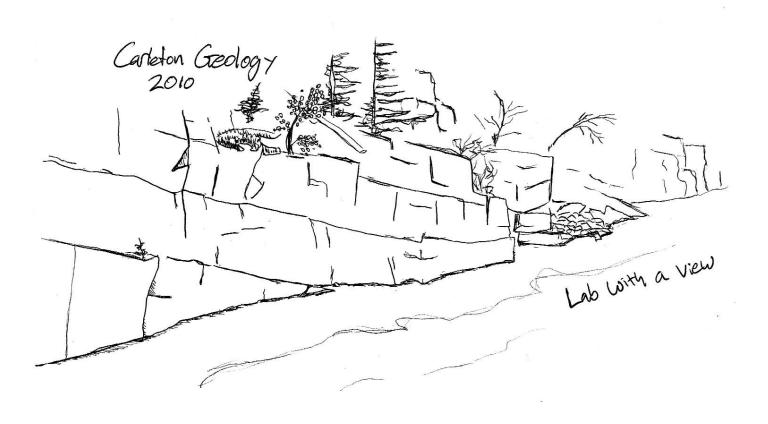
## Carleton Geology Newsletter

Volume XXXV 2010



The cover drawing is the 2010 Geology T-shirt design by Nate Ryan '10.

The Carleton Geology Newsletter is edited by Timothy Vick. Layout by Ellen Haberoth.

#### **Photo Submissions:**

Pictures submitted to the Newsletter can be either in traditional print or electronic formats, but electronic pictures should be medium to high resolution in order to reproduce well on paper. The file size of electronic pictures should be several hundred KB or more.

If you have a change of address or other correction to our address list you may edit it yourself and make sure your listing is done the way you prefer at http://apps.carleton.edu/alumni/directory/

If you have forgotten your username or password call the Alumni Affairs Office at 1-800-729-2586.

Or

You may notify: Alumni Records Carleton College Northfield, MN 55057 (507) 222-4195

E-mail: addresses@carleton.edu

## Department of Geology Carleton College Northfield, Minnesota 55057

June 9, 2010

Dear Alumni and Friends,

In spite of our best efforts, the geology department continues its strong tradition at Carleton with the graduation of 26 seniors completing their Comps on a stunning variety of topics from sulfur isotope fractionation during Martian core formation, to the effects of river morphology on the survival of sturgeon larvae. Please check out the Comps titles listed near the end of this newsletter.

As many of you already know, this year marks the passing of Eiler Henrickson. Eiler's impact on the geology department is immeasurable, and the many notes, letters, and photos we received from alumni since his passing beautifully capture his legacy. We reprinted a sample of these memories in this newsletter and a complete compilation was distributed at Eiler's memorial service during Reunions. You can find a PDF version of the compilation on the "Geology Alums" section of our web site.

Congratulations to Clint Cowan who was promoted to Full Professor! Clint had a busy, yet productive year, organizing and running our first off-campus studies program to New Zealand with 21 students during winter term. Remarkably, he reports that everything came off smoothly. Sarah Titus was on a pre-tenure sabbatical for the entire year, and is looking forward to getting back to teaching, if not grading. Sarah's productive sabbatical resulted in a paper published in EOS, a manuscript (tome) on the San Andreas Fault, a couple of NSF proposals, and she even found time to advise a couple of comps projects related to her research. Bereket Haileab is pushing along his work with students on the surface water chemistry of Rice County and is currently in Africa with Adam Maloof '98 on some great adventure. Mary Savina made the graceful transition from Faculty President to our newly created Faculty Assessment Czar. Perhaps one of the more thankless jobs on campus, Mary is spearheading an effort to coordinate and streamline how programs, departments, and the college document what we do, how we do it, and whether we are doing what we say we are doing. Finally, it is with both a heavy heart and a sense of overwhelming joy that I report that this is my last year as Chair. Bereket will take over the reins starting in the fall as I go on sabbatical for the entire year. Thanks to a wildly successful Keck project in Southeast Alaska, I have at least two, and maybe three, manuscripts waiting for me.

And now the BIG news. After 35+ years working for the Geology Department, Tim Vick can no longer resist the siren song of retirement. (Or perhaps he's tired of sleeping on the ground with a bunch of twenty something's and grouchy faculty?) After passing through the various stages of loss, we are at acceptance, and ready to move on to the celebration phase. On that note, please mark your calendars and plan to attend reunions next year (2011). Tim would like to step down at the end of March 2011, and we hope to have a successor in place by then. Don't tell Tim, but we plan to have a reception in his honor during Reunions and then again during the annual GSA meeting which happens to be in Minneapolis in 2011. Stay tuned.

As always, a big thank you to Tim Vick and Ellen Haberoth for keeping the department running smoothly, and for putting together and editing this newsletter. Please keep sending in your news and accomplishments; we love to hear from you, and may you find peace and joy in the coming year.

Sincerely Yours,

Professor and Chair of Geology

### Remembering Eiler Henrickson '43

**Eiler Henrickson '43, Carleton College Charles L. Denison Professor of Geology emeritus**, passed away on Dec. 10, 2009. Funeral services were held Friday, Dec. 18 at 11 a.m. at Northfield's First United Church of Christ with burial at the Oaklawn Cemetery.

A three-sport, nine-letter athlete as an undergraduate, Eiler served as captain of the wrestling squad, played football and ran track. He was undefeated in dual wrestling meets and in tryouts for the U.S. Olympic team. Henrickson was elected to the Carleton College "C" Club Hall of Fame in its first such ceremony and in 1986 was named to the Minnesota Wrestling Hall of Fame.

Eiler taught geology at Carleton from 1946-87 and also coached the Carleton wrestling team for 12 seasons. In 1957 he led the squad to the Midwest Conference Championship, beating nationally ranked Cornell College for its first conference defeat in 26 years. He was called back to coach the 1975 season and again in 1984, at the age of 63. His academic career was even more spectacular. His 1949 discovery in Michigan's Upper Peninsula of the first uranium in the United States outside the Colorado Plateau made the front pages of newspapers all over the world. His 41-year tenure at his alma mater included serving as department chairman, and emphasizing and implementing field trips for students as an integral part of their education. Annual student field trips to Alaska, his favorite place, were one of these accomplishments. Those field trips are still an important part of the geology major today.

#### Wild West Will Be Wilder Yet, When Eiler Arrives

by Patricia Martin

(Reprinted from the Carleton College VOICE, Summer 1987, Vol. 52, No. 4)

For most people 41 years of teaching would lead to a well-deserved retirement. But Eiler Henrickson is not like most people. Henrickson has played a special role as teacher, friend and coach for generations of Carleton students. Now he is taking his enthusiasm, eternally youthful outlook and vast knowledge of geology to Colorado College.

"I didn't want to just put my feet up on the desk," Henrickson said of his decision to become chairman of the geology department at Colorado College following his retirement from Carleton this spring.

Those who know Eiler Henrickson would be very surprised to see him put his feet up on the desk or show other signs of slowing down.

He came to Carleton as a freshman from Northern Minnesota in 1939. Following his graduation in 1943, Henrickson served in the U.S. Army and worked with the U.S. Geological Society. In 1946 he returned to Carleton to teach. What encouraged him to stay 41 years was what he calls "the spirit of the department - the manner in which students and faculty interact.

"Ever since the department started, we've had an emphasis on field trips and an emphasis on cooperation, not competition. Students cooperate to see how far the group can go."

"Eiler's enthusiasm for field trips is just incredible," Ed Buchwald, Henrickson's colleague in the geology department for 20 years, says. Buchwald recalls a field trip he and Henrickson led to Northern Michigan in the late 1960s. "It started to snow early in the week and the snow began to accumulate. Eiler went to a hardware store and bought brooms so we could sweep the outcroppings and get on with our work. At first the students were skeptical - they even



thought he was a little crazy - but they soon got into the spirit of the trip."

Henrickson made his mark as a scientist early in his career at Carleton when he discovered uranium in the Upper Peninsula of Michigan. "That was one of the more glamorous things I've been involved in," he says. "At the time, the word 'uranium' was like 'gold' in the Gold Rush."

His discovery, the first of uranium in the United States outside the Colorado Plateau, made the front page of newspapers all over the world. "I was in the right place at the right time," he says. "I was one of the first people searching for uranium for the Atomic Energy Commission." He was exploring for a steel company which had a contract with the AEC.

This 1949 find was the first of three uranium deposits Henrickson discovered. Working on contract with private companies, he has taken part in a wide

range of geological explorations, some of which produced results more significant than the uranium discovery.

The opportunity to spend summers doing professional field work and consulting has been important to Henrickson. "This has helped me keep up with what is going on within the profession. It has helped my teaching."

Henrickson said that one of his goals at Colorado College will be to encourage the idea that geology is an excellent liberal arts major, and not just professional preparation. His own involvement in archeological geology, which uses geology to solve problems in archeology, offers an example of how geology meshes with other liberal arts.

In the 1960s Henrickson worked with the

Argonne National Laboratory's "Copper Project" to trace artifacts back to their geological sources. Dick Ramette, a Carleton professor of chemistry, was also involved in the work.

However, Henrickson's career at Carleton was not all science. A three-sport, nine-letter athlete as an undergraduate, he was both captain and coach of the wrestling squad, played football and ran track.

But it was in wrestling that Henrickson had his greatest, and most long-lasting, athletic accomplishments. He was undefeated in dual wrestling meets at Carleton and in tryouts for the Olympic team.

While in the

Army, he taught wrestling and hand-to-hand combat at Fort Benning, and also served overseas. As a graduate student at the University of Minnesota he coached wrestling for two years, years when Vern Gagne was a Gopher wrestler.

When he returned to Carleton, he coached wrestling for 12 years. He stepped down in 1958, when, after completing a Ph.D. in geology at Minnesota, he decided to concentrate on science. The year before, Carleton had won the Midwest Conference championship, the first time in 26 years that nationally ranked Cornell College was beaten for the title. He was called back to coach the 1975 season and again in 1984, when he was 63 years old.

He was elected to the Carleton College "C" Club Hall of Fame in the first such ceremony, and was named to the Minnesota Wrestling Hall of Fame. A strong believer in the value of athletics to personal growth and to education, Henrickson still likes to

work out with students to keep in condition.

He also has enjoyed keeping up with his own four children and five grandchildren. One daughter, Ann Rossow, lives and works in Northfield. Kris Rasmussen makes her home in Austin, where she works with handicapped children. Son Ike, a state wrestling champion in high school, also works with handicapped people and lives in West St. Paul. Kurt, a geology major in college, works for an expert referral system in Eden Prairie.

Henrickson admits he will miss being close to his family. "I will miss Northfield, too," he says. "My association with Northfield has been wonderful. I got to know people, especially through athletics, in the public schools and at St. Olaf, as well as Carleton. And I never could refuse an invitation to talk to civic

groups." He also served a three-year term on the Northfield school board, and was active in organizing youth wrestling programs across the state.

Being with students, both as teacher and as coach, has been a real inspiration, Henrickson says. Students obviously have been inspired by him, too. Ed Buchwald tells of a birthday prank by students years ago: "For years and years, Eiler rode a bike that must have been 30 or 40 years old. I don't know if it was painted with rust paint or if it was just that color all over, but everyone could recognize it.

"One year on Eiler's birthday, students put up a banner changing 'Leighton Hall of

Chemistry' to 'Henrickson Hall of Geology.' Inside, in all the geology rooms, there were signs. You would pull down a chart, and a sign would unroll saying 'Happy Birthday Eiler.' Students also decorated Eiler's old bike like something you would see in a kiddie parade, streamers and all."

On a more serious note, former students have begun to raise money to support The Eiler L. Henrickson Endowed Chair in Liberal Arts. Members of the Class of 1952 have donated \$100,000 toward that endowment, which will honor "the best teacher/friend at Carleton."

[Upon retirement from Carleton in 1987, Eiler moved to Colorado Springs, CO where he was Chairman of the Geology Department at Colorado College for ten years. He then returned to Northfield, where he lived the remainder of his life.]



#### Memories of Eiler

Eiler taught me I could do anything if I would do the work. Thanks Coach! - Paul Fossum '50

It is a sad day for Carleton and former students of Eiler....what a man, what a legend!! I put him right up there with Gould. - John L. Lufkin '62

He was nuts. I still remember a field trip to Michigan, gathered on an outcrop with Eiler explaining at length the significance of the feature we were standing on, and waving his rock hammer in the air. All pretty normal, except we were in the middle of a severe thunderstorm. The students were trying to slink back to the trees, and Ed Buchwald kept calling out, "Eiler, Eiler, we've got to get out of here." Nothing would keep Eiler from teaching.

- Peter Besenbruch '79

At every turn Eiler taught us how to fully live life. I'll never forget him running into the lake on a fall field trip (Black Hills maybe?) carrying a student on his shoulders and throwing her into the chilling lake. Then we all jumped in! What a fun and thoughtful man. - Carolyn White'84

I feel Eiler's spirit and influence is alive in all who knew him, the passion, the care, the fire, the leadership. Remember the flames painted on the side of his car and his response to Dick Ramette, "so what color are the students painting it?" One in a million kind of guy!!! - Rob Alexander '83

I was one of but 5 in the class of 1953; we were a small but very gung-ho group. Our spirit was due mainly to the dedication of Eiler and Dunc as they mentored us in the pursuit of our Carleton education. I have always said they'd cut off their right arm if it would help us to understand the subject of geology. Eiler was not a particularly gifted orator, but his enthusiasm was totally infectious, and this more than anything else powered us. It certainly has stayed with me in my own teaching ever since. Eiler was a storied Carleton athlete, and my only less than nostalgic memory of him involves the fact that that he led calisthenics and wind sprint drills for the football team. He was awesome and I wasn't. I really miss him but I don't miss the drills! - *Gary Ernst '53* 

Eiler played a very important role in my life. I had signed up to take a different Freshman Seminar my first year at Carleton, and after attending the first class, it was clear it was a mistake. Suddenly it became very important to me to take Eiler's Geology 8 (Freshman Seminar) class. The only problem was-being after the first day of class, the enrollment was already full. So there I found myself, for the very first time in a professor's office, trying to persuade Eiler to allow me to take Geology 8 even though there was no available room in the vehicles (this was back in the days of station wagons), which he finally agreed to do even although, as he said with his grin, I'd probably have to sit in someone's lap. That became our private joke the remainder of my first semester at Carleton, and beyond.

