Geology Department Newsletter



"Educating students to shape their lives, their professions, and their societies"

February 2012

Greetings!

It's great once again to share the news of the department and of our extended family. I want to take this opportunity to thank **Pat Colgan**, the newsletter editor, for his persistence in making sure that a newsletter comes together each year and **Janet Potgeter** for gathering information, getting the newsletter printed, and making sure that it gets to you.

We saw some changes in staffing during the year. Linda Davis, Lindsey Waddell, and Michael (Mick) McRivette all took on new positions after teaching in the department as visiting faculty members. Linda is now a member of the geology faculty at California State University, Bakersfield. Lindsey and her husband Jack Waddell (he was a visiting faculty member in physics), both took positions as Instructors at the Arkansas School for Mathematics, Sciences, and the Arts. Mick took a visiting faculty position at Albion College where his wife Carrie Menold is on the faculty. Their son, Milo, was born in December. Our new visiting faculty starting in fall 2011 are Kelly Heid and Tara Kneeshaw. Kelly has taught for seven years in the department as a parttime adjunct faculty member. Last summer she completed an M.S. in Geosciences from Mississippi State University. Tara was previously on the geoscience faculty at California State University Fullerton and recently moved back to Michigan (a native Michigander).

Larry Fegel decided to retire at the end of this academic year in order to be able to spend more quality time with his family and grandchildren. Larry has been an affiliate faculty member for 11 years after an impressive career in the public schools system (mostly in Grand Rapids). Larry has been a valuable member of the department and local education community and he will be missed by all of us. We are in the process of searching for a new faculty member to fill the affiliate position.

Both **Steve Mattox** and **Figen Mekik** were promoted to Full Professor during the 2011-2012 academic year. Congratulations! In addition, Figen was elected to be the Chair of the University Academic Senate at GVSU.

Several faculty members were on sabbatical leave last year. **Peter Wampler** and **John Weber** completed full year sabbaticals during the winter 2011 semester, establishing new collaborations and research directions in Haiti and Eastern Europe, respectively. **Kevin Cole** was also on sabbatical last winter, exploring the use of a terrain scanner for landslide evaluation. **Steve Mattox** took a semester sabbatical leave during the fall 2011 semester, working to



Students and faculty exploring a slot canyon near Escalante, Utah. Pictured from left are Mike Stockoski, Luke Burt, Jordan Koster, Nick Anderson, Joe Klumpstra, Pat Videtich, and Greg Wilson (photo by M. Stockoski).

enhance the pipeline of students into geoscience majors from Michigan high school geology courses to Michigan universities. These sabbaticals led to re-energized faculty, new scholarly directions and new student research opportunities.

We had significant participation in professional meetings last year. A record 18 students attended the GSA Annual meeting this year in Minneapolis and 12 GVSU faculty and 11 GVSU undergraduate students were authors or co-authors on GSA presentations. **Peter Riemersma** and **Peter Wampler** organized a geology field trip through the Michigan Upper Peninsula on the way to the meeting, providing both transportation and edification. Once again, Grand Valley participated in the group alumni event and we connected with several alums from widely varying times at GVSU. In addition, two faculty members and two students presented at the AGU meeting in San Francisco.

I would like to mention a few awards or recognitions. The College of Liberal Arts and Sciences sponsors a *Distinguished Alumni-in-Residence Award* and every other year our department can select to honor one of our alums. In 2011 we selected alumni **Ron Sheets**, who came to campus during homecoming week and met with students and faculty. A couple of our students also received external recognition. *Continued on next page.....*

"Grand Valley State University is a public institution with a local, regional, and state commitment, and a global perspective. We are dedicated to providing our students with the highest quality undergraduate and graduate education."

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electronic mail: geodept@gvsu.edu http://www.gvsu.edu/geology/ Senior **Erica Dalman** was selected to be a summer intern with the *American Geosciences Institute Government Affairs Program* in Washington, DC. She was also a recipient of the Association for Women Geoscientists (AWG) *Crawford Field Camp Scholarship*. Senior **Adam Davis** was selected to receive a *GSA/ExxonMobil Bighorn Basin Field Award* to participate in a one-week field program last July.

One interesting thing we tried this year in geology seminar was to arrange mock job interviews for students with local employers. Several of you participated in this project and the students found it to be extremely useful. We hope to continue to do this and welcome the participation of any of you who might be interested.

