

I do not recommend fieldwork in July there unless you are lizard-like. **Selena Mederos** (MS candidate) is continuing her geophysical work on uplifts and basins in the Utah-Wyoming area, having completed her fieldwork last summer. **Sarah Titus** (MS candidate) decided to do a combined gravity, magnetic, and structural study of some shallow-level plutonic bodies that intrude shear zones in the Sierra Nevada mountains in California. It was fun to wander around the old stomping grounds (I did my PhD research there). **Ryan Clark** is also working on the rocks from the Sierra Nevada as part of his undergraduate senior thesis. **Karoun Charkoudian**, recently graduated from John Hopkins University, is planning to work in the upper Midwest for her Masters' project.

The two new postdoctoral fellows—**Eric Ferre** and **Sarah Tindall**—continue to make the lab a vibrant place to be. **Eric Ferre** is helping out with several of the student projects that use the Anisotropy of Magnetic Susceptibility technique. **Sarah Tindall** is continuing with field research in the western United States and physical modeling.

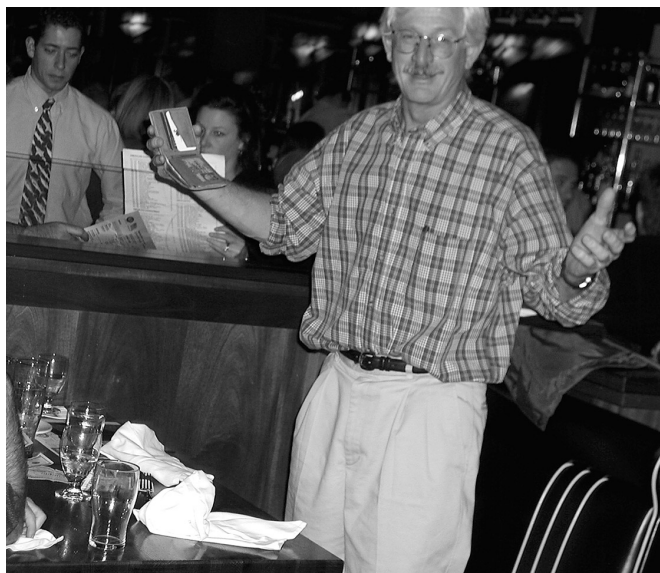
I was able to travel multiple times last year, including Europe three times: For the European Union of Geoscientists in Strasbourg last spring (I was co-convening a session), Spain for the Pyrenees field trip, and the Czech republic where I was a lecturer for a pan-European one-week summer school. I have to admit that a vacation would be just sitting around home for a week. It won't happen anytime soon.

❖ John W. Valley

2001 was a busy year for me. It started with the Jan. 11 publication of my paper with William Peck (UW-PhD 2000) and others on the now famous 4.4 Ga zircon from the Jack Hills of Western Australia (see last year's *Outcrop*). As attention from the science paparazzi died down to an acceptable level, Peck et al. published a second more detailed paper. A third paper by Valley et al. will appear in *Geology* (April 2002). In June, new graduate student, Aaron Cavosie, and I started an expanded project in the Jack Hills with a month in the outback. The high point was collecting 3.0 Ga quartzites that contain the oldest samples yet identified on the Earth. The low point was getting three flat tires on the same vehicle, on the same afternoon, 50 km from the nearest building with a roof.

I spent much of last year editing and writing a new book on Stable Isotope Geochemistry that was published by the Mineralogical Society of America last November. This volume updates the previous MSA volume on the same subject I edited in 1986.

Publication coincided with a short course just before the Boston GSA meeting which was a big success, and



Lawford Anderson seems perplexed. Read John Valley's report below to find out why. Photo by Dave Mickelson.

was attended by 80 scientists, including a number of geo-Badgers: Richard Alley, Ilya Bindeman, Aaron Cavosie, Cory Clechenko, Steve Dunn, John Eiler, Liz King, Matt Kohn, Jade Star Lackey, Stephanie Maes, William Peck, Greg Roselle, Pat Shanks, Joyashish Thakurta, and Julie Vry.