I guess that was something that really impressed me--that here was this extraordinary teacher who in my natural inclination I would be very reserved with, but instead he was like an instant friend. I never quite got over how easy it was to talk to Eiler.

Well, that was 37 years ago, and now I've been a professor for 22 years and not too surprisingly I have a similar role in our department, taking a lot of students on their first field trips and supervising field-based research projects. I still follow three rules that Eiler taught me: (1) always look like a geologist, (2) always walk very fast, and (3) it is never cold outside. If no one has patented those rules, they should. Eiler would be pleased. - Jim Evans '76

The incomparable Eiler Henrickson was the epitome of strength and vitality. Eiler was my first geology professor. His devotion and enthusiasm were central to my decision to becoming a geology major. For this life-altering experience, I'm permanently in his debt. I will never forget Eiler in his short sleeve shirts at the snow-covered outcrops on field trips, completely obvious to the weather while the rest of us were huddling into our parkas. I can't express how much I appreciate Eiler's support of my interests in geoarchaeology. He rummaged around in some cupboard and came up with some samples of Bronze Age slag from an archaeological site in Austria--it opened a whole new world for me. He's the reason I was a geology major; he set the whole tone of the department. - Alison Rautman '80

This is only a small fraction of the memories that people submitted to us. You can download a pdf file of the full version of the memories from the alumni section of the Geology Department web site, and, as long as supplies last, we will be glad to mail you a paper booklet of the memories which are a printed version of the pdf file (contact Ellen Haberoth in the Geology Department at ehaberot@carleton.edu or 507-222-4407). A Powerpoint slide show of pictures of Eiler that we prepared for the memorial service at alumni reunion will also be posted for download on the web site.

#### DEPARTMENTAL NEWS

## Clint Cowan Promoted To Full Professor



We are extremely pleased to report that Dean of the College Beverly Nagel has announced that Clint Cowan '83 is being promoted to full professor effective September 1, 2010. Congratulations, Clint!

After graduating from Carleton, Clint earned his M.Sc. in Geology at The University of Michigan in 1985. After receiving his Master's degree, he worked as an exploration geologist with Exxon in Houston, Texas, for two years before entering the Ph.D. program at Queen's University in Kingston, Ontario. He earned his Ph.D. in 1992, and taught at Carleton for one term as a Visiting Professor before taking a position as an International Staff Geologist with Royal Dutch Shell in The Hague, Netherlands. Five years later, in the fall of 1997, Clint returned to Carleton and began his present teaching career.

Clint's principal teaching responsibilities include sedimentology, stratigraphy and paleontology. A large part of his effort goes to creating and running off-campus study programs that include taking students to the Bahamas, Australia and, most recently, to New Zealand.

Collaboration with peers at university laboratories has been essential to Clint's research success. Each year for a number of years, he and his students have presented papers at the national meetings of the Geological Society of America and the American Geophysical Union. Their papers have appeared in peer-reviewed journals (Geology, Journal of Sedimentary Research), and special volumes (American Association of Petroleum Geologists), and most recently as the feature article in an upcoming issue of GSA Today. This last paper is a thoughtprovoking re-interpretation of ancient climate entitled "Sedimentologic Evidence for Tropical Shoreline Ice between the Cambrian Explosion and the Great Ordovician Biodiversification Event", co-authored with former student Tyler Mackey '08, and colleagues at the University of Minnesota.

## Carleton Adds Environmental Studies Major

By Suzanne Rook, The Northfield News
Mark Kanazawa is betting that today's
college students are more interested in studying the
environment than ever.

Beginning this fall, Carleton College will offer an Environmental Studies major. While six students have already changed to the new major, environmental studies grads aren't expected until spring 2011.

Kanazawa, the college's director of environmental studies, has spent years planning and preparing for the program, which until now was offered as a concentration. But with the number of concentrators growing, the school agreed to consider a major. Final approval came in March.

The increasing numbers Kanazawa attributes to the media's focus on the environment.

"A lot of students see the urgency, because they're confronted with it every day," said Kanazawa.

Northfielder and environmental activist Bruce Anderson agrees, saying today's youth are more aware of the environment because they've been brought up learning and hearing about it. And that has gotten a good number of young people believing that "My generation, and my parents' generations have kind of mucked things up, and that they better get on the stick if they want to do something about it," he said.

But not every student interested in environmental studies wants the same type of career. Carleton's environmental studies program incorporates many other subject matters: history, law, art, ethics, education and more.

"It is a very broad field," said Kanazawa. "Some people say everything is about the environment."

You can learn more about the ENTS majors from the web page at http://apps.carleton.edu/curricular/ents/about/major/foci/

#### NSF Awards Carleton \$305,000 For New XRD

We are excited to be able to announce that Carleton has just been awarded a National Science Foundation grant of \$305,000 to be used toward the purchase of a new x-ray diffraction machine.

Authors of the grant proposal were Melissa Eblen-Zayas, Physics Department, Steve Drew, Chemistry Department, and Cam Davidson from the Geology Department. Tentative plans call for the new machine to be housed in the Geology Department and replace the old XRD that we have now. The old XRD, also funded by an NSF grant, was ordered in 1987 and delivered in 1988.

X-ray diffraction has many uses in both geology and chemistry. In geology, we often use it to identify minerals by crushing rocks into a powder and then running the powder through the machine. The machine will analyze diffracted x-rays emanating from the sample and run the results through a database to find the mineral identities and relative abundance.

#### Mary Savina Leads Special Trip to Arizona's Basin and Range Area

by Mary Savina

Thanks to the generosity of the alumnisupported Henrickson Endowment for Field Geology, the department offered a spring break field trip to southern Arizona to senior geology students (class of 2010). Many of the seniors missed out on an opportunity to study geology off-campus in Italy or New Zealand. The program actually started in winter term, as the group of eight students met with Mary Savina and reviewed journal articles on Basin and Range tectonics, porphyry copper deposits, volcanic calderas, Sonoran desert geomorphology, metamorphic core complexes and geophysical studies of southern Arizona (in other words, a set of important geologic features that characterize southern Arizona and aren't found in Minnesota). Students prepared short essays on these topics and also planned the field stops, with much assistance from George Davis and some of his colleagues at the University of Arizona, as well as Clark Arnold '62.

Once we arrived in Tucson, we explored field sites in the Tucson, Tortilla, Rincon, Santa Catalina, Mule, Santa Rita and Huachuca Mountains (and the San Pedro, Madera, Sabino and Santa Cruz valleys). We were helped in the field by several outstanding geologists, including Phil Nickerson, brother of David ('02) and his advisor Eric Seedorff on porphyry copper exposures. We also spent a full day at the University of Arizona, where Pete Reiners '91 and other colleagues hosted us and Willie Guenthner and Kendra Murray (both '07) gave us graduate students' perspective of the geology department. Another highlight was the opportunity to meet many Carleton



Kurt Constenius, a Tucson consulting geologist and author of influential articles on Basin and Range faulting, led us on a walk to see the Pirate Fault scarp which marks the boundary between a range and a basin. Photo by Timothy Vick

alumni at the annual Tanque Verde picnic, hosted by Bob Cote, '56, of Tanque Verde Ranch. We stayed at a wonderful University of Arizona field facility in Florida Canyon, south of Green Valley.

Naturally, the trip provided lots of interesting (and unplanned) experiences. We were (very regrettably - and unexpectedly) rained out on a planned evening trip to Kitt Peak observatory. And the first thing that we did on arrival in Tucson on March 16th (air temperature ~75° F) was to head straight for Mt. Lemmon to play in the snow! The strangest experience (fortunately not a trip-ender) had to be the run-in (as in head-on) with the Border Patrol north of Montezuma Peak and very far away from anywhere. No injuries and our rental SUV was driveable afterwards. You couldn't have asked for a nicer place to wait out the three hours while all the paperwork got done or, for that matter, a nicer group of guys than the border patrol and the Cochise County sheriff's deputy. (Our trip preceded the controversial new Arizona laws on border protection and law enforcement by about a month).

Students saw the trip as particularly valuable in a number of ways:

- Working in a single area helped them put a variety of subjects and skills together. Several students said that this trip filled what they saw as a gap in their course-work how to apply a variety of concepts to the geologic history of a single place;
- Appreciating the breadth of knowledge needed to solve problems in economic geology;
- Interesting to see how events from several different time periods manifested themselves;
- Reiterated "the more things you see, the better geologist you will be;"
- The day at the University of Arizona helped students imagine themselves in graduate school and showed them how faculty and students work collaboratively within a department.

All of us thank our alumni, both donors to the Henrickson endowment and those in the Tucson area, for their help in making this trip so good. If we missed you this time around, we'll catch up with you the next time we run a trip like this.

#### Faculty to Explore Field-Based Science Program at Summer Workshop in Italy

Why would anyone propose starting up an off-campus study program - and a science program, at that - in a tiny village, perched on a ridge in the Apennine Mountains in central Italy?

The answer, according to geology professor Cameron Davidson from Carleton College and Carleton alum and environmental studies professor Laura Cleaveland Peterson '01 from Luther College, is that the village in question - Coldigioco - is a center for geological research and is superbly situated for a field-based program in the earth and environmental sciences.

And though it's not part of the "official" answer, Coldigioco happens to be, Peterson said, "one of those places that people just seem to fall in love with."

This summer, with the support of a grant from the ACM Faculty Career Enhancement (FaCE) Project, Cam Davidson will take a group of faculty from ACM colleges to Coldigioco for a five-day workshop, "Earth and the Environment in Italy."

The workshop will be an opportunity for faculty in environmental studies and geology to see firsthand the resources available at the Geological Observatory of Coldigioco (OGC) and in the surrounding region, as well as to take part in the early stages of planning a possible new off-campus studies program for ACM science students. Also, participants will collaborate on developing innovative field-based exercises and independent projects in the environmental sciences.

Coldigioco draws students and researchers from around the world to study geology. In large part that's the result of the efforts of OGC Director Alessandro Montanari, who has lived and worked in the region for more than three decades and moved to the village in 1992 to create the observatory. Most of the town's buildings are owned by geologists, and the communal-style facilities are tailored to hosting groups of students.

This story was originally posted on the website for the Associated Colleges Of The Midwest at http://www.acm.edu/features/news/120.

# Mary Savina and Suzanne Savanick Hansen Help Win Funding To Study Adding Sustainability To Curriculum

Professor Mary Savina '72 and another alum, Macalester College Sustainability Manager Suzanne Savanick Hansen '89, were among those who recently received Faculty Career Enhancement (FaCE) grants from the Associated Colleges of the Midwest (ACM) to support collaborative faculty workshops with their proposal entitled "Integrating Sustainability into the Undergraduate Curriculum."

The goal of this cross-disciplinary and cross-college collaboration is to develop, assess, and then disseminate well thought-out pedagogical strategies and practical, meaningful, usable activities for introductory courses across the disciplines at our institutions and beyond. Teaching and learning resources that will be developed over the course of the project will be disseminated online.

The project will gather carefully selected faculty representatives of ACM schools to work together in an intentional and structured way over a full year. Plans include an opening workshop in summer 2010 and a culminating workshop and conference in spring 2011.

The planning team defines sustainability education as an experience that allows students to explore the interplay between the social, economic and environmental needs of current and future generations. Among the ACM member institutions is a core of schools recognized as contributing national leadership on sustainability. Yet even among recognized leaders, the emphasis on sustainability is having more of an impact on campus operations than it is on the curriculum. Sustainability education complements the goals of a liberal education in many ways.

Besides Mary Savina and Suzanne Hansen, the planning team includes faculty members from Luther and St. Olaf colleges.

## Nate Evenson '10 Cited For Outstanding Oral Presentation

Congratulations to Nate Evenson '10 who has been recognized for the "Outstanding Undergraduate Oral Presentation" at this spring's Cordilleran Section of the Geological Society of America meeting in Anaheim, California! Nate's title was, "U-Pb zircon geochronology and provenance of the Paleogene–Neogene Kootznahoo Formation, southeast Alaska." The award includes a check for \$400.

## Carleton Science Education Center Wins Science Prize for Online Resources

Cathryn Manduca and the Carleton College Science Education Resource Center have been awarded the Science Prize for Online Resources in Education (SPORE) for their website creation, On the Cutting Edge, which fosters the sharing of ideas about the geosciences, both in terms of teaching and education throughout the field. The On The Cutting Edge website is found at http://serc.carleton.edu/ NAGTWorkshops/index.html

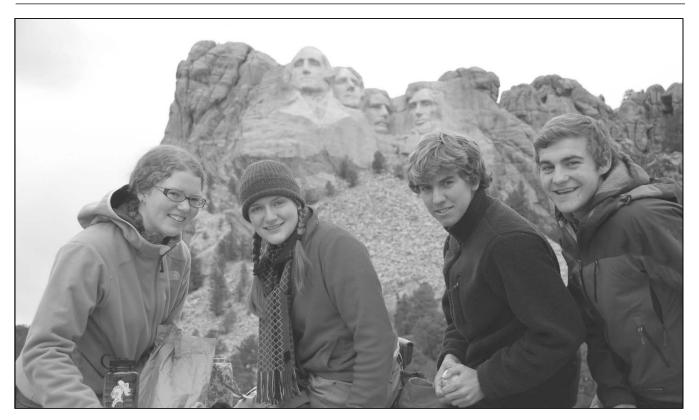
*Science* is published by The American Association for the Advancement of Science (AAAS), the nonprofit science society.