The department is undertaking an official self-study to evaluate what we do well and what needs to change or evolve, so that we can set new strategic goals. We kicked this off in May with a SERC (Science Education Resource Center) funded and facilitated on-campus workshop that helped us develop action plans related to curriculum and recruiting.

Finally, I want to update you on the status of a couple of our endowed funds. The details are within the newsletter, but we do have a bit of news worthy of the chair's letter. Last year the *Norman and Helen Gibson Field Study Scholarship* reached the endowed level and we awarded our first scholarships to support student research last summer. In the last year we were also able to establish the *Richard H. Lefebvre Geology Field Education Fund* and I am happy to report that it is already within about \$2000 of reaching the endowed level of \$30,000 thanks to some very generous donors! That fund will help keep us running field trips.

We always enjoy seeing and hearing from you. Please keep in touch and if you plan to be in the vicinity of GVSU, please let us know. We would love to see you or hear from you.

My best wishes for 2012! Ginny Peterson

Graduates across the years 1968 to 2011

The Department of Geology has produced 539 graduates between 1968-2011 in our Geology, Geochemistry, Group Science/Geology, and Earth Science majors.

1968 - 1	1980 - 9	1992 - 7	2004 - 28
1969 - 5	1981 - 11	1993 - 16	2005 - 19
1970 - 7	1982 - 16	1994 - 13	2006 - 22
1971 - 2	1983 - 6	1995 - 16	2007 - 19
1972 - 5	1984 - 6	1996 - 12	2008 - 18
1973 - 14	1985 - 6	1997 - 23	2009 - 17
1974 - 9	1986 - 9	1998 - 13	2010 - 22
1975 - 11	1987 - 8	1999 - 15	2011 - 14
1976 - 7	1988 - 6	2000 - 15	
1977 - 14	1989 - 7	2001 - 23	
1978 - 11	1990 - 6	2002 - 26	
1979 - 12	1991 - 4	2003 - 24	

Approximately 357 Geology/Geochemistry degrees, 98 Group Science, and 78 Earth Science degrees have been awarded.

Department Faculty and Staff

Ginny Peterson - Associate Professor & Chair **Kevin Cole** – Associate Professor Patrick Colgan - Associate Professor Larry Fegel - Affiliate Faculty **Kelly Heid** – Visiting Assistant Professor **Tom Hendrix** – Emeritus Professor Tara Kneeshaw - Visiting Assistant Professor Pablo Llerandi-Román - Assistant Professor Steve Mattox -Professor Figen Mekik - Associate Professor **Heather Miller** – Assistant Professor Bill Neal - Emeritus Professor Peter Riemersma – Associate Professor Norm TenBrink - Emeritus Professor Patricia Videtich - Professor **Peter Wampler** – Associate Professor John Weber - Professor **Greg Wilson** – Instructor & Lab Coordinator **Janet Potgeter** – Department Office Coordinator

Currently there are 74 Geology, 4 Geochemistry majors, and 20 Earth Science majors, and 30 minors. There are 176 students in the Integrated Science Program (pre-service teachers served by our faculty).

Our 2011 Graduates

We are extremely proud to present another outstanding crop of new geoscientists to help build a better world! We hope to have even more new graduates coming next year!

B.S. Geology

James L. Buzzell Jeremy W. Espinoza Stephen J. Hoekwater Christy L. Kroskie Kyle W. Siemer Michael A. Wicker Kyle E. Eno Andrew J. Heyboer Elizabeth C. Koeman Stephen A. Shields Kent A. Walters

B.S. Geochemistry

Samuel M. Howard

B.S. Earth Science

Ashley Meade (Vandenburg) Bradley Stevens

Please consider a gift to one of our departmental scholarship funds. When giving to GVSU, please specify a specific fund or give to the Geology Development Endowment Fund which is used for special needs in the department such as matching funds for equipment or visiting speakers.

