Cretaceous batholith the size of the Sierra Nevada. This was a many faceted adventure. In remote areas, restaurant owners would sometimes bring their children to meet us; the honesty of youth made clear how strange we look. Aaron is a vegetarian, but I had no such excuse the night they served dog. It's unremarkable.

The Geology 916 trip this year was a great success, but may have been the end of an era. Nine students and I took a full-size van with trailer (for camping gear and rocks) to Wyoming and Montana for two weeks in June. We visited the Laramie Range, Kelsey Lake (only operating diamond mine in the US), Leucite Hills, Atlantic City, Tetons, Yellowstone (picture elsewhere in the *Outcrop*), Beartooth Mts, Stillwater Mine (picture, preceeding page), Powder River Basin, and the Black Hills. We had a pretrip seminar and each student was the expert on one area. The courtyard is now graced with very large samples of clinker from the metamorphic aureole of a burned coal seam near Gillette, leucitite, and Stillwater anorthosite. We returned just days before new university rules took effect for large vans that are caused by valid safety concerns, but will make trips like this will be more difficult in the future.

In August, graduate students **Cory Clechenko, Aaron Cavosie, Jade Star Lackey**, post-doc **Ilya Bindeman** and I traveled to Davos, Switzerland to speak at the Goldschmidt Conference. The geology at the meeting and in the mountains were equally exciting.

At the GSA meeting in Denver this fall, I had the honor of presenting the MSA Award to **John Eiler** (see article elsewhere in the *Outcrop*). My students and I also presented 12 abstracts.

### Herb Wang

This year I expanded my involvement in teaching Environmental Justice (EJ). In the spring I hosted the campus visit of 1999 MacArthur Fellow, Wilma Subra, who has helped minority communities in Louisiana's "Cancer Alley" deal with environmental pollution. In the fall I taught a first-year interest group (FIG), which is a program for new freshmen in which they take three courses together as a cohort. In my FIG, my 19 students took large lecture courses in sociology (Racial and Ethnic Minorities in the U.S.) and general chemistry together with my freshman seminar on EJ, which was the so-called "linking" course. The students were in the same discussion section in the other two classes and most lived in the southeast dorms. For their term project several students visited a southeast Chicago Housing Authority community called Altgeld Gardens and invited a community leader, Cheryl Johnson, to be a speaker at an evening teach-in on EJ. Other students helped me develop a proposal for a summer field course in EJ, which was funded by the Provost's office from a bequest by Ira and Ineva Reilly Baldwin. This course will be offered this summer in which day-long trips will go to landfills, sewage treatment plants, and communities in Chicago and Milwaukee that are affected by pollution. It is hoped that a third of the class will be K-12 school teachers who will then develop curricular materials on environmental issues as they relate to health and social justice. I would be interested in hearing from alumni, particularly in the Chicago, Milwaukee, or Fox River Valley areas, who might be interested in being a local resource for some of these field trip stops.

I have been the group leader for rock mechanics in developing a project plan for NSF that is being called EarthLab, an underground research laboratory for earth sciences that is a part of a neutrino laboratory for physics. In June, Rosemary and I visited the Soudan mine, which is a state park in Minnesota, where you get to go down 2300 feet to visit both the mine and the physics lab. We took in the views of the

taconite mines while we were up in Iron Country. For a change of scenery, we went to France in August where my student **Tyson Strand** and I presented papers at a poroelasticity conference in Grenoble. Rosemary and I visited Lyon and Annecy on either side of the conference.

During the fall semester I was a faculty discussion group leader for the new International Learning Community, which is a group of 50 students living in the lakeshore residence halls. Every other week there was a dinner featuring a speaker with a topic touching on a theme such as "language and identity." At the end of the semester, Rosemary and I attended a luncheon at UW-Eau Claire to see former PhD student **Tim Masterlark** honored as a distinguished young alumnus. Congratulations, Tim!

#### Klaus Westphal

Besides planing and managing the museum exhibit and the educational outtreach programs, I taught the introductory course "Life of the Past," which every semester acquaints about 45, mostly non-science maors, with the history of life on earth. See also the Museum's Annual Report on elswhere in the *Outcrop*.

# FACULTY PUBLICATIONS

Please see individual faculty web pages for listings of faculty publications for 2002 at http://www.geology.wisc.edu/people/faculty.html.

# **EMERITUS FACULTY NEWS**

### C.R. Bentley

The biggest news this year was the launch, finally, of ICESat, carrying the GLAS laser altimeter. (I started work on this project about 15 years ago, so you will forgive me for reporting the launch in this Newsletter, even though it didn't actually take place until Jan 12, 2003.). Spacecraft and instrument commissioning will take a couple of months, after which real data should start to become available. **Ben Smith**, now at the University of Washington, will be looking for early signs of height changes on the West Antarctic ice sheet.

Ice Coring and Drilling Services (ICDS) continues to be my main activity.

- 1. Work is still progressing on the development of the "Enhanced Hot Water Drill" (EHWD) for the IceCube project at South Pole; but the actual emplacement of the neutrino detectors in the ice there will not begin before the austral summer of 2004-05.
- 2. This past season (2002-03) we supported Paul Mayewski's fourth season of ITASE traversing and drilling on a route from Byrd Station to the Pole.
- 3. An ICDS crew completed two one-foot-wide, 300-m deep holes into which the new South Pole seismograph system was emplaced. The deep ice several kilometers from the station and its noise should provide a superbly quiet site for the seismometers.
- 4. The new air-driven shot-hole drill worked like a charm at OnsetD camp in West Antarctica, thanks to some expert tweaking by the ICDS crew. Some 200 60-m shot holes were drilled for **Sridhar Anandakrishnan** in just a couple of weeks! He reports outstanding seismograms from shots in those deep holes.
- 5. Finally, we continue slowly but surely to design a new deep coring drill; our aim is to be able to core  $3000\,\mathrm{m}$  in two seasons. The diameter of

the cores to be obtained and whether to base our drill on the successful but imperfect European drill remain open questions.