In an era in which knowledge of geoscience is fundamental to handling such pressing issues as climate change and environmental degradation, the web site fosters the sharing of ideas about teaching with the aim of improving education throughout the field.

"In the United States, many students get earth science in seventh or eighth grade - and never have another geoscience class," Cathy said. "Yet now it is especially important for students in general to understand what is facing us environmentally, and for the workforce to have more and better-trained geoscientists."

SPORE was designed to honor and promote the originators of the best online materials available to science educators. The contest bears the acronym SPORE-meaning a reproductive element adapted to develop, often in inhospitable conditions, into something new-with the idea that these winning projects may be the seed for valuable progress, despite widespread challenges to educational innovation. Science publishes an article by each recipient of the award explaining each winning project. The article about the On the Cutting Edge Web site was published in the February 26 issue of Science.

In 2009, visitors to On the Cutting Edge numbered more than 700,000. They visited the site's 3,000 pages a total of 850,000 times. The site contains more than 1,200 classroom activities contributed by the teaching community, and includes step-by-step instructions for how to put new techniques into place. The Web site also includes a wide variety of visual tools for use in the classroom, such as artistic renderings, visually represented data, and video and models of the Earth's processes. Cathy added, "The Web site created a culture of sharing teaching resources that wasn't there before."



This year's fall field trip was a classic: The Black Hills of South Dakota. Among the 30 students who signed up were (from left) Liz Lundstrom '12, Laura Bazzetta '10, Ben Welna '13 and Jon Hillis '13, seen here during lunchtime communion before the altar of American democracy, Mt. Rushmore. Photo by Timothy Vick

#### David Chapman, Bernstein Geologist-in-Residence, Focuses on Global Warming

The Geology Department was pleased to welcome Dr. David Chapman of the University of Utah as our 2010 Bernstein Geologist-in-Residence. Dr. Chapman was here for a week, giving talks and participating in classes and other activities of the Geology Department.

His public talks were entitled, "Global Warming: The Science is Settled. What do we do now?," and "Heat loss of the Earth,"

Dr. Chapman received his B.S. and M.S. degrees in Physics from the University of British Columbia and then spent six years in Zambia, teaching at Canisius College under the auspices of CUSO (the Canadian Peace Corps) and at the fledgling University of Zambia. His interests then turned to geophysics which he pursued at the University of Michigan, earning his Ph.D. in 1976, after which he joined the faculty of the University of Utah.

Dr. Chapman is also Associate Vice President for Graduate studies and Dean of the Graduate School and Director of the Thermal Geophysics Research Group. He leads an active research group studying thermal aspects of geological processes including: global heat flow; thermal state of the lithosphere; geothermal systems; thermal aspects of groundwater flow; thermal histories of sedimentary basins; heat flow and hydrothermal circulation in the sea floor; exhumation of mountain belts; and global warming.

He is author of more than 120 publications including two Scientific American articles, four papers in Nature and one in Science. He has commuted to work for the past 28 years on the same Peugeot 10 speed, enjoys vegetable gardening, and reserves part of each summer for long-distance walking with the recognition that "Britain, France, Italy, and even the High Uintas at 2 miles an hour are just about perfect."

#### Kevin Uno '01 Returns to Teach Intro

We were pleased to welcome Kevin Uno '01 back to the Carleton Geology Department for fall term to teach Introductory Geology.

Kevin's Carleton comps project was entitled "Upper Cretaceous Paleomagnetism from Umbria, Italy: 'Anchored' poles set proposed True Polar Wander event adrift." From that platform he

launched himself into the graduate school of the University of Utah where he completed a masters degree in 2008. His masters research was on the use of geochemical tracers in ice to identify subglacial processes at Storglaciären, Sweden. For his dissertation, Kevin is using stable isotopes to study past and present climates. This includes paleoenvironmental reconstructions in East Africa using carbon and oxygen isotopes in fossil tooth enamel, and using isotopes from modern elephant tusks as a proxy for climate and life history.

One of Kevin's recent papers is Uno, K.T., Cerling, T.E., Nakaya, H., Nakatsukasa, M., Kunimatsu, Y., (2008), Stable carbon and oxygen isotope ratios of fossil tooth enamel from the Nakali and Namurungule Formations, Kenya: Capturing the C3-C4 transition in East African equid diet at ~9.6 Ma, J. of Vert. Paleontology, 28, 3: 155A.

#### Bryn Benford Teaches Introductory Geology

Bryn Benford, who taught Introductory Geology for us last year, returned for another round of teaching Introductory Geology this spring term.

Bryn is a Ph.D. Candidate at the University of Wisconsin-Madison. Her thesis, advised by Dr. Basil Tikoff, is entitled, "An integrated tectonic study of the Jamaica strike-slip restraining bend." Bryn's masters thesis, also done under Dr. Tikoff's supervision, was entitled, "Continuation of the Western Idaho shear zone: South Mountain, Idaho."

Bryn was a geology major and honors student at her alma mater, Franklin and Marshall College.

To keep her sanity and get out of Mudd once in a while, Bryn helped coach the Carleton track team in the triple jump and hammer throw events. Thanks Bryn!



This past winter Clint Cowan directed a new off-campus studies geology program in New Zealand which took 21 of our students to the Southern Hemisphere for the whole of Winter Term with a full academic course load in geology. While this means that most of the participants are enjoying three summers in a row, they did have a bit of a chance to experience snow and ice when they visited Fox Glacier on the South Island where they paused to take this group photo. By all accounts, the program was a huge success. Photo by Andrew Walters '11

#### Paul Riley Helps Out Teaching Tectonics

Paul Riley, a PhD candidate at the University of Wisconsin-Madison, stepped in during winter term to teach Tectonics while Sarah Titus is on sabbatical.

Paul is a 2004 graduate of Franklin and Marshall College's Geoscience program. His senior thesis was entitled "Shear sense indicators in the Snake Range Decollement, NV," and he was awarded the Geology Award as an outstanding geology major. Paul's advisor for his senior thesis was Zeshan Ismat. His masters thesis at the University of Wisconsin, under the supervision of Laurel Goodwin, was entitled "Spatial distribution of deformation bands and fractures in the Pajarito fault zone and implications for vadose zone fluid flow through the Bandelier Tuff, NM." His PhD thesis, being done under the supervision of Basil Tikoff, is entitled "Characterization and organization of fracture systems in the Tuolumne Intrusive Suite, Sierra Nevada Batholith, CA."

Along the way, Paul has gained wide-ranging experience including numerous teaching and research positions, grants, awards, and industry experience interning with ExxonMobil last summer.

#### Duncan Stewart Fellow For '10-'11 Named

Each year, the geology faculty faces the difficult task of selecting a few students to be Duncan Stewart Fellows. The Duncan Stewart Fellowship was established in 1976 by Daniel Gainey, class of 1949, in honor of Duncan Stewart, professor of geology at Carleton for nearly 25 years.

We select the Stewart Fellows based on a combination of excellence in scholarship, a high level of intellectual curiosity, potential for scientific growth, and involvement in departmental activities. As we make this selection, we realize how fortunate we are to have so many talented, interesting, and impressive students within the department.

We are very pleased to announce that Nick Holschuh '11 has been named Duncan Stewart Fellow for the next school year, extending the number of Stewart Fellows over the years to 98. Congratulations Nick!

#### Two Carleton Geology People Awarded NSF Fellowships

We are proud to report that two Carleton geology majors have been awarded National Science Foundation graduate research fellowships. The fellowships provide graduate students with three years of support worth a total of over \$100,000. The fellowships carry annual stipends of \$30,000 plus a one-time allowance of \$11,500 for education-related expenses. Among the ten winners of fellowships this year from Carleton were Kristin Bergmann '04, who is attending the California Institute of Technology, and Sam Kanner '10, who will be attending the University of California-Berkeley.

Also, the eight honorable mentions in the competition from Carleton included geology alums Tyler Mackey and Lydia Staisch, both '08.

## Carleton People Present Papers at GSA and AGU Annual Meetings

The following Carleton Geology Department people presented papers in technical sessions at the annual meeting of the Geological Society of America in Portland, OR in October. Carleton people are indicated in bold face type, and students and alums are indicated with their class years. The papers listed are only those which involved a current Carleton student or employee; many other Carleton alums, too many to list here, also presented papers at the meetings.

Moran, Kelli L., Simpson, Edward L., Hilbert-Wolf, Hannah L. '12, Wizevich, Michael C., Golder, Keenan B., and Tindall, Sarah E. "The Recognition and Implications of the Wood-boring Trace Fossil Asthenopodichnium Xylobiotum in Upper Cretaceous Strata of Grand Staircase Escalante National Monument, Utah."

**Titus, Sarah**, and Liben, Lynn S. "Synthesis of Research on Thinking & Learning in the Geosciences: The Importance of Spatial Thinking for Geoscience Education."

Weil, Arlo Brandon, Yonkee, Adolph, **Statman-Weil, Zoe '11**, and Wicks, David. "Determining the 3-D Kinematic History of the Wyoming Laramide Foreland: Preliminary Results from a Paleomagnetic Investigation of the Triassic Chugwater Group."

Weil, Arlo Brandon, Yonkee, Adolph, Wicks, David, and **Statman-Weil, Zoe '11**. "Determining the 3-D Kinematic History of the Wyoming Laramide Foreland: Preliminary Anisotropy of Magnetic Susceptibility Results From the Triassic Chugwater Group."

Yonkee, Adolph, Weil, Arlo, Wicks, David, and **Statman-Weil, Zoe '11**. "Determining the 3-D Kinematic History of the Wyoming Laramide Foreland: Preliminary Results From Detailed Structural Analysis of the Triassic Chugwater Group."

Holschuh, Nicholas Donald '11, Haileab, Bereket, Nega, Tsegaye, and Fu, Wei-Hsin, "A Preliminary Geochemical Analysis of Spatial and Temporal Variations in the Surface Water Chemistry of Rice County Minnesota Using ArcGIS."

Wizevich, Michael C., Simpson, Edward L., Hilbert-Wolf, Hannah L. '12, and Tindall, Sarah E. "Syndeformational Origin for Internal Laminations of Spectacular Seismogenic Load Structures in the Late Cretaceous Wahweap Formation, Grand Staircase-Escalante National Monument, Utah."

Hilbert-Wolf, Hannah L. '12, Simpson, Edward L., Wizevich, Michael C., and Tindall, Sarah E. "Seismite Intensity Studies in the Wahweap Formation, Southern Utah: Unraveling Syndepositional Fault Movements and the Differential Effects in the Hanging Wall and Footwall Blocks."

**Ryan, Nathaniel A. '10**, Whitney, Donna L., Teyssier, Christian, Gottardi, Raphaël., and Seaton, Nicholas. "Deformed Kyanite: Origin and Significance in the Raft River Core Complex of Utah."

**Hagemann, Mark W. '10**, Banner, Jay L., and Musgrove, MaryLynn. "Assessing Potential Seasonal Paleoclimate Signals in a Late Pleistocene Stalagmite from Central Texas."

Frankel, Kurt L., Wegmann, Karl W., Bader, Nick E., Carson, Robert J., Bayasgalan, Amgalan, Dufrey, Chelsea C., Sprajcar, Jodi, **Sweeney, Kristin E.** '09, and Colbert, Tina. "Late Pleistocene Slip Rate of the Höh Serh-Tsagaan Salaa Fault Zone, Mongolian Altai and Intracontinental Transpressional Deformation in Central Asia."

The following Carleton Geology Department people presented papers in technical sessions at the American Geophysical Union annual meeting in San Francisco, CA in December. Carleton people are indicated in bold face type, and students and alums are indicated with their class years. The papers listed are only those which involved a current Carleton student or employee; many other Carleton alums, too many to list here, also presented papers at the meetings.

"Paleomagnetic Data From the Rinconada Fault in Central California: Evidence for Off-fault Deformation" **Sarah Crump '10, Sarah Titus, Zachary McGuire '08**, B. A. Housen.

"Linking River Morphology to Larval Drift of an Endangered Sturgeon" Laura Bazzetta '10, R. B. Jacobson '79, P. J. Braaten, C. M. Elliott '98, J. M. Reuter '00. "Fractionation of Sulfur Isotopes in the Formation of Mars" **Neil. T. Foley '10**, A. Shahar, M. Liu.

"Water Storage Change in the Sacramento and San Joaquin River Basins Since 2003, including Central Valley Groundwater Depletion". **James Bethune '10**, J.S. Famiglietti, C. de Linage, J. T. Reager, M. Lo, S. C. Swenson, M. Rodell.

"Subtle evidence for paleoseismicity in the cratonic interior, U.S.A." William Jacobson '11, Clint A. Cowan '83, A. C. Runkel.

"Steady-State Deformation Using Matrix Exponentials" **Sarah Titus**, J. R. Davis.

"The Influence of Cooling History on the Redox Conditions of Subduction Zone Magmas", **Benjamin H. Parks '11**, K. A. Kelley, E. Cottrell, E. S. Posner.