Faculty and Staff News

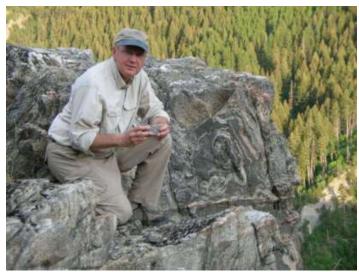
Kevin Cole (colek@gvsu.edu) - "2011 was a year of change for our family. I started the year with a winter sabbatical. I spent my sabbatical in Seattle, Washington working on debris flows. I worked on a new method for determining both the causes of and the recurrence intervals of non-anthropogenic coastal debris flows. I used the topographic scanner on two sites; one was a fast moving slump in Issaquah Washington and the other was a coastal bluff on the Kitsap Peninsula in Washington. After teaching 111 1st term last summer we headed west. We stopped at Glacier National Park hoping to work on my 111 Glacial Labs, but instead met with tons of snow. We couldn't even make it up to the Grinnell Glacier where I hoped to take more pictures. While in the Seattle area we spent some time hiking with our daughter Rachel and her beau. We explored some new parts in Oregon getting good use of our rain jackets. We also watched Rachel give a fire dance performance on the Reed College campus. Next both Susan and I went to Alaska and joined my folks on their boat in Ketchikan Alaska and did some fishing, crabbing, shrimping, hiking and sailing. In August we dropped Sean off at Whitman College and began our life as empty nesters. It is much quieter at home now and we are learning to cook for two (lots of leftovers!). On our way back east we stopped at a very large slide that both crossed and took out highway 410 near Yakima Washington, a casualty due to blasting at a gravel quarry (the quarry people deny this). Heading further east to home we stopped at the Craters of the Moon National Monument and collected a large piece of pahoehoe lava for the Richard H. Lefebvre Memorial Plague. During the fall semester I taught two classes, physical geology and mineralogy. I had a crop of 33 students in mineralogy and they very much enjoyed the Bancroft trip and the class (especially the silicates!!). We went a week later to Bancroft arriving in the pouring rain late at night. Pitching tents in the mud is always fun. The students collected lots of interesting minerals and both Greg Wilson and I collected a bunch of new samples for the 111 sets."



Matt Boike, Joe Klumpstra, and **Kristine Haataja** on the fall geomorphology field trip at Pigeon Creek Park describing sediments and soils. Is that an Inceptisol? (photo by P. Colgan).

Patrick Colgan (colganp@gvsu.edu) - It was a good year. I worked with some great undergrads in my classes as well as on individual research projects. I wrote lots of letters of recommendation for graduating seniors applying to grad schools. Kent Walters went to Univ. of Cincinnati, Elizabeth Koeman went to Notre Dame, and Sam Howard went to Univ. of Southern Illinois. Each of these students worked with me on NASA Space Grant projects. During this past summer I worked with Adam Mulling and Sam Howard on projects. Adam was doing a soil organic carbon inventory for post-settlement stream alluvium, and Sam used the radioisotope cesium-137 to determine deposition rates of alluvium. Both gave nice presentations at the fall GSA meeting and the MI Space Grant Conference. Graduating senior Jeremy Espinoza wrote a nice senior seminar paper that was published in the Interchange on ice sheets and sea level rise. Now he is in Denver working in the environmental business. I had one major publication this past year, a book chapter titled The Quaternary of Wisconsin with my co-author Kent Syverson of the Univ. of Wisconisn-Eau Claire. It was an addition to the 15 volume series *Developments in Quaternary* Science published by Elsevier. This series is designed to cover what is known globally about the Quaternary Period. Kelly and I were able to go up north and spend some time at a cabin at Seul Choix Point on the north shore of Lake Michigan. I did some geology, collected fossils, and measured some interesting structural features in the Silurian Cordell Fm. We also explored and had fun with our dogs. everyone is well! Stay in touch and keep sending in your notes to the newsletter!

Larry Fegel (fegell@gvsu.edu) - "It is time to say good bye. At least it is time to close one chapter and perhaps open another. After forty-three years in education, I have decided to retire at the end of this semester. I have had many great opportunities over the past four decades or so. I started teaching at Blandford Nature Center in March of 1969. I taught lapidary, earth science, and nature study classes. I also ran summer science camps. Eventually, I started the educational farm while helping with the sixth grade Blandford Environmental Program led by my late wife, Connie. In 1976, I helped start City High School teaching earth science, biology, algebra, and geometry. Throughout the 80s and 90s, I worked in outdoor education and eventually became a curriculum director. In 1998, I went to West Ottawa Public Schools as an assistant superintendent. In 2001, I retired from education administration and began teaching at GVSU. The past eleven years have been rejuvenating for me, as I believe I finally landed where I was "supposed" to be. I believe we all have a calling in life and mine has been to share the teaching of earth science with future teachers. Many people have asked what I intend to do next. I am not sure, but I intend to spend a great deal of time with my seven grandchildren. I may also have some opportunities to work with local nonprofit agencies with a focus on watershed management. I am truly appreciative of the support I have received from everyone in the department. I have had many great experiences and will cherish the fond memories of my time at Grand Valley. Thank you and farewell."