#### Dave Clark

Louise and I are still enjoying retirement in northern California. Even though our North Bay friends and family think that our principal purpose in life is to sample all of the gourmet restaurants in Sonoma and Napa counties, in 2002, we also continued our study of Spanish, spent time at the Shakespeare Festival in Ashland, Oregon, visited with family in Utah and Florida, and, related to our new purpose in life, we experimented with different ways of cooking abalone that grandson Jed continuously pulls off the floor of the Pacific for us.

Because all of this, plus growing azaleas, rhododendrons, camellias, roses, lemons, olives, and a variety of herbs, takes most of our time, less time is spent with geologically related things. However, one splendid geologically related item is the fact that grandson Ryan, with a 2002 geology degree from Madison, is now in graduate school at MIT and will begin field work in the Himalayas this summer. In addition, I published a summary and proposal concerned with our Arctic Ocean work in EOS, and spent some time with Diane O'Connor, a graduate student working with Walter Alvarez at Berkeley, identifying conodonts that she and Walter collected in the Great Basin. Also, I was designated a lifetime National Associate of the National Academy of Science, evidently a new category of honorary membership, which in my case is related to previous work as chairman of the Academy's Polar Research Board.

We continue to entertain family and friends who seem to enjoy our pool and mini-redwood forest and we would love to hear from former graduate students who are now scattered around the Earth.

## **Campbell Craddock**

We continue to live quietly in retirement out in Cherrywood. Although medical appointments are more frequent, we are thankful for continued good health. With the collaboration of former students, I plug away at two geological projects near Lake Superior.

Our limited travel was mainly to visit relatives in Minnesota, California, Michigan and Illinois. But in October we journeyed to Decatur, IL, to attend the 50th reunion of Dottie's class of 1952 at Millikin University. It was fun to see all the old gang again; I spent the weekend pushing the wheelchair of a rather large sorority sister.

With sadness I report the passing of my dad John Craddock, on September 16, at age 98. He came to Duluth in 1921 as a Scottish immigrant, and he worked for more than 40 years for Dun and Bradstreet

I was adopted as an infant in Chicago in 1930, and we spent a lot of time on genealogy. Diverse evidence, including blood tests, indicate that my birth father was Guy Siller, who operated the Ford garage on the main street of Houghton, MI. During the summer we accompanied our three children to Houghton so they could meet their two new uncles at their summer homes and view the graves of two grandparents and many relatives.

In the Wisconsin Historical Society library we discovered a ship passenger list showing the arrival of the Siller family in New York from Hamburg on August 16, 1850. The family included Prof. C. F. E. Siller, his wife, four sons and a daughter, and they proceeded to Milwaukee. Prof.



Geology is in the Public Eye on Interstate Highway 39 in a northbound rest area at mile 118 about 27 miles north of Portage. The large Cambrian sandstone boulder (behind sign) has exceptionally clear criss-crossing tracks called Climactichnites. These were made by an extinct animal, which lacked any skeleton and which is thought to have been a large slug-like creature, which sucked up microbes as it crawled over moist, sandy tidal flats. The boulder was contributed by James Schmitt and Gasser Construction Co. of Baraboo and installed in August 2002. The interpretive sign was designed by Bob Dott for the Wisconsin Department of Transportation. (photos by Tom Van Beek of DOT)

Siller was born in 1801 in Danzig, Prussia, and he earned his PhD (Geochemistry!) in 1840 at Jena University, Germany. In 1843 he was appointed the first Professor of Pharmacy at Dorpat University, a German university in Russia (now Tartu University in Estonia-founded 1632). The Tartu University library has a lithograph of Prof. Siller made in 1847; they kindly scanned it and transmitted it to us by the internet. So we now have a picture of this noble ancestor-dead now some 150 years. (See an interview with Cam Craddock elsewhere in the *Outcrop*.)

#### Robert H. Dott, Jr.

The year 2002 held both good news and bad news for me. It began with a splash with unexpected media interest in our Geology article about stranded jellyfish on a Cambrian shoreline in central Wisconsin (see cover of the 2001Outcrop). But the best of the good was an opportunity for a nostalgic re-visit to Antarctica and South America in February and March. Nancy and I spent three weeks cruising with an Abercrombie & Kent 'expedition' to the Antarctic Peninsula, South Georgia Island, and the Falkland Islands. I managed to be geology lecturer for the 80 or so well heeled tourist clients. My five lectures were surprising hits even when I was masquerading as glaciologist and volcanologist. Returning to South Georgia with perfect weather after 30 years was a big thrill. Our timing was especially good what with all the Ernest Shackleton excitement in the air. We actually landed at the very site on Elephant Island where the H.M.S. Endurance crew camped for many weeks while Shackleton sailed to South Georgia for help. We also hiked the last three miles of Shackleton's heroic trek across the unmapped interior of South Georgia to Stromness whaling station. After the cruise, we spent a week on our own in southern Chile, including Cerro Paine National Park, where several of my former students and I had done research in the 1960s and 1970s.