### Professional Talks Given in the Geology Department This Year

Professional and technical talks given in the Geology Department this year included:

Darren Gravley, University of Auckland, New Zealand, "Frontiers Abroad Program in New Zealand."

Meg (David) Sedlak '84, San Francisco Estuary Institute, "Regional Monitoring Program." John Lufkin '62, "Geology of the Black Hills South Dakota."

Marshall Sundberg '03, University of Minnesota, "Contributions of Experimental Rock Mechanics to Deep Earth Geodynamics."

Julie Bowles, Institute for Rock Magnetism, University of Minnesota, "Magnetic Characterization of Synthetic Martian Crustal Rocks: Implications for the Magnetization of Mars (Or: How to Have Fun Making Magma in the Lab)."

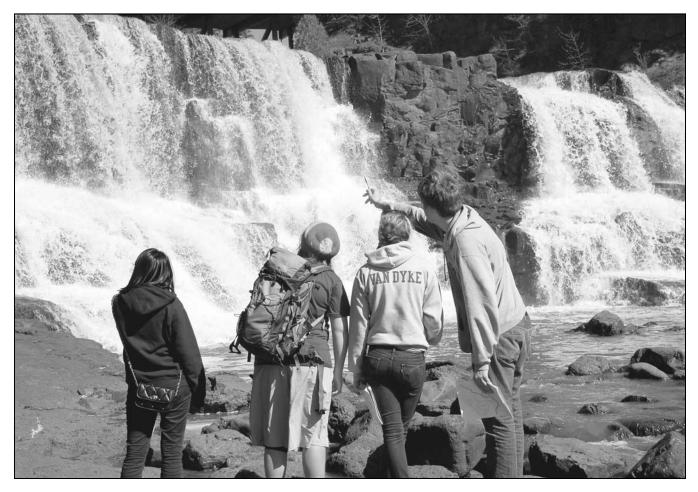
Nicholas J. Pester, University of Minnesota, Department of Geology and Geophysics, "Phase Equilibria Constraints on the Chemical Composition of Deep-Sea Hydrothermal Vent Fluids."

James M. Robertson '65, Director and State Geologist, Wisconsin Geological and Natural History Survey, Madison, Wisconsin, "State Geological Surveys: Where Geology Meets Public Policy."

Elizabeth Screaton '84, University of Florida. "From the Seafloor to the Seismogenic Zone: Fluid Flow in Earthquakes."

Bernstein Geologist-in-Residence Dr. David Chapman:

- Public Talk "Global Warming: The Science is Settled. What do we do now?"
- Intro to Geology Classes Temperatures in the Earth", "Aquifer recharge and 4-D gravity."
- Geology Seminar "Heat loss of the Earth."



The 2010 spring field trip went to Northerm Minnesota, including the North Shore of Lake Superior and the Iron Range. One of our favorite exercises is to figure out the layering of the lava flows in Gooseberry Falls State Park. Naturally, we don't tell anyone ahead of time what kind of rocks to expect so they have to figure out for themselves that it is basaltic lava, it is in flows, there are several flows, and they're big. Photo by Timothy Vick

#### Carleton Network for Lesbian, Gay, Bisexual And Transgender Geology and Natural History Alums

The Carleton Network For Lesbian, Gay, Bisexual and Transgender Geology And Natural History Alums provides students and alums with career information, fellowship and support. It was founded in 1990 and now has 41 members coast to coast.

The network has the twin objectives of helping reduce isolation among alums and working toward a more open, accepting and informative environment on campus for students in geology and related fields.

The network consists of a confidential list of names and addresses, circulated only to members of the network, maintained by Marilyn Yohe '88, Dan Spencer '79, and Tim Vick (Geology Department staff member). Inquiries about joining may be addressed to any of them.

LGBT folks might also be interested in the general alumni group called Out After Carleton (OAC). Full information about OAC is available through www.carleton.edu in the alumni section.

### Geology Department T-Shirts Available by Mail

We have a supply of geology T-shirts available that can be purchased by mail. The cost for current year shirts is \$10 plus \$4 postage payable to Carleton College. Prior years' shirts can be had for \$5 each plus postage.

The 2010 shirt is ice grey with a sketch of an outcrop on the front with the text, "Geology - Lab With A View." As of this writing sizes XS (youth L), S, M, L and XL are available.

The 2009 shirt is black with light blue ink. On the front is a breast patch saying Carleton College Geology Department 2008, and on the back is a large geologic iPhone design listing 16 geologic specialties with the inscription, "We have more apps." Available sizes at the time of this writing are S and M.

There is also a timeless (and priceless!) special shirt for families with multiple generations attending Carleton. The shirt features a diagram of the interior of the Earth with the core labeled Carleton Faculty, and the layers going upwards toward the surface being Post Docs, Graduate Students, Seniors, Juniors and Sophomores; the blebs of magma (which melted off the subducting plate) rising toward the surface are "Children that go to Carleton." It is cardinal red with white ink. Sizes available include S, M and L.

The 2006 shirt is dark blue with white ink. On the front it says "Carleton Geology 2006," and on the back it says "The Dark Crystal... Trial By Stone" with a picture of a quartz crystal. The only size of this one left are mediums.

Email Tim Vick at tvick@carleton.edu or give him a phone call at (507) 222-4401 to find out whether your size is still in stock.

#### 2010 Awards

(All are class of 2010 unless indicated otherwise)

#### **Distinction In Comps**

William Jacobson

Allison Pfeiffer

Stuart Sweeney Smith

Sarah Crump

**Neil Foley** 

Mark Hagemann

Samuel Kanner

Sigma Xi

Jordan Epstein

Nathan Evenson

Neil Foley

Samuel Kanner

Allison Pfeiffer

**Andrew Ritts** 

Nate Ryan

Julia Schwarz

Chelsea Scott

Mahima Swarup

**Duncan Stewart Fellow** 

Nick Holschuh

Lawrence McKinley Gould Prize in Natural Science

Nathaniel Ryan

Phi Beta Kappa

Sarah Crump

Nathan Evenson

Mark Hagemann

**Mortar Board** 

Nathan Evenson

Carleton Toni Award In The Arts

Nathaniel Ryan

Jefferson Natural Sciences Teaching Award

Sarah Crump

National Science Foundation Fellowship

Samuel Kanner

**Student Departmental Advisors** 

Ana Vang '11

Andrew Walters '11

#### Senior Projects - 2010

Graduating senior geology majors, their hometown and titles of integrative exercise ("comps") projects: **Lila K. Battis**, Cary, NC, Auntie Clementine's Guide to Fossils: A Children's Book

**Laura K. Bazzetta**, Waukesha, WI, Linking River Morphology to Larval Drift of an Endangered Sturgeon

**James Bethune**, Portland, OR, Snowpack trends in the contributing region to the Central Valley of California

**David D. Brink-Roby**, Corvallis, OR, Fault development in the Cathedral Peak Granodiorite, Sierra Nevada batholith: Evidence for directional emplacement of the Johnson Granite Porphyry

**Sarah E. Crump**, Saint Paul, MN, Paleomagnetic data from the Rinconada fault in central California:

Evidence for off-fault deformation

**Travis W. Drake**, Portland, OR, Transient Storage, Discharge, and Nutrient Uptake in Small Streams of the Kolyma River Basin, Siberia

**Kimberly J. Elson**, Davis, CA, Substrate preference of freshwater mussels in the Cannon River, Northfield, Minnesota

**Jordan Epstein**, Los Altos Hills, CA, Paleomagnetism and Geochemistry of Tertiary Intrusions and Flows Associated with the Kootznahoo Formation near Kake, Southeast Alaska, and Implications for the Alexander Terrane

**Nathan S. Evenson**, Saint Joseph, MN, U-Pb detrital zircon geochronology and provenance of the Tertiary Kootznahoo Formation, southeastern Alaska: A sedimentary record of Coast Mountains exhumation **Neil Foley**, Winchester, MA, Fractionation of sulfur isotopes in the formation of Mars

Mark Hagemann, Hurley, WI, Assessment of potential seasonal climate signals preserved in a late Pleistocene stalagmite from central Texas

**Lauren E. Howell**, Newtown, CT, Characterizing shallow intrasedimentary faults using magnetic depth estimation methods: Preliminary results of a high-resolution aeromagnetic survey at the San Luis Basin, south-central Colorado

**William Z. Jacobson**, New York, NY, Liquefaction features in Cambrian-Ordovician boundary strata of southeastern Minnesota: Evidence for paleoseismicity in the cratonic interior?

Samuel A. Kanner, Amherst, MA, Using Low and

High Frequency Subbottom Surveys to Locate Cretaceous and Quaternary Sediments in Block Island Sound: an Analysis to Estimate the Cost of an Offshore Wind Farm

**Zachary P. Montes**, Seattle, WA, Field and microstrucural observations of granulite facies rocks, Hamilton Downs, Mt. Hay Block, central Australia

Michael Mooney, Montclair, NJ, The Geology of Late Cretaceous Earth Allowed for the Formation of the Eastern North American - Eastern Asian Disjunction Allison Pfeiffer, Seattle, WA, Effects of soil disturbance on aggregation and mineral-associated carbon and nitrogen storage

**Andrew Ritts**, Duluth, MN, Limnological Analysis of the Groundwater, Biological, and Morphological Factors in Relation to Stratification and Dissolved Oxygen Levels of the North and South Basins of Roosevelt Lake, MN

**Nathaniel A. Ryan**, Wallingford, PA, Microstructures of a deformed kyanite-quartz vein of the Raft River Mountains in northwest Utah, USA

#### Class of 2011 Geology Majors

Miki Beavis, Foster City, CA Lillian Betke-Brunswick, Northampton, MA Annie Boucher, Brooklyn, NY Hannah Fariss, Summerland, CA Nicholas Holschuh, Moorhead, MN William Jacobson, New York, NY Thomas McGaughey, Brooklyn, NY Alissa Morson, Lafayette, MN Alice Newman, Taipei, Taiwan Masaru Nobu, Fairfax, VA Benjamin Parks, Burlington, CT Noah Randolph-Flagg, Kalaheo, HI Colin Sinclair, Madison, WI Ana Vang, Esko, MN Andrew Walters, Marion, OH Adrienne Wilber, Sitka, AK Amanda Yourd, Bemidji, MN

**Julia E. Schwarz**, Seattle, WA, Influence of lithology and climate on spring chemistry in the Upper Deschutes River watershed, Oregon

Chelsea Scott, Bryn Mawr, PA, Kinematic modeling of deformation in the Troodos ophiolite, Cyprus Mahima Swarup, Kolkata, India, Tectonic evolution of the Menderes massif core complex and Alasehir graben, southwestern Turkey: counter evidence to a rolling-hinge mechanism

Stuart A. Sweeney Smith, Bemidji, MN,

Characterization of two atypical refractory inclusions from separate CV3 chondritic meteorites: Petrogenesis in the early Solar System

Allison R. Vitkus, Shaker Heights, OH, Microfossil fauna from the Blue Earth Siltstone of the Lower Ordovician Prairie du Chien Group, Minnesota, USA Sibo Wang, Hamden, CT, Reconstructions of Late Ordovician crinoids and bryozoans from the Decorah Shale, Upper Mississippi Valley

**Sophie G. Williams**, Seattle, WA, Soil microbial biomass and respiration dynamics in a 14 year chronosequence of restored tallgrass prairie

#### Class of 2012 Geology Majors

Charlotte Alster, Tucson, AZ Kristofer Asp, Plymouth, MN Sarah Berry, Downers Grove, IL Adam Denny, Marshfield, WI Megan Ferre, Louisville, KY Hannah Hilbert-Wolf, Allentown, PA Laura Hockenbury, Lafayette, CO Evan Johnson, Portland, OR Elizabeth Lundstrom, Burlingame, CA Sarah Marks, Brooklyn, NY Ailsa McCulloch, Woodside, CA Peter Scheuermann, Pittsburgh, PA Zachary Stewart, La Crosse, WI Angus Vaughan, Minneapolis, MN Alexander Walker, Edmonds, WA Nina Whitney, Bowdoinham, ME Griffin Williams, Kalamazoo, MI



Angus Vaughan '12, Andrew Ritts '10 & Callie Millington '12 on our fall field trip to the Black Hills.

### NEWS FROM ALUMS

#### **Faculty**

Ed Buchwald: I can't believe that Cynnie and I have been retired for eight years! We celebrated our fiftieth wedding anniversary in style last August by having our family join us in the Thousand Islands of the St. Lawrence River where Cynnie's family has had a cottage for six generations! The highlight was a boat trip for everyone in an antique yacht owned by the Antique Boat Museum of Clayton, New York. We had a three-hour cruise and cocktail party around the islands. It was a spectacular day on a great boat celebrating a fantastic marriage!

We have been enjoying our grandsons in Massachusetts. Adam and Nancy are great parents and it is such a joy to visit with those two happy little boys. By the time you read this we will have completed a long automobile trip to visit Julie and Chris in South Carolina, in-laws in New Mexico, and Charles and Jeannie in British Columbia. The Carleton

Men's Lacrosse Club continues to count me as their most dedicated fan. More and more schools are making lacrosse an official collegiate sport and the competition as a result has become very fierce but we are having great fun. I fledged two more Eagle Scouts in December and have three more on the way. It saddens me to remind you that Eiler Henrickson passed away after a long illness. He almost made it to ninety. Eiler was the one who hired me, and together we created the conditions that allowed for the Geology Department to grow to what it has become. I know it is trite to say, but he really was bigger than life. His energy and desire to make Carleton the best that it could be were great inspirations for me. I miss him dearly.

Remember to plan on coming to reunion weekend. It is, by far, the greatest weekend of the year. I will be there to enjoy it with you.

Ed Buchwald

The picture above was taken in a railway freight yard at the time of Dante's trip after graduation from Carleton, hoboing with a Beloit friend to Denver from Chicago to attend the University of Colorado for graduate work.

Dante Stephensen '58 sent a great collection of pictures in this year, including these two. The one below shows him on the platform of his private 1926 rail car, The Survivor. The Survivor has a storied history of housing and transporting celebrities of many eras including wealthy members of the Woolworth family, movie stars Barbara Hutton and Cary Grant, and presidents Eisenhower and Clinton.

#### Alums

<u>1942.</u> Charles D. Edwards: "Not much, at 89 there is not much going on, I have two sons that are geologists and that keeps my interest up."

1943. Loyd A. Beaurline: "Loyd and Mary Jane ('45) are enjoying the Texas "winter" weather and having guests (grandchildren and 2 greats!) Will return to Minnesota on April 22 to enjoy a summer with the children, etc. The ice went out very early, so the lake will begin warming."

1947. Charles Higgins: "Not much. Left hip replacement in May 2009 has sidelined me for now." Georganna Dean Dickson: "It's interesting that we think we can control our planet -- then, along come hurricanes, floods, earthquakes, tsunamis and volcanoes! But that doesn't mean we should stop doing what we can control -- like global warming! I have fond memories of Eiler!"

<u>1949.</u> Jim Dorman: "I am a Carleton Physics major and career seismologist. Earth science has been very good to me. In retirement I am tutoring Memphis kids grades 3-12 in math."

**1950. Paul Fossum** writes that he's been enjoying fishing the Chetco and Rogue rivers.

<u>1954.</u> Walt Varco: "Two new knees - titanium replacements of worn-out 'nature's own' cartilage-less original issues. 'Tis great to be mobile again! I might even be able to keep up with the group on a geologic field trip...Peace! :) Walt"

M.E. (Pat) Bickford: "I continue to be active in research. I have a paper in press in Canadian Mineralogist and another under review for The Journal of Geology. I continue my service as Science Editor for Books for GSA and serve on the Publications Committee. In late April, 2010, I will lead a petrology field trip to coastal Maine. On April 30, 2010, I will receive an Alumni Achievement Award from the Dept. of Geology, University of Illinois, where I received my MS (1958) and Ph.D (1960). All is well!" Congratulations, Pat!

1956. Richard Buchheit: "Detta & I were based in southwest Colorado from July 2008 - July 2009. Visited Grand Canyon in March & June '09. Lots of oil/gas and CO2 exploration and production in our area of Dolores County, including our property. New natural gas production from the Gothic Shale. Expected to be in Colorado by now, being firewatchers at a tower in the San Juan Mountains, but quad bypass surgery and rehab will keep us in Grand Marais until mid-July. A chance for walleye fishing!"

1958. John A. Reitan: "I've planted a six-acre vineyard and am producing Syrah and Zinfandel wine. Health is good and six acres takes a lot of time! My wife, Sady, has retired from teaching at University of

California at Davis. Now we take care of grandchildren!" Thanks to **Dante Stephensen** for sharing some of his memories: "1968, after military, former Navy SEAL, I decorated my jazz club by 'emptying out my closets,' according to my educator mother, who passed away just prior to her 102nd. We hire only struggling college and grad students putting themselves through school. Sound familiar? Spent very little time in my major, but I do enjoy looking out of windows of airplanes studying that which is below. Dave Southwick was our class genius to whom I looked up the most. He and George Austin were USGS state directors. We were a small group of Geo majors."

<u>1960.</u> Michael W. McLanahan: "My son's wife gave birth to twins - one boy & one girl; now have seven grandchildren. Named: 2010 Lifetime Business Excellence awardee by Blair County Chamber of



Andy Larsen '61 was honored this year by the Riveredge Nature Center in Newburg, Wisconsin, of which he was the first Executive Director, by the construction of a "rock pile," a recreation of a glacial landscape in which children can explore and learn about the Earth. Here, Andy explores the glacial rock area with his grandson Tyler last November.

Commerce" Michael, congratulations on both counts! **1962. John Lufkin** ran his fourth annual geology field trip to Costa Rica this January, and also published a new guide book to the geology of the Black Hills in December. Hope the book sales go well, John!

1963. Wendell Duffield: "I'm still playing (and enjoying) the role of adjunct professor of geology at Northern Arizona University, but much of my 'professional' time during the past two years has been spent writing a book about volcanoes aimed at teenage readers. The title is 'What's so Hot About Volcanoes?' and it's on track to be the second in a new series of books published by Mountain Press, in Missoula, MT. The first of the series, already in print, is 'What's so Great About Granite?' The author is **Jenn Carey** '87, a Carleton Geology grad. Jenn works at Mountain Press and is the editor for my book. The manuscript is now in her hands but I'm hoping I'll be able to report that it's in print by the time of next year's Newsletter." 1965. Jan Tullis: "In July 2010 I will begin a three-year phased retirement from Brown but intend to remain fully engaged in undergrad teaching and advising. I am so impressed with the fantastic work being done by Cathy Manduca and all the other Carleton geo majors in education!" Joel Renner: "Retired from Idaho National Laboratory where I led the geothermal research program of reservoir engineering and energy conversion. I was also the team leader for the U.S. Department of Energy geothermal exploration program. Doing a bit of consulting in retirement and am participating in a Smithsonian science teacher energy program and will participate in a California Bay Area teacher energy program this summer." **1966. Beth Schwarzman:** "Busy as ever here in Falmouth. How did I ever find the time to work? I'm making maps of the trails on all the conservation lands in Falmouth for the local land trust's website, as well as leading walks and working to acquire conservation land. I'm also running the first BioBlitz in Falmouth (since Woods Hole is part of Falmouth we have lots of local biological talent). And I am again leading the Carleton alumni Grand Canyon riverrunning trip in late August and early September (Carleton's 9th). Somehow we still find time to sail, garden, and get to California to see the kids." 1969. William E. Henry, MD, PhD: "Currently serving as Chairman of Imaging Services at Northern Michigan Regional Hospital and Chair of the Credentials Committee at the hospital and on the Medical Executive Committee. I am also a board member for the Great Lakes Chamber Orchestra trying to find new areas of support for the orchestra in this difficult Michigan economy! Enjoying having my wife, Lt. Col. (ret.) Linda Henry, home after 20 years in nursing air evacuation on C130's. Three tours of duty in Iraq are enough!"

1971. Karen Lubke: "After 31 years with ARCO-Vastar-BP, I retired from BP in Houston and began a new job in North Dallas. I still have a real passion for my work as a production geologist, mother of two college boys, and dog lover!" Royston ("Roy") Kruse: "I am working on a project for my employer in Malawi, Africa, very close to where I grew up. I spend about 50% of my time on the road."

1972. A letter from Chris Rautman that Ed Buchwald passed on relates some of the highlights of Chris's entry into geology from Carleton, and before that, Philmont Boy Scout Ranch. Chris spent a few years in the mining industry, then worked at Yucca Mountain for 14 years, and in the past decade or so has been doing geotechnical work for the U.S. Strategic Petroleum Reserve at Sandia National Labs. 1973. Dick Pautsch: "Having finished my quest to visit every county in the United States, I'm now working on spotting at least 100 species of birds in every state. Plan to retire within the next year and see what's next."

1974. Peter S. Dixon, MD: "I have a new foundation (#2), The Cunniff-Dixon Foundation (see website cunniffdixon.org) which is about what I do everyday. Trying to maximize time for sailing, fishing, scuba diving and playing around on the lower Connecticut River and Long Island Sound." Margie Diamond Simpson: "Retired in January, getting the boat ready for an early May departure - six months on the Inside Passage, then to Puget Sound for winter 2010-2011 to prepare boat for possible trip to Mexico and? in

<u>1975.</u> Larry Meinert: "Lots of new developments. After seven years at Smith College in Massachusetts



Larry Meinert '75 ran his first marathon last October in the shadow of Veyo Hill in Utah.

following 22 years at Washington State University, I am moving on to 'the other Washington.' I will be the Geological Society of America Congressional Fellow for 2010-2011. Since 2008 I have been the editor of Economic Geology, which is another full time job on top of my other three (I also run a small winery specializing in a Bordeaux blend of Cabernet Sauvignon, Merlot, Carmenere, and Malbec). In October, 2009 I ran my first marathon, in St. George, Utah. I finished without killing myself and was very pleased to have run sub-four hours (3:56:04)." Good work Larry! Jim Pizzuto: "Teaching field geology and fluvial geomorphology this term. Research: helping to cleanup a river valley contaminated with mercury, and I am also part of a NSF-funded Critical Zone Observatory studying anthropogenic effects of watershed scale carbon sequestration on decadal, centennial, and millenial timescales."

**1976. Karen Kimball:** "My son Jeff (Spear) is graduating this May from Columbia University. Majored in bio-anthropology. No fencing team at Carleton so he didn't apply. He is 2008 NCAA champ in Men's Sabre and three-time all-American and an academic all-American as well as the first fencing recipient of the NCAA elite 88 award as well as three time all-ivy and academic all-ivy in fencing. Younger brother Will is a junior in high school and can't go to Carleton which still has no fencing team. He just qualified for the first Youth Olympic Games (under 18 athletes) in Singapore this summer because of his result at the Fencing Cadet World Championships in Baku, Azerbaijan last week. Oh well, at least he is still thinking about an environmental/geology type Phil Muessig: "My sustainable major...." communities work here is now focused on a challenge, assistance and recognition program called Minnesota GreenStep Cities. I'm developing it with the League of Minnesota Cities and other groups outside state government, and think it will keep me busy for a number of years. Temporary content at www.MnGreenSteps.org will morph over to a cool interactive website in late June. So I'm going around the state talking to city councils, and will be in Northfield next Monday night." We received a card from Neil Suits, who writes, "Even though I studied history at Carleton, I got a PhD in geology at Penn State and teach geology here in Montana (at Montana State University - Billings). Excellent exposures in the Beartooth and Pryor mountains."

1977. Bruce K. Nelson: "A space physicist wants to take a geology class around the Australian outback - what's missing? Someone who can talk about the rocks, of course. That is my way in to participating in a four-week field course in Australia this summer, organized by a rocket scientist. The prospect helps

ease the depression of a return from sabbatical in France to dealing with the disaster of Washington state budget reductions to public education. But we still get amazingly good students (grad and undergrad) that keeps the department-level morale high. My small wine group also just bottled its 14th vintage of wine from eastern Washington state cabernet sauvignon. That keeps the morale high too." Eric Simonson: "Just back home from Kathmandu, where I was helping launch our 2010 IMG expeditions to Mt. Everest (Nepal side) and also Cho Oyu (Tibet side). I am still living my dream, traveling and running the guide service business. I can still beat my 10-year-old daughter down the ski hill (barely). See you in the mountains." **David Gambill:** "After 30 years in Geology and International Development, our family needed to live in a more sane and healthy place. We left our jobs, sold as much as we could, packed the rest, and returned to the house I built in 1984 in Santa Rosa, CA., just north of San Francisco then asked, 'Now what?' I decided it was time to start the chocolate company I'd been dreaming about for 9 years. In less than a year we received the Best of the NorthBay Chocolatier award and won more awards than any other chocolatier at the annual Wine and Food festival for the county. We bought a teahouse in 1998 to retail our chocolates. I now spend my mornings managing the teahouse (I've learned that good tea brewed properly is a lot of fun to drink) and afternoons (& evenings, sometimes nights) making chocolates. We're growing so I now have two staff helping to make chocolates. Check out our websites. Our chocolate tag line is 'Taste the Dark Side;' the teahouse tag line is 'Relaxed pace, refined flavors...the world of tea.' I'm amazed at how rapidly our justturned six-year-old daughter adds new skills and understanding, and am constantly awed by how she puts the world together to make sense of what she sees from what she has seen. Stop by for tea and chocolate when you're out this way. And if you love dark chocolate or fine tea, check out our websites for some new takes on old favorites."

1978. Zachary G. Wilson: "I decided to celebrate the recession by starting my own business, The Wilson Law Firm, P.C. The doors are still open and the lights are on, so I guess things are going well!" Keep up the good work, Zach. Steve Ingebritsen: "Looking forward to having Noah Randolph-Flagg (2011) and Elizabeth Lundstrom (2012) working with us this summer. Ailsa McCulloch (2012) will be volunteering in our branch June-July." Congratulations to Sue Campbell who reports, "Big news! Steve Erickson ('76) and I are getting married on Labor Day Weekend. Having ascertained the stability of our relationship by cohabiting for 10 years, it's time to

make it official. In my spare time, I enjoy surfing the web, gardening, sewing, and being a Grandma to the (Erickson) granddaughter." Dorothy Davis Morrow: "Older, wiser! Last summer I took my 11 and 8 year old boys to Yellowstone Park. They loved it and I could actually remember some of my geology from 30 years ago! Otherwise, enjoying life immensely and have taken up gardening - with gusto. Hello to all I haven't seen for years. Thank you for keeping in touch with us - the geology department has always been the BEST at this." Alison Krafft Rempel wrote at Christmas time, "We're still having fun doing stuff around the house. Alison is channeling her inner farmgirl so the two back lawns are gone and we now have an orchard and veggie and herb beds. We lost one of our chickens to an unknown cause, but acquired an angora bunny this year, so we still make our pet quota of 1.5/family member (3 cats, 2 chickens and the bunny). After remodeling the kitchen we decided we liked the cherry cabinets and the contractor so much that we did a built-in along one wall of the dining room to match. Steve is still working in telecommunications for Marki Microwave so we can pay for all the fun house projects and vacations. Alison is still enjoying the at-home-mom thing. She volunteers at school and for Carleton and both are happy to chaperone the fun Girl Scout activities like rafting, skiing and spelunking." Their daughter Sarah is just finishing her first year at Carleton, and other daughter Becca is going to be a high school junior in the fall. Lona Sepessy: "I'm ending my 4th year as an elementary school teacher librarian where I especially enjoy helping find books for our science specialist as well as featuring science content in our library classes! My family is doing well - Scott finishing his 25th year teaching at Lakeside, a private school in Seattle. Claire will be a senior and planning a college trip to Carleton this summer after a month in Senegal on a Global Service Learning Trip through her school. Whitaker will be a 9th grader and has so many summer plans we'll hardly see him at all. Two weeks in Costa Rica, 1 week kayaking in Barclay Sound, 1 week backpacking in the Tetons with a night or two at home in between for a quick shower and laundry. WIth all this travel, Scott and I will have two weeks without kids and have so many possible adventures we're having trouble deciding. At the top of the list is a week or two on our Hunky Dory - a 26foot St. Pierre Dory just meandering our way around the San Juans or Gulf Islands camping and visiting friends. Most exciting is Scott's sabbatical from teaching for the 2010-2011 year. While we won't let him go for the entire year he will be spending a month in France at Plum Village, home of Thich Nhat Hanh's monastic community, 2 months in New

Zealand with a volunteer habitat restoration and wildlife monitoring program. I'll be managing the touchstone of home with vicarious participation in everyone's travel plans, knowing how precious the remaining time is with kids and the promise of more travel and adventure time in the not too distant future." Barbara Okamoto Bach's family letter last winter said that Mark was scheduled to become head of Research and Development for Johnson and Johnson in Japan after more than 16 years at Merck -Congratulations Mark! Barbara, besides maintaining her already full schedule, has become the new mom of Teddy, the family's new Portugese Water Dog; Teddy is a good companion for their other PWD Koko and has a gregarious personality that wins hearts, but he takes as his mission the filling of any auditory space that might be available in the Bach household. **1979. Marie Del Toro:** "We've had a great year traveling, camping, and reconnecting with old Carleton friends. Georgane Callaizakis was married in July 2009, and there were a few Carleton geo majors present! Our children are now 15 (Holleynd) and 13 (Wilder). We wonder where the time has gone. They are so fun to be around!" Congratulations and best wishes to Mark Helpenstell, who "Got married at Christmas, at my wife's parents' house in Hawaii. All three of my kids were in attendance, and I inherited two more great sons - one 20 and one 8! My daughter Tiffany turns 30 this fall (holy crap, we're all gettin' old!), Joshua graduated last summer from UC Boulder, Alex has another month to go at WWU, Marcel is finishing freshman year at UPS, and Jesse is almost done with second grade! Looking forward to one more round of Boy Scouts, soccer, and whatever it is that catches his attention this week! Tisa and I are working too much, trying to play just as hard, and just generally loving life! Go Seattle Sounders!" Sarah Mills: "My BIG news is that my daughter, Alexis, will be starting at Carleton in the fall. I am really excited about that - I expected her to end up much farther away. Carleton has been so positive, communicative, and proactive with the acceptance and follow-up letters. I've been impressed! Otherwise, our business (which has evolved into a large-scale industrial machine shop) was down 65% in 2009. We finally cut back to bare bones by September '09. This year, revenues are coming up slightly, and we are trying to do it with a skeleton crew. So, Doug and I are working like crazy. To relax, I took up piano again about six years ago and have a great instrument and a former concert pianist as a teacher. Our household/family continues to care for my 92-year old mother and, because of her, we live in a lovely home. I will miss Alexis's help in care-giving, but my 13-year old son, Parker, is great with her too." Sarah,

t-shirts! Tillman Farley: "Still working as medical director of a migrant/community health center in Colorado. In January, I married my partner of the past 8 years. Two of three kids graduated from Carleton, and the third has been accepted there and will probably start in the fall. As I have traveled around with the three kids looking at highly competitive colleges around the country, Carleton always seems like the best one! With all the kids gone, it might be time for the next thing, as soon as I can identify what that is." Tillman, it was nice to see you when you were here in June. Congratulations to Dan **Spencer** who has just been awarded tenure at the University of Montana in Missoula. Last year Dan finished his third year full-time in the Environmental Studies program at the University of Montana; he noted, "Happiness is the opportunity to go through tenure twice in one's teaching career...." In Dan's holiday letter last winter he said Pat had had a full year immersed in his Philosophy graduate program, finishing up his course work and working as a TA for several outstanding philosophy professors. **1980. Fred H. Seymour:** "Four years into photovoltaic solar electric panel manufacturing... Life in a startup company is especially intense when you are one of the founders. It is a lot of fun to be working with a bunch of energetic and enthusiastic people..." **Janet** Hartwell Barnet: "Our daughter Kaitlin is graduating from Carleton this year which means she will be on the same reunion schedule as me. I have quit teaching in the public schools to teach quilting and sewing to kids and adults along with producing my own art. It was a great change for me, allowing our family to travel on any date not just school vacation weeks:) I do miss my summers off." Kim Jones: "Since last July 1st, I've been doing a yearlong job at Konan University in Kobe, Japan, as resident director for a study abroad program of 43 students from North America and Europe. It was my first time working full-time in any Japanese organization, and my first time being in charge of students on this sort of program. Needless to say, I've learned a lot! It's been a great year, but homestay issues and medical emergencies have kept me really busy, and I'll be a bit relieved when the students are all safely home. All is well on the home front too. David's been doing geochemical research with various Japanese scientists at Kobe and Shimane Universities. The three kids adapted well to their Japanese schools and have had a good year. Nonetheless, we are also all looking forward to getting back to Tucson in July. A sentiment that probably wouldn't be shared by too many people, I suppose..." Mindy Bell: "I'm still enjoying teaching high school science and I try to get

you might want one of our intergenerational Carleton

backpacking in the Grand Canyon once in a while. Darrell does climate change research (mostly lake cores) all over Alaska and is always looking for good graduate students. (Ahem, current Carls). Lindsey will start college next year in Flagstaff despite our best efforts to kick her farther away from home. Hope to see some of you at reunion in June!" Alison E. Rautman: "I've stepped down from being Assistant Chair of Anthropology, and moved bureaucratically to the Center for Integrative Studies, where I am doing teaching, research (archaeology) and curriculum development--including online courses. Unbelievably, the entire MSU geology program is on the chopping block--B.S., M.S., and Ph.D. degrees. On a personal note, it is a big year with our son graduating from Carleton (political science), and our daughter graduating from high school. No, she is not going to Carleton; she's decided on Syracuse University in upstate New York. Go Orange!" Vicki Hansen and **John Goodge** are coaxing their two kids, Berit and Casey, through the growing-up years, now with the happy announcement that Casey will be starting at Carleton in the fall - good job Casey! They write, "At UMD, John continued to play (er, work) with the scanning electron microscope, and is constructing a new analytical instrumentation lab at UMD. John also has a new Antarctic research project funded, so he will be leading his 11th expedition to Anatarctica this coming winter - guaranteed a white Christmas. Vicki made big headway with Venus research, is developing a 3-D Venus wall-mural installation, and also ponders how to improve life-work issues for women in science."

<u>1981.</u> John Hankins: "My Carleton bride and I celebrate another milestone as our youngest child graduates from college. Covering eight combined

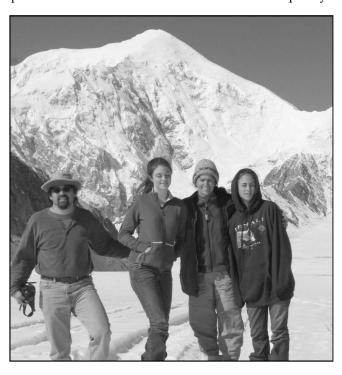


Peter Wiegand '82 with his wife Kate and their son Henry, born in November.

years of tuition has given new meaning to 'disposable income.'"

1982. Peter Wiegand: "We welcomed Henry Estin Wiegand to the world on 11/14/2009. What an amazing experience. He's a real joy to be with and it's great to share that with family and friends. Getting ready for another big move; this time to Scotland. Kate has landed a research position at the Centre for Ecology and Hydrology near Edinburgh. Should be a great adventure! My condolences to all of Eiler's friends and family." Lisanne Pearcy: "I'm teaching introductory (physical) geology at a local community college. Getting back into teaching after nearly 20 years away is no mean feat. My last teaching job was as Shelby's sabbatical-leave replacement for Mineralogy in 1991! That was the era before powerpoints, class websites and online labs. And before many exciting advances in geoscience. It is quite a challenge, but I'm enjoying it." **Peter** Whiting: "Not much changes, except the kids get older (and I suppose I do as well). Life is good so no major changes is just fine with me."

<u>1983.</u> Christina Szigeti: "Enjoyed seeing everyone at reunion last year, especially Clint Cowan, 'the first person I ever met at Carleton.' I treasure the squeezy



Rob Alexander '83 sent this great picture taken when they did a ski plane landing flying from Talkeetna and landing near the Kahiltna Glacier base camp, the jumping off point for climbers up Denali from the southwest. In the background is Mt. Foraker, looking down the glacier. With Rob are left to right, Desi (daughter, 19), Becky (wife, she'd kill me if I gave her age), and Petra (daughter, 16).

Schiller I got for being part of the largest number of majors at reunion. Looking at all the beautiful rock and mineral specimens in the geo lab reminded me of why I loved Geology at Carleton." Jeff Pipes: "Still working the vineyard and winery in California. We are coming off three drought years and a hard frost last year, but this vintage looks really good. The wines are all good, but the farming has been hard! Florence and the girls are well. The horses have been healthy and have gotten us a lot of press recently, including articles in the LA Times, SF Chronicle, and an AP story that got published across the country...some of you saw it and sent me notes....thanks!" **Rob Alexander:** "Greetings all. All is well down here in Houston, except, we're still in Houston! Older daughter escaped H-Town and is in her second year at Oberlin Conservatory (viola) and decided to add Biology as a second degree (Career Plan B). Younger daughter is now looking at colleges so empty nest is getting closer (or so we hope!). We finally got around to remodeling our kitchen this year and replaced our functional, but dated, formica countertops with a gorgeous crenulated garnet+amphibole quartzite. (I have been trying to find a way to use those terms for 25+ years!) I still love real rocks, as opposed to the unconsolidated stuff we drill in the Gulf of Mexico. Thanks you guys!!" Mark A. Gonzalez: "The family loaded up the Conestoga and followed the trail west to the High Desert of Oregon. We relocated to Bend this past February, where the kids are learning the finer points of fishing wily trout, steelhead, and salmon; mom is learning the art of High Desert gardening; and dad is biking the gorgeous byways on the leeward side of the Cascade Range. We share our yard of sagebrush and juniper with a couple coveys of California quail and a herd of mule deer. Good neighbors for the most part. Still trying to save the planet, one watershed at a time. New position gives me a national platform to work coast-to-coast on stream and wetland issues." Jim Holmes: "Our son, Tom, is a first-year at Carleton, taking Intro to Geology this spring. Please let me know if he is ever absent from class." (We're on it, Jim. You might want to get some of our intergenerational Carleton Geo t-shirts, for both of your generations!) David Purkey: "I still enjoy leading a group of water resource researchers within an interesting organization around the continued development of our Water Evaluation and Planning (WEAP) software, although my work life involves increasing amounts of management and adminstration in complete inverse correlation to the actual science I work on. We sent our eldest, Hannah, off to college last fall and our youngest, Sage is a junior in High School. The empty nest looms, which

is both scary and exciting. Dawn and I are begining to dream about perhaps one last adventure in Africa before the end of our careers. Stay tuned."

1984. Mark Gordon: "I survived my first reorganiza-

tion with Shell and continue in the same role. This job includes a mix of fieldwork, field outings and work station projects. I have some contacts with academics because we fund various outside projects. We took vacations to Hawaii, the Rockies and Romania." Carolyn White writes that she's "Enjoying life in Houston, if that's possible. I get outside as much as I can at work, planting wetlands in detention basins, planning stream mitigation projects, and restoring coastal prairie habitats. Very fun stuff! Kids are well. Jasper, 13 is going to the High School for Performing and Visual Arts next year to play lots of viola. Corinna, 9 is loving musical theater at HITS and horseback riding. We stay busy. It's great to have friends Barb Waugh and Jay Jackson back in the neighborhood!!"

1985. Brad Werrell writes that he's making a gasifier for solid fuels to run in internal combustion engines, prospecting for placer gold, expanding his medical education software solution business and developing a home remedies website. He adds, "Fully enjoying life and family..." Kristin Mitchell: "I have a high schooler! Ben has worked on his Eagle Project for



Maria Peterson '85 was selected to represent the United States in international Kyudo (Japanese archery) competition as part of the three-person USA team. Maria joined the First International Kyudo World Cup Tournament in Tokyo in April. Here she is shown with the USA Kyudo Team 2010: on the left is Douglas Sakurai (renshi, 5th dan from Los Angeles, CA); Maria (renshi, 5th dan from Belmont, CA); and Masatsugu Owaki (5th dan from Los Angeles, CA).

Scouts - an environmental one - eradication of phragmites on Clark Lake, Door Co. WI - also ran track/cross country. Katie's in 5th grade. Dale has been working with a group from the Parent company of Bruker in Germany. That means a few trips to Europe. Life is good."

1987. Jennifer Carey: "I just wrote a book called 'What's So Great About Granite?' published by Mountain Press Publishing Company (where I work). It is part of a fun series we are starting that introduces readers of all ages and levels to geologic features. The next book will probably be 'What's So Hot About Volcanoes?' by Wendell Duffield '63." Good luck on both books Jenn, hope they sell like hotcakes! Chris Carlson: "I am approaching five years of working on groundwater policy and management issues for the US Forest Service in the Washington HQs. Though the opportunities abound for influencing how 193 million acres of public land are managed, change generally does not come quickly or easily. I continue to work the internal and external politics to get a draft of the agency's first national ground water management policy published in the Federal Register for public comment. It looks like this policy would fit well into the priorities of the new Secretary of Agriculture and the Obama Administration. Hopefully, that will allow us to get over the hump and move forward with publication sometime this year (hope springs eternal). I spent the past year in a government leadership development program. As a part of that program I did a four month detail in my supervisor's position and a four month detail to the US EPA Office of Water to help foster better collaboration and problem solving between the Forest Service and EPA on water issues. My wife, Martha Anderson (also Carleton '87) and I are having a great time with our 4-year-old son Niklas, who is now in a pre-school program at the University of Maryland. Best wishes to all. If you are going to be in the DC area, look us up."

1988. Peter Sauer: "On our first sabbatical leave from Indiana University, Debbie and I managed to get off to Durham University in Merry Old England. We've been having a great time exploring castles and coastlines, museums and mountains (including famous sites for geology), the unconformity at Siccar Point, the lava flows around Edinburgh, and plenty of sea cliffs teaming with Paleozoic fossils. We've succeeded in showing our three boys (Noah, Ben, and Danny) some of the great world beyond Indiana. Come the end of summer we will be back in Bloomington, so come on over to England soon!" Ben Edwards: "Lots of excitement in our lives these days! Kim is almost finished with certification to teach 7-12th grade math, so she's doing lots of substituting



Peter Sauer '88 and his family spent the past year in Durham, England, a lovely cathedral town about an hour north of York. This picture of his family was taken at Robin Hoods Bay, a picturesque town leading down to a bay where the wavecut terrace is famous for its Jurassic and Mesozoic fossil fauna. When the weather was too rainy to enjoy geologizing excursions, they sometimes visited the National Railway Museum in York..



Sharon Stern Kahn '90 and her new son EJ.



Andrew
Garrett '90
and his
daughter
Amelia.



Sonja Wolter '89 spent last winter at Summit Camp in Greenland again. Her emails included an automatic temperature reading in the signature block, so her email recipients could follow the wind chills as they bumped along in the -50 to -100 F region. At left, one of Sonja's duties was to clean the frost off of the weatherdata tower. As the winter ground on, the crew generated their own mirth by staging the Greenland leg of the Birkebeiner ski race; at right, Sonja and her racing nemesis Ken flash through in a photo finish.



and we're slowly trying to readjust our life to having two working schedules. So far I'm slowly adjusting to doing more dishing, hanging out laundry etc. Fortunately the girls are increasingly bigger helpers around the house, although they are both now busy with soccer, participating in musicals, voice lessons, and piano lessons. Life doesn't seem to slow... Ian Skilling and I got a nice write-up on the NSF webpage about the eruption in Iceland and our work on glaciovolcanism in northern British Columbia and in Iceland (search for Ben's name in the 'Alums In The News' section of the Geo Dept. web site) and I've had a few local newspaper and TV interviews about the eruption. Hopefully it's a good opportunity to educate a broader community about volcano-ice interactions, Pleistocene paleoclimate studies, and volcanic hazards." Binks Colby-George: "I have spent the last year going back and forth to Afghanistan. Geology looks great out of the plane window, but ground conditions do not permit a more detailed investigation."

1989. Sarah Gramlich Howard: "I've created a website summarizing the peer-reviewed, scientific evidence on the various factors that may affect the risk of developing type 1 diabetes. I focused on the potential role of environmental contaminants, and included evidence for contaminants' involvement in type 2 diabetes as well. www.diabetesandenvironment.org" **1990. Susan Ford-Bennett:** "Who knew I wanted to be a science teacher when I grew up!?! I'm working on my single subject credential to teach science to middle school or high school teachers. I was inspired after developing a science program for my kids' elementary school after we lost the traveling science teacher to budget cuts." Andrew Garrett: "I started a new position in February this year, and the family moved from the Boston area to DC during the biggest snow storm that the area has seen in decades. The year started with a deployment to Haiti, and now we are getting settled down in a new home in Bethesda. Jennifer continues her work as a medical informatics specialist, and Amelia is more fun every day- she'll be 2 in July." Rebecca Arenson: "About to move to a house after nine years of apartment living and have a housemate for the first time in five years. So lots of adjustments. The best part is finally having kayak storage space and a garden. Still adjusting to the relocation from Seattle back to Maryland and missing the West coast." Mark Scott: "Kids (8 & 10) immersed in Spanish with Tim Getten's '89 daughters. Our son is a best buddie of Tudi's (Katrina Allen Kennedy '88) boy, so we see them fairly often. Barb '89 is finishing up a doctorate in Science Ed at the U of MN and who knows where that may take us. I am talking about the days I 'used to be' a geologist and 'used to throw' a



Binks Colby '88 has spent much of the past year and a half in Kabul, Afghanistan, doing computer work on a contract for his employer, MACTEC Engineering and Consulting in Portland, Maine. He has survived bad weather, bugs and car bombs (a ways away, fortunately), and here he poses with an example of the type of vehicle you would like to have if you could afford one. Life in Afghanistan, from Binks' reports, is basically living in a battle zone.

Discraft. My folks are still in Northfield and we see Tim and/or Mary probably every third trip down there from St. Paul. Been loving the Greenland updates from Sonja! I see John Ostegren and Steve Robertson every once in a while - more often on Facebook than in the 'hood." Congratulations to **Sharon Stern Kahn** who has gained a new member of her family: "While life has been full and crazy for a long time, our nearly 1-year-old son, EJ, just ups the ante! We adopted our smiley little boy last October and have had a whirlwind year getting to know him. Meanwhile, at work, people continue to think that working in Geography puts me practically in Geology. I like what I do, but it doesn't have much to do with rocks! If you're in Madison, come visit us!" 1991. Kari Cooper and Eric Cowgill: "2009 was a big year for us - our daughter Katja Cowgill was born and I got tenure (Eric got this out of the way the year before). Katja went on her first hike at four months, although we're keeping her away from rock hammers and the mass spec until she's a bit older! Eric has started working on active faulting in Haiti and orogen-scale deformation in the Greater Caucasus (Azerbaijan and Georgia), while continuing work on crustal deformation along the north margin of Tibet. I'm continuing to work on sub-volcanic processes in various places, most recently Mt. Hood, Mt. St. Helens, Tarawera (New Zealand), and Quizapu (Chile)." Kari, congratulations on both counts, and hello to Katja - may she always love rocks!

1992. Andy Brydges: "In November 2009, I started a new job at the Massachusetts Clean Energy Center, directing the Commonwealth's solar and wind incentive programs. I'm enjoying the new challenges and opportunities after years in consulting. My son Charles, 8, already hopes to be a scientist. My daughter Emily, 6, throws a wicked forehand!" Clifford Blizard: "I am at long last fulfilling a dream of becoming a writer. I have a draft of a book on an archaeological site here in Georgia finished, with plans to self-publish by next Spring. I am also with the Atlanta Nature Examiner, writing about natural history in the Southeast, online at http://www.examiner.com/x-41890-Atlanta-Nature-Examiner. In my spare time, I am teaching online for Axia College and Kaplan University, and mentoring Doctoral Students online for the School of Advanced Studies at the University of Phoenix. I've been at the same residence here in Georgia for nearly four years now -- scary!"



Joan Ramage '93, Leo Macdonald and their daughter Iona welcomed the newest member of their family into the world when Aurora Beth Macdonald was born April 18. Congratulations Joan and Leo, and welcome Aurora!

1993. David Lund: "We recently moved to Ann Arbor for a position in the Dept. of Geological Sciences. The job is great - it's like a perpetual comps project, but with teaching and a few other things thrown in. And there are several Carleton alumni here - you can hardly shake a stick without hitting one! My wife Kate and I now have two kids, Sam (3 yrs) and Etta (5 yrs). Overall we're enjoying Ann Arbor, playing a little ultimate, and spending part of the summers at field camp in Wyoming. Winters in Michigan are about as fun as in Minnesota, though we lack the sweet smell of Malt-O-Meal and turkey farms that bless Northfield." Joan Ramage Macdonald had a baby - and we send out a big welcome to Aurora Beth Macdonald! Joan wrote, "Iona is two and very excited to be the big sister."

**1994.** Congratulations to **Naomi Lubick** who writes, "What's not new: I'm a freelance science writer, living in Zurich. What's new: I got married to Matthew MacLeod, on 14 October 2009, in Zurich. (He's Canadian, grew up near Banff, and models long-range atmospheric transport of pollutants.) We're moving to Stockholm in August. Come visit if you are ever in Sweden!" Brett (Kessler) Dooley: "I am in my second full year of teaching adjunct at the local community college. Things are going pretty well, but it has been hard trying to get a geology program started. It is not new to the VCCS system, just this campus has never offered geology before. People can get set in their ways! Butch's museum has a new director, and things are looking as good as they can in this economy for Butch. Tim is still home-schooled but is going through an on-line program, which he seems to be both enjoying and doing well. Tim now volunteers at a local alpaca farm instead of the SPCA, but that animal interest is still strong."

1995. Congratulations and best wishes to Kate Jesdale who reports, "Josh Stephen and I got married last summer. The wedding was REALLY FUN. A few weeks ago, we bought a house, so we're happily entrenched in life in Vermont." Bryn Perkins: "I'm writing from Croatia, it's my first time here and it is really quite nice! I sold the Prague Monitor after unfortunately having to cut it way back (last couple of years were particularly rough for media). I'm starting work as a management consultant (for McKinsey) in the fall, and working on getting my Czech to fluent before then. Got married to a wonderful woman (back in 2006, met here in Prague in 2002 but she is American -- don't remember if I wrote that before, it has been a few years). Still living in Prague and really enjoying it, now in a bigger flat that makes it really easy for people to visit!"

<u>1996.</u> **Kevin Theissen:** "2009 was a big year for me. First, I was awarded tenure and promotion at the University of St. Thomas and in the summer my



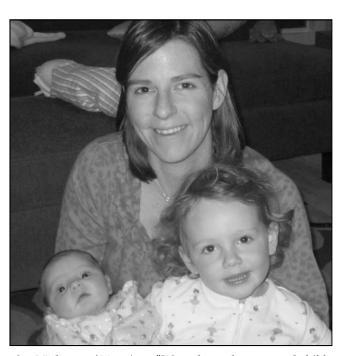
Got an email last August with a great picture of **Nina Molumby Stuyt '96** and her new baby Emmett Molumby
Stuyt, born last year on July 28th. She added, "Big
brother Karsten is very excited to have his brother around"



Congratulations and best wishes to Kate Jesdale '95 and Josh Stephen, who married last August in Randolph, VT. Members of the wedding party included (from left) Naomi Lubick, Martha (Tobey) Alvarez, Karin Stratton, Joan (Ramage) Macdonald, Julia Daly, Josh Stephen, Kate Jesdale, Beth Lambert, Anu Gupta-Evans, Jay Stetzel, Rachel Bynum, Abigail (Traktman) Stricoff, Sharon Schaff, and Liz Butler. At right the Strong Women continue their wedding tradition of carrying off the groom; from left, they are Kate Jesdale, Karin Stratton, Joan (Ramage) Macdonald, Josh Stephen, Anu Gupta-Evans, Naomi Lubick, Beth Lambert, and Liz Butler.



Karen Bobbitt Gran '96 and her son Peter joined us on the beach in front of Split Rock Lighthouse this spring during our Northern Minnesota field trip. Peter loves rocks, especially if they are airborne and splashing into the lake.



Cari Johnson '96 writes, "We welcomed our second child, Naomi Carlen ("Mimi") on March 3, 2010. Here's a pic with me, big sister Ella (who will be three in June), and the baby. I am also tenured and an associate professor as of last year (yay!). All is well in Utah:)" Congratulations on all counts Cari!!

sweetheart Inga and I were married." Kevin, congratulations and best wishes for the future on both counts! **Karen Gran:** "We are still enjoying life in Duluth, and all the hiking and cross-country skiing that goes with it. The boys keep growing (Peter is now 3, Alex is almost 7), and Rik and I are both as busy as ever trying to juggle everything life throws at us. I was funded to go back to Mount Pinatubo in the Philippines this past year and ended up taking 3 students in August and another 3 in January. It was fascinating to see how much change had occurred since I was last there in

2002." Stephanie Phippen and Dan Feiveson: "Our two little boys, Julian (4) and Levi (18 months), are keeping us busy and already demonstrating innate interest in rocks. Stephanie works at a large environmental consulting firm and still finds her way into the field from time to time, most recently in the Alaskan wilderness. Dan continues to demonstrate zero innate interest in rocks while running a small business serving business newspapers and data publishers."

1997. Fawna Korhonen:
"After three years at the
University of Maryland,
I've moved on to another
postdoc at Curtin
University in Western
Australia. I'm really
enjoying life in Perth. If
anyone finds themselves
in this part of the world,
drop me a line!"

1998. Carrie Elliott: "My husband Andy Materer and I welcomed our first child, Colin Materer, into the world December 5, 2009. I made him a trilobite shirt- starting the earth science education early!" Congratulations Carrie, and welcome to Colin! Last summer, Allison Payne sent a note relating, "There I was in Fairbanks this winter, finishing up my Masters thesis in volcanology, when Redoubt volcano began erupting. Since I was funded by the Alaska Volcano Observatory, I came down to the HQ in Anchorage to help out - and got hired to run the operations room full time! It's been

outstanding. I'll finish up that thesis . . . soon. In the meantime, I'm thoroughly enjoying green and sunny Anchorage, riding my bike to work in the spruce forest along salmon streams, and singing in a band with my husband Jesse. I can't complain." **Martha Carlson Mazur** sent a note last summer bringing us up to date: "My husband, Bob Mazur, and I were married in Ann Arbor, Michigan in August of 2008. I furiously finished my PhD in aquatic ecology at the University of Michigan and defended in June 2009. I am continuing to work at the USGS - Great Lakes

Science Center in Ann Arbor, where I am a research ecologist studying Great Lakes coastal wetland ecology. After eight rewarding years coaching the UM women's Ultimate team, I have decided to hang up my clipboard to have more time to spend with friends and family. If you are ever in Ann Arbor, look us up!"

1999. Heidi Guetschow:

"What's new? Nada. Nose to grindstone." Congratulations to **Ken** Tape who wrote last summer saying, "My book was published by the University of Alaska Press and will be on the shelf March 2010. The content is also being developed into a special exhibit for the UA Museum of the North, which will run next Summer/Fall. It has been a rewarding project, to say the least, and my Carleton visit was a very

memorable highlight. It's not every day that I get to be 'distinguished!' I wear my "I (heart) Cryosuction" shirt all the time, and it gets more comments than any other shirt I wear. Who can resist?"

<u>2000.</u> Alex Barron: "We managed to pass comprehensive clean energy and climate legislation through the House of Representatives last summer and I spent the fall tracking the international climate negotiations. The spring has slowed down just enough to allow me to plant a backyard garden while I wait (and hope) for the Senate to turn to energy



Carrie Elliott '98 wrote that she and her husband Andy Materer "welcomed our first child, Colin Materer into the world December 5, 2009. I made him a trilobite shirt - starting the earth science education early!"

legislation." **Annie Winkler:** "I'm working at Real Pickles in Greenfield as I start to pursue EMT work. The folks at Real Pickles are awesome, and the company was started by two Geo grads from Brown - Dan Rosenberg and Addie Holland." **Deb Goodwin:** "I am in the final year of my doctorate and therefore teaching undergraduate-level science education classes to distract myself from the much-dreaded writing process. I'm also working as a Scientist for Sea Education Association, which is far more exciting than anything related to grad school." **Nina Berglund:** "I recently accepted a job as a City Planner for the City of Duluth so we will be relocating to Duluth, Minnesota. In December, we got a puppy, Carleton Rover aka Carl Rove. Now we are expecting



**James Bishop '01** and Oliver.

our first baby in October 2010! New job, new city, new puppy, new baby ... when it rains it pours!" Luc Mehl: "I've taken a 'real' job working for a few friends that manage environmental science data. I never wanted to spend much time at a computer, but the hours are flexible and I get a lot of mountain time. I just got back from winning a 180-mile wilderness ski race in the Brooks Range. 4.5 days, hundreds of caribou, a few wolves, intense aurora, two lost toe nails. I'm constantly grateful to be living in Alaska." We wish a warm welcome to Anne-Sophie, born to

Anna Nelson Laloe and Jean-Baptiste in February. Later Anna wrote, "Anne-Sophie is doing great - she started smiling yesterday!! It's been so much fun to have visitors - let us know if you're in the area and want to meet our little girl!! We'd love to see you here in Boston."



Carl Tape '01 and Elisabeth with Leo.

2001. James Bishop: "Last May my wife Megan gave birth to our son Oliver. We're having his first birthday party soon, just prior to our moving to Houston. Oliver is scooting around, feeding himself, clapping, giggling, and generally a very happy California baby. Obviously, we're a little conflicted over the move to Texas, but to keep our jobs, we need to move to the nation's fattest city-- we'll be skinny there! Megan and I are both geologists with Chevron. The work is really interesting and not quite as evil as you might imagine (sometimes I go weeks without any pillaging). Drop me a note if you're in Houston anytime after July." Carl Tape: "2010 is a big year. My wife (Elisabeth Nadin) and I had a healthy baby boy, Leo Nadin Tape, on March 1, 2010, in Cambridge, Massachusetts. Elisabeth (geologist) and I (seismologist) both accepted faculty positions at University of Alaska Fairbanks, to start fall 2010. I am currently enjoying a postdoc at Harvard." Carl, congratulations on both counts, and welcome to Leo! Willy Amidon: "I am finishing my PhD this spring, getting married this summer, and starting a job at Middlebury College this fall. In the words of Michael Jackson... 'This is it.' Please come visit us in Vermont." Best wishes on all of it, Willy! Anne Sawyer writes, "We're coming up

on our first anniversary of being small-farm and old-falling-down-farmhouse owners, and it's fabulous! Just this past weekend we were planting pear and cherry trees, planting pines for a windbreak, building a raised bed for blueberries, picking rocks from the future garden and ordering chicks to fill our newly-



Anne Sawyer '01 and Joey in a "family" photo in front of the Christmas tree with their best friend.



**Katja Meyer '02** and her husband Burt Thomas with Farris on a recent trip to the Sierras.

built coop. We're hoping for fresh eggs by September and also hope to start a batch of broiler chickens in late summer! We'll be trying to establish pasture this summer and perhaps we'll have critters larger than our border collie (sheep? a pig?) by next year. I recently finished the Master Gardener course at the U of MN and am now volunteering as a Rice County Master Gardener intern. It's a fantastic program geared toward educating the public about all things yard-and-garden, but I haven't had to learn so much in such a short period of time since I left Carleton! And, since starting a small farm doesn't pay the bills (it creates the bills!) I'm still enjoying my job Chanhassen, MN, as a snow hydrologist for NOAA." **2002. David Nickerson:** "With my graduation from medical school in June, my wife Erin and I are moving to Little Rock, Arkansas for my residency training. We'll be there for three years and hope to move back to our home state of Wyoming afterward. My younger brother Phil is continuing the family geology tradition, working on his doctorate in economic geology at the University of Arizona." Mary Savina, Tim Vick and the students in Mary's Basin And Range study group spent an interesting day with Phil looking at porphyry copper mineralization in the Tortilla Mts. near Tucson this spring. Katja **Meyer:** "The big news here is that we welcomed our son, Farris William, into the world on September 21, 2009! We're completely smitten and having a blast exploring California as a family. We are also keeping busy as postdocs - I'm at Stanford and my husband, Burt, is at the USGS in Menlo Park." Congratulations Katja and Burt, and welcome Farris! Also, congratulations are in order for Liz Cassel, who writes, "I just finished my PhD at Stanford this spring, and am moving east to become an assistant professor at Franklin and Marshall in Pennsylvania this fall. And I'll also be making a stop in Prague in July to compete in the World Ultimate Club Championships!" Good job Liz.

2003. From Nico Davies: "I moved to northern Germany about a month ago and have now started my very intense second doctoral programme, this time in medicine. I am most interested in anything to do with immunology and engage in sport-immunological research on the side. I believe that biomechanics holds the key to several health issues, both on a macroscopic and a microscopic level. On the side, I work with a cartoonist and together we try to publish funny, but socially and politically critical books. Our most recent publication is called: € = mc² (Petz and Davies, Kopp Publishing, 2009 and yes, money rules us all!) I also run my own little graphics business, at times sell icons to firms and have attached a drawing. Our medieval music ensemble is doing well and we are starting to get a little bolder now. We will have to



*Nico Davies '03* with her new stethoscope, now headed off to medical school.

survive a few concerts in the summer and hope for the best."

**2004. Dave Auerbach:** "Spending a year Down Under, lecturing and TAing at Adelaide University. Just got back from two weeks at field camp in the Flinders Ranges!" Bess Koffman: "I completed a third Antarctic field season, and am now locked in a windowless lab until I melt 680 m of ice core. My PhD is rolling along, and I'm enjoying the balance of teaching, labwork and writing. I still find time for some old-time fiddling and picking with my friends, and I can't wait to get the garden going! I'll be welcoming my brother (a banjo player) to the grad program here at UMaine this fall, too!" **Joseph Graly:** "I am on the verge of finishing a M.S. at the University of Vermont and am soon to start a doctoral program at the University of Wyoming. My masters started with Greenland climate history and ended with me becoming one of the world's leading experts on meteoric 10-Beryllium. I'm going back to Greenland for my doctoral research, so who knows what the future has in store..." **Brandon Murphy** served as a sedimentologist on the Integrated Ocean Drilling Progam Expedition 320 in March and April last year. Brandon is a grad student at UC-Santa Cruz.

2006. Kelsey Dyck: "Still in graduate school at UC Santa Cruz, working on my thesis full-time now." Rachel Brown: "Last summer Kelsey Dyck ('06) and I TAed the UCSC summer field camp together in the White and Inyo Mountains of California- a beautiful though quite warm place to be in the field. Time in Santa Cruz is flying by..."

**2007. Donald Penman** writes that he has become a PhD student in geochemistry at University of California, Santa Cruz. **Gloria Jimenez:** "Still living in Cuenca, Ecuador, and working with park guards and water monitoring equipment in Sangay National Park--it's bringing back memories of geomorphology! I've been training and coordinating a group of community park guards through my counterpart, the Fundación Cordillera Tropical. They range from young, cute, and gangster-looking (a popular fashion among the male Ecuadorian under-25 set) to old, cute, and hobbit like (and speaking better Kichwa than Spanish). I teach them to use their cameras, cook stoves, and GPS units, and they teach me campo (countryside) slang. I am still living and working in Cuenca. It's a very nice, pretty, conservative city where your name means a lot and people stick with their families. Makes it a bit difficult to meet people who aren't gringueros (gringo-chasers)." Gloria's other recent activities have included yoga, dance and defending her house plants against Tigrillo, her new, very energetic cat who views plants and anything hanging as his natural prey. **Kelly Hereid:** "I just passed my Ph.D. qualifying exam! (Good job, Kelly!) Still chugging along on that degree at the University of Texas, working on reconstructing paleoclimate using western Pacific corals from the last thousand



Glorial Jimenez '07 is in Ecuador. Here she crosses a stream valley with a co-worker.

years or so. Gave my first AGU talk last December as well, it was great to see all the other alums there! That's all for now, have to get back to packing for a research cruise to the Gulf of Mexico. Hope everyone's adventures are appropriately ridiculous!" **2008. Perry Spector:** "I'm currently working for Columbia researching the East Antarctic Ice Sheet. I've decided to go to the University of Washington for grad school in the fall to study the glacial history of Antarctica. Just saw a talk today from Dave Barbeau...It's a small world with Carleton Geology. Hope all's well. Cheers!" Tyler Mackey: "It's been a good first year in my master's program out here at UC Davis, but I found myself missing the Carleton winters in California. I decided field work in Antarctica might be something of a consolation, so I will be taking off for the fall to dive on some unique modern microbialites in ice-covered freshwater lakes of the McMurdo Dry Valleys." John Nowinski: "I got married last June and recently bought a place in Austin. I'm finishing up my M.S. in hydro at UT and will be starting a Ph.D. here in the summer. I've seen plenty of Kelly Hereid, Lauren Andrews, Jaime Levine, and other Carls in Austin." Marc Monbouquette: "I'm starting a master's program in environmental management at Duke University in Fall 2010." Michael Barrett: "Starting in May, I will be living and working at a mountain lodge in the High Peruvian Andes. Any and all Carls are more than welcome, and geo alums will receive special

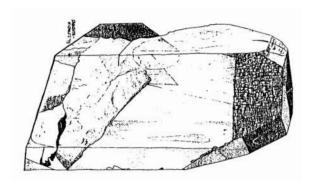
discounts. Come visit and stay at 12,000 ft.!" Michael, what a great deal! For any who might want to check it out, the url for the location, Llanganuco Mountain Lodge, is www.llanganucolodge.com. 2009. Kirke Elsass: "After graduation, I worked on an organic produce farm and loved it. I am now working at an elementary school teaching nutrition through local foods I buy directly from farmers. I have confirmed that my long-term plans will revolve around agriculture, K-12 education, and basketball." **Katie Marks:** "I will be going to the University of Oregon this fall to work with Kathy Cashman towards a masters in geology/physical volcanology. This past fall, I spent five months on the Big Island of Hawai'i volunteering for the Hawaiian Volcano Observatory. Now, I am enjoying learning something new by working at my mom's staffing company in WI and enjoying spending time with my family before heading off to grad school." From Katie Buckner: "I am at the University of South Carolina learning that the law really is a jealous mistress. Nevertheless, despite the law's demands, I am very excited for a summer internship with the South Carolina Dept. of Health and Environmental Control, where I hope to exercise my Geology background in some capacity. Did I mention it reached 90 degrees in March? Happy." Kristin Sweeney: "I'm working as research assistant at St. Anthony Falls Lab at the University of Minnesota. This fall, I will start as a Master's student

in geomorphology at University of Oregon."



Katie Marks and Lauren Colwell '09 spent five months last fall volunteering at the Hawaiian Volcano Observatory. This was taken at the summit caldera - Moku`aweoweo - of Mauna Loa on a hike they went on with fellow volunteers Erin (far left) and Fred (far right).

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