Larry Fegel in the field. We all will miss having Larry in the department and appreciate his mentoring and wry sense of humor. Larry introduced many of us to important geologic sites in Michigan and further afield. We hope Larry continues to enjoy his geological explorations in retirement!

Kelly Heid (heidk@gvsu.edu) - "I became a Visiting Professor this fall. I didn't have to travel very far - I just moved down the hallway to a new desk in a different office. This new position allows me to work full-time and teach more courses. Along with the Geo111 lab sections, I was assigned to teach one of the big Geo100 Environmental Geology sections. My other big news is that I completed my Masters of Geosciences this summer with Mississippi State University. I am now the proud owner of a new set of initials a M.S. to go along with my B.A. and M.Ed. The capstone for the program was a two week field course on the island of San Salvador in the Bahamas. During the field course we spent our time learning the geology of the Holocene carbonate platform and the mechanics of cave formation on the island. Ten days walking beautiful sandy beaches, crawling though twelve caves, and snorkeling every afternoon along the shorelines and reefs made it a tough assignment. Pat, the dogs and I were also able to spend a week along the north shore of Lake Michigan in a cabin outside of Manistique. Pat spent his time exploring the geology of the exposed Silurian rock outcrop just out back of the cabin. For fun he mapped the orientation of the huge straight shelled cephalopods exposed on the outcrop. Me, I spent half my time lounging on the porch reading books in the sun with L.C. and the other half trying to keep Sammy out of mischief."

Tara Kneeshaw (kneeshta@gvsu.edu) – "Greetings! I am a new addition to the Geology Department, having started this past fall as a visiting professor. I come to GVSU from California State University, Fullerton where I spent my last 3 years as an assistant professor of hydrogeochemistry. I am originally from Kalamazoo, MI and I am really enjoying being back in Michigan and close to family after a decade of moving back and forth across the country. After receiving bachelor's degrees in both biology and geology from Albion College I spent about 2 years working for the United States Geological Survey in Menlo Park, CA. During my time there I worked on everything from climate change to salt water intrusion in the

Los Angeles Basin before deciding to head to Texas where I obtained my doctorate in geology at Texas A&M University in 2008. I am a very interdisciplinary scientist with my research efforts being focused on environmental biogeochemistry. My primary areas of study include evaluating natural means to remediate polluted water, soil and wetlands. Most recently, I have worked at the Bemidji National Crude Oil Spill Fate and Natural Attenuation Research Site in Bemidji, Minn., studying how to remediate wetlands polluted by crude oil spills. During my first year at GVSU I have been busy from day one! I have been teaching many sections of Environmental Geology (one of my absolute favorite classes to teach!) and while all of the students have kept me busy, it has been really fun getting to interact with such a diverse audience. I have also had the opportunity to work with two of our geology majors: Elizabeth Vanderhoef and Bruce Shultz on their seminar research projects, both of whom have interests in pursuing future work/studies in water quality/hydrogeology. Next fall, I'm slated to teach Geochemistry (which will be a real treat since it is so closely related to my research) as well as Living with the Great Lakes. It's been a great first year and I'm looking forward to what the next has to offer. "



Our new visiting assistant professor **Tara Kneeshaw**. Tara hopefully will want to stay in Michigan with us!

Pablo Llerandi-Román (llerandp@gvsu.edu) - "I had a productive year 2011 in terms of my scholarship, teaching, and service. I visited Puerto Rico a couple of times to work on collaborative projects related to modeling slope retreat in small cays and to collect stratigraphic and structural geology data in the serpentinite belts. The first project resulted in a coastal process workshop taught at the University of Puerto Rico (UPR), Humacao. The project was sponsored by the UPR Sea Grant Program. Teachers from Puerto Rico and the U.S. Virgin Islands participated in the workshop, and I was honored to mentor GVSU (Kyle Siemer) and UPR (Stephanie Montalvo) students during the workshop. My colleague Chester Jackson (Georgia Southern) co-taught the workshop and Lesbia Montero, Sea Grant coordinator at Humacao, collaborated with us throughout the workshop. The second project resulted in a paper submission to the GSA Bulletin in collaboration with Drs. Daniel Laó-Dávila (Oklahoma State University) and Tom Anderson (University of Pittsburgh). In terms of teaching, I enjoyed developing new lessons and adjusting the curriculum of SCI 225, a collaborative course taught with biology colleagues Erin Naegle and Christopher Dobson, as well as Heather Miller and Steve Mattox from geology. We coauthored an invited paper presentation at the annual GSA meeting in Minneapolis related to the development of SCI 225. My service to the community and the profession was one the most rewarding aspects of my work during year 2011. I developed a blog about geology in the summer in collaboration with my colleague Daniel Laó-Dávila. The blog is aimed to the Spanish-speaking community and it has been a great success. We received more than 5,000 visits in about six months, and we already surpassed 6,000 visits including January and February of this year. I was invited to give a talk in a school in Puerto Rico as a result of the blog and teachers in Puerto Rico are using the blog as an instructional tool. In addition to the blog I served in the Program Committee of the National Science Teachers Association annual meeting in Indianapolis (March 29-April 1, 2012) and the organizing committee for the annual meeting of the GSA SE section (to be held in Puerto Rico in 2013)."

Steve Mattox (mattoxs@gvsu.edu) - "I'm delighted that Stephanie Standriff has been selected as top Integrated Science major this year (2012). We continue to refine her manuscript on designing a simple classroom model for melting permafrost by a warming climate. Jessica Ketelaar, a recent graduate, has a well-tested activity of finding diamond deposits that she will present at Indianapolis NSTA. Earth science minor Kimmie Jenerou co-wrote three manuscripts on evolution, a desktop explosive volcano model, and gender bias in science books. My fall sabbatical focused on writing a NSF grant to expand our network to five high schools that will be supported to offer credit by exam for physical geology. GVSU alum Jason Hunter recently demonstrated success at Grand Haven High School. He adds to the well-established program of GVSU alum Chris Bolhuis in Hudsonville. In May, I greatly enjoyed the Institute of Lake Superior Geology conference and field trips to the Duluth Complex and Keweenawan Mellen Intrusive Complex. I continue to work with Michigan Tech University in the summer on their project to increase the skills of Earth Science teachers in Kalamazoo and Jackson. I also ran two Hawaii field trips. Greg Wilson and Peter Wampler explored the Big Island with fourteen of our GVSU students. In August I guided the same trip for 24 members of the Michigan Earth Science Teachers Association. In my spare time, I am trying to establish partnerships with two science teacher preparation colleges in Indonesia."

Figen Mekik (mekikf@gvsu.edu) – "Hello! Another year went by so fast! This year was a year of transitions for me which steepened my learning curve on many fronts. I became the series editor to *Nature Education* for articles dealing with climate and surficial geosystems; I was elected as Chair to the University Academic Senate; I have been invited to an oceanographic cruise in Bermuda; and I began the process of promotion to full Professor. But amidst all the intense activity and sometimes overwhelming responsibilities, I realized one thing: there is truly no end to growth and nothing is

impossible. Anything can happen, and it usually does!! Whether one is 20, 40 or 85, tomorrow has surprises in store, and it is never too late to achieve that elusive, sexy dream. Just don't stop trying. I say this because this year showed me no matter how rough the road gets, people can get tougher and overcome their challenges. I almost lost a friend to a terminal disease but she recovered by what seems like her pure strength of will, resilience and love for life! I hope all our alums and current students are doing well! We miss you guys!!!"