At the GSA meeting, I also had dinner with three incorrigible geo-B's: Charlie Guidotti, Lawford Anderson, and Darrell Henry. The first announced that he had a secret that he would not divulge, while the second agreed to pay, but lost his credit card through a crack in the floor. The ensuing disruption was photographed by Dave Mickelson who conveniently was at a nearby table. This event occurred *before* the Wisconsin alumni cocktail gathering.

I did not learn the dinner secret until the next day at the MSA business meeting when it was announced that John Eiler (UW-PhD 1994) will receive the MSA Award in 2002. This highly prestigious award goes to one person a year for scientific achievement before the age of 35. The list of past awardees is truly impressive.

❖ Herb Wang

In last year's *Outcrop* I described how sponsorship by BP arranged by Jay Nania enabled me to attend a conference of the National Association of Black Geologists and Geophysicists. This led me to propose a summer session forum on Environmental Justice. With lots of help from Barbara Borns in IES, the course was a big success. The eight-lecture series brought together approximately 100 students, staff, and faculty from the university together with participants from the community. The



At a workshop in October in Lead SD, a group of earth scientists and nuclear physicists tour the Homestake Mine. Herb Wang is on the right. Photo courtesy of Herb Wang.

list of speakers and course readings can be found at www.ies.wisc.edu/forum.htm. I returned to this year's NABGG conference to describe the course.

In October the nuclear physicists held a workshop in Lead, SD to explore using the Homestake Mine for neutrino detection. A group of earth scientists led by Lawrence Berkeley Labs was also in attendance. I especially enjoyed a morning tour of the mine down to the 7400 foot level. (See photo above.)

I continue in my role as associate dean for natural sciences and completed my term as faculty director of the Honors Program. In the spring and summer, I and Pat Simms, a reporter for the State Journal, served as advisors to a group of students who revised a handbook devoted to guiding a student to getting the most out of UW-Madison.

Recent PhD's Dave Hart and Tim Masterlark have taken positions with the Wisconsin Geological Survey and USGS EROS data center in Sioux Falls, respectively. Kyle Lewallen continues to do well at Exxon. He sent me e-mail from a ship in the North Sea. Current student Tyson Strand is engaged in creative modeling and theory development of two-phase fluid flow at the pore scale. He presented some of his work at the U.S. Rock Mechanics Symposium in Washington, D.C. in the summer.

❖ Klaus Westphal

Besides planning and managing the museum exhibits and the educational outreach programs, I taught the introductory course "Life of the Past" which, every semester, acquaints about 45, mostly non-science majors, with the history of life on earth. See also the Museum's "Annual Report" on page 67.

Faculty Publications in 2001

Please see individual faculty web pages for listings of faculty publications for 2001, at <http://www.geology.wisc.edu/people/faculty.html>

EMERITUS ACTIVITIES—2001

❖ C.R. Bentley

Ice Coring and Drilling Services (ICDS) has taken up most of my work time (I do allow myself some time off!). 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 for several seasons still.

This past season (2001-02) we supported Paul Mayewski's third season of ITASE traversing and drilling on a route from Byrd Station to old Siple Station at the foot of the Antarctic Peninsula. A team of drillers produced three holes for emplacement of a new seismograph system in the deep, quiet ice several kilometers from Pole; they will return next season for a final reaming. We also built and tested a brand-new air-driven shot-hole drill for use by Sridhar Anandakrishnan for his West Antarctic exploration seismic program next season. Some off-season work will still be required to bring the new drill up to Sridhar's specs. We provided a drill for a fascinating New Zealand project on Victoria Lower Glacier where the local climate is sensitively balanced between Ross Sea and East Antarctic plateau influences. Last but not least, we are beginning on the design of a new deep coring drill for the WAISCORES project on the West Antarctic ice divide (i.e. between the Ross and Amundsen drainage systems).

My GLAS work still goes on—we now anticipate a launch of ICESAT carrying the laser altimeter later this year. Former graduate student Ben Smith, now in his doctoral program at the University of Washington, is the primary "doer" for me on this project.

❖ Carl Bowser

My second year of retirement, and things get no less busy. Geology and geochemistry continue to dominate my life, but the camera lens is assuming a larger and larger role. Blair Jones and I have finally gotten acceptance for our long awaited "treatise" on mass balances in weathering of silicate dominated terrains. In final revision, we hope to have it out the door in time for publication in the American Journal of Science either this year or early next year. Some of the work will be