of Geology  
1475 Jayhawk Blvd.  
Rm. 120 Lindley Hall  
Lawrence, KS 66045-7613  
ADDRESS SERVICE REQUESTED