Heather Miller (millerhea@gvsu.edu) "One more year around the sun. In 2011, I continued to teach SCI 225, an integrated Earth and life science course for non-science elementary education majors focused on climate change. I continue to enjoy the challenge and rewards this class brings. I was also able to teach GEO 202, Hydrosphere for the Integrated Science program. With this class we were able to take several field trips including a 3-day trip to Kentucky where we made a side stop at Falls of the Ohio in Clarksville, IN. Students explored the 390-million-year-old fossil beds which are among the largest, naturally exposed, Devonian fossil beds in the world. Our final destination was exploring parts of Mammoth Caves. Students had the unique opportunity to get off the path and investigate the science and history within the cave. We were also able to take a tour of Onyx Cave, which is no longer open to the public. The highlight was turning off our headlamps and experiencing the dark and quite within the cave. As any other geology field trip they also treasured our roadside stops for fossils and geode hunting all over the state and of course the tradition of singing in the van. Along with these two classes I also taught GEO 103, Oceans once again. With this class, the students continue to enjoy the field trip on the D.J. Angus where we take water quality measurements on Spring Lake, the Grand River, and Lake Michigan. We were also able to visit Rosy Mound to explore the dunes and shoreline processes as we have in the past. I love taking students in the field to explore and learn about the world around them! It is rewarding for both the students and me. I continue to represent the department in my work with the W.K. Kellogg-Woodrow Wilson Teaching Fellowship at GVSU by coordinating the mentoring program. GVSU is one of six Michigan universities chosen to participate in this innovative program to prepare science and mathematics secondary teachers. I look forward to this year working with students and local teachers to enhance our understanding of teaching and learning in and outside of the classroom. On the personal side, **Mason** (5 ½), Logan (3 ½), Matt, and I have enjoyed our nonstop adventures in Michigan. This past year we went camping at Tahquamenon Falls and Fisherman's Island, visited Sault Ste. Marie, Traverse City, and went hiking and camping in the Manistee National Forest several times. Bring on 2012; I am ready for another great year!"

Bill Neal (nealw@gvsu.edu) – ""This year's professional highlight was the publication of *Beaches of the World* (University of California Press), a book that consumed a great deal of my effort and energy for the last few years. Thanks go to the Santa Aguila Foundation for supporting the book's

photos in color (See their web site, and the CoastalCare.org web site). And I am fortunate to continue to participate in work with a team investigating impact of sea-level rise on small offshore islands and cays in Puerto Rico working with GVSU colleague Pablo Llerandi-Roman and alumnus Kyle Siemer as well as Georgia colleagues. Also have a couple of papers 'submitted,' again thanks go mainly to the co-authors who saw these to completion. Mary and I attended SE GSA in Wilmington, NC, and the national GSA meeting in Minneapolis; always making these travels mini-vacations. We enjoy seeing alums at the meetings as well as GVSU student presentations. Ron Green finally bought the beer he owed me! There have also been some surprise visitors to the department, and I thank all of those alumni for stopping in to visit, as well some alums that have re-established contact via e-mail. Once again we enjoyed our 'California girls' visit, the highlight of the summer! For staying young, I recommend associating with children, grand-children, great-grandchildren, and even students. For going gray early, I recommend the same. There may now be signs of 'fossilization' setting in as 3 hours in the office seems like a day, and 3 days seems like a week! Our travels have not been as far afield as in past years, but we did a nice trip to Kentucky (gave up visiting wineries to visit distilleries instead - wine is fine, but liquor is quicker - my apology to **Kat**). Remember: Be true to your school [Beach Boys 1963]; The World's Beaches [Beach Buoys 2011].

Ginny Peterson (petersvi@gvsu.edu) - "I have started to find my balance as department head and have been able to put more energy into my scholarly activities. I was first author on a collaborative article in GSA Today that was the result of my participation on the GSA Education committee. The article suggests strategies to better engage and serve 2year college faculty. I also made progress on my research on using the geochemistry of mafic rocks to fingerprint Southern Appalachian terranes. I spent some time with my coauthor in Florida to kick start our manuscript and we presented the results at the GSA meeting in Minneapolis. I also mentored McNair scholar, Chad Williams during the summer. He worked on a key sample from the Chunky Gal Mountain Fault to better understand the metamorphic conditions during fault movement. I served my last year in 2011 as an Associate Editor for American Mineralogist. I found that I did not have sufficient time for that and department head duties. I also enjoyed the opportunity to serve as a panelist to evaluate interdisciplinary proposals for NSF. I am currently interested in better constraining the fault history to help understand exhumation of high pressure rocks in the region. I continue to teach Petrology each winter semester. Last March we had a great trip to the North Carolina Mountains despite snow and fog on Whitetop Mountain, a motel that messed up our reservation and closure of the Blue Ridge parkway. I taught GEO 111 last fall after a couple of years hiatus and explored some different approaches to learning and assessment, using concept sketches. My family is doing well. Jon is still employed with Sylvan Energy, exploring for petroleum in the Michigan Basin. Casie is a senior in High School and considering colleges for next year. We took a couple of trips this year as a family to both coasts. We spent a week on Cape

Cod in the summer and a week in the Seattle/Vancouver area over the winter holidays. We did experience a major transition. Our 15-year old dog Mica was overtaken by cancer and so we have adopted a sweet puppy, Chaco."

Janet Potgeter (potgetei@gvsu.edu) - "2011 was a busy and exciting year. Since I have been working full-time for the department, I have found new areas to keep busy in this dynamic unit. The level of scholarly activity by the Geology students and faculty is admirable and enjoyable to observe. The highlight of my year was travelling with my mother throughout the U.K. and Ireland for over three weeks. We had a smashing time exploring all the major cities and great historical sites, as well as some lovely out-of-the-way places. I look forward to going back to further explore and take in more of the rich history of those countries. My family is doing well as daughter **Molly** will graduate from high school this year and plans to start her college career at GVSU in the fall. Son **Troy** is a high school sophomore and is looking forward to getting his driving license, and warmer weather for baseball and golf. With the winter season we've had so far in West Michigan, Spring doesn't look to be very far off. Best regards to all in 2012!"

Peter Riemersma (riemersp@gvsu.edu) - "Highlights in 2011 include monitoring well construction by my enthusiastic hydrogeology class at the Allendale Elementary School, a successful Earth Science Week and Chili Contest, and a pre-GSA student field trip to Marquette, Michigan that included a tour of the Ni-Cu core storage site for the Eagle Mine. Over spring break Larry Fegel and I visited the Buick Lead Mine in Missouri while over the summer **Dakota** (age 9) and I dug for fluorite in Rosiclaire, Illinois and Marion, Kentucky. Much of my summer was spent developing my approved sabbatical project Design and Implementation of Outdoor Learning Activities at the Allendale Township Public *School Campus.* This project will involve collaborative teams of teachers, students, and community members conducting research and developing specific innovative outdoor activities so elementary and middle school students can do field trips without leaving the grounds. I also contributed to an NSF proposal to increase the number of STEM (Science, Technology, Engineering and Math) majors graduating at GVSU. If the proposal is accepted my contribution to the project will be to design a 1 credit STEM Career course and also design a STEM website and brochure to summarize data on career opportunities in STEM fields but also highlight the successes of GVSU STEM graduates. I am working with student Zach McCurley to identify the source of ammonia groundwater contamination at the nearby Hemlock Crossing park that precludes the use of this water for drinking. I am working with student Andre Rasche on a project to better define the geologic factors that influence the formation of submerged sinkholes in Lake Huron."

Pat Videtich (videticp@gvsu.edu) – "A highlight of 2011 was going along with Greg Wilson and a great crew of seven students on a 25-day-long, western fieldtrip. Going out, nine people and all our camping gear in a 15-passenger van was tight, but not nearly as tight as coming back with 9 people, all

our camping gear, and a few tons of (mostly Greg's) rocks! Just kidding, Greg! I am happy to report to the 2009 crew who went on this trip that this time it wasn't nearly as hot at the bottom of the Grand Canyon. But it is still one heck of a hole to climb out of! Aside from making it out of the Grand Canyon, another highlight for me was Buckskin Gulch (Utah), a slot canyon with incredible colors! It was perhaps the most "mystical" place I have been. I highly recommend it! This year student Adam Davis and I spent a lot of time working on rocks from ye ol' gypsum mine. Adam ended up concentrating on pyrite associated with dolomite and in October gave a very nice poster at GSA in Minneapolis. I enjoyed seeing a number of alums at the meeting, and, for the second year running, GVSU had one of the best turnouts for the Monday evening "alumni-get-together-at-the-pole-event"! For Sed-Strat I did things very differently for the students' Student Scholars Day projects; each group of students chose a formation to work on that they would later be visiting on our fieldtrip to northern Kentucky. They studied thin sections of their formations and then at their outcrop taught their classmates about the formation. I think the SSD projects turned out very well and didn't hear too many students complaining that they didn't get to sieve 20 sand samples! Speaking of sieving, Bill Neal and I submitted a paper on sieving to the Journal of Geoscience Education. It's all about why it is such a good idea for Sed-Strat students to do a sieving exercise. Really it is! Again last summer JoAnn Webb (2005) and I ran lab/field trip activities for middle school students from Grand Rapids. This year the Regional Math and Science Center at GVSU kindly funded FRESH (Field Research in Earth Science Happenings) for five days of activities, and Peter Riemersma, with the able assistance of son, **Dakota**, again helped out one of the days. Thanks, guys!"



FRESH Program students learning how to kayak in Holland, Michigan (P. Videtich).

Peter Wampler (wamplerp@gvsu.edu) - "I was fortunate to have sabbatical leave during the 2010-2011 academic year. In August, 2010, I collected bulk sediment samples on the Clackamas River in Oregon with GVSU student Paul Bourdon. Recovered tracer gravel distribution and size will be combined with previously collected data and data from other regulated rivers to inform future augmentation planned by Portland General Electric (PGE). Preliminary results were

presented at GSA in Denver, CO in October 2010. While in Oregon, I had the opportunity to raft the wild and scenic section of the Rogue River of "River Wild" fame; one of my "bucket list" items. In March, 2011 I travelled with two GVSU students and Chris Hendree from GVSU admissions. The initial three days of our trip was spent visiting with Haitian secondary school administrators to learn more about how they are preparing students to eventually take advantage of the Empowering Haiti through Education Scholarship (www.gvsu.edu/haiti). The following week was spent working with graduate student Andrew Sisson to collect data on biosand filters in rural Haiti. We worked with staff at Hôpital Albert Schweitzer (HAS) to collect over 200 water samples from biosand filters and water sources near Verrettes, Haiti. Three manuscripts are in preparation based on this work. Preliminary results were presented at the national Geological Society of America (GSA) in Minneapolis, MN in October, 2011. I also spent time creating and updating a web site devoted to "Safe and Sustainable Water for Haiti" (www.gvsu.edu/haitiwater). Sabbatical release allowed me to continue research on sustainable storm water practices at GVSU during the fall of 2010 and summer of 2011. Baseline topographic data was collected during the Fall of 2010 with undergraduate student Ryan Hargreaves and during the summer of 2011, over 300 water samples were collected from more than 20 storm events from May to August in 2011. These samples were analyzed for suspended sediment and are providing the first publishable data on sediment loads originating from campus ravines. Information about this ongoing work is updated on a web site hosted by GVSU entitled "The **GVSU** Storm Water Initiative" (www.gvsu.edu/stormwater)."

John Weber (weberj@gvsu.edu) - "My family and I enjoyed spending academic year 2010-2011 on sabbatical. I spent the fall writing (a major paper with colleague Scott Giorgis and Anthony Rodriguez (Geology 2009), and proposals) giving a series of colloquium talks at M.S.U., the Univ. of Oklahoma, and Northwestern. We also enjoyed having the time to take several long family road trips to Niagara Falls, Toronto, and the Ontario "wine country"; and to the Channeled Scablands, Apatite-to-Zircon Labs (Viola, ID), and Spokane, WA. We spent much of the winter living in lovely Slovenia where I worked at the University of Ljubljana (Geology and Geodesy Departments) on a neotectonics research project and practiced speaking Slovene. It's exciting that our new GPS results can resolve the 1-2 mm/yr of north-south shortening that is actively forming the impressive Slovenian-Austrian Alps! I also enjoyed developing and teaching a week-long seminar for PhD students: "The ups and downs of mountains" (attended by ~50 PhD students and professionals). We invited ourselves to travel to Croatia and visit the University of Zagreb Geophysics Institute, where I toured and photographed the Andrija Mohorovičić (yes, that Moho!) memorial lab, and gave a colloquium talk. We then spent one week in in Vienna, arguably the most elegant city in Europe. I worked with my colleague Christian Koeberl at the University of Vienna, gave a colloquium talk, and attended a special formal talk and small informal dinner (only 5 people!) in which Professor Paul Crutzen (the 1995 Nobel Prize in Chemistry winner) laid out his discovery of the hole in the ozone layer and mused on the environment. Being able to discuss science face-to-face with a Nobel Prize winner was a once in a lifetime experience for me! I also spent a week in Puerto Rico, and 2 weeks working in the field in Trinidad, collecting GPS data, taught my BP field structural geology course in Azerbaijan for the second time, and stopped off in Greece to do 2 weeks of fieldwork in the Trichonis rift basin on my may home. A good year with lots of fun and interesting work!!"

Greg Wilson (wilsong@gvsu.edu) - "Life is going well for most of my family. I continue teaching the Honors Geology course and with the assistance of a group of dedicated student workers, we are keeping the Geology labs running. This past summer, I did a Canyonlands trip with Pat Videtich and a great group of enthusiastic students. We had to detour to Death Valley due to snow on Grand Canyon's North Rim (May), but otherwise the trip went very well. Another great field trip occurred in June when I and my son Cooper, travelled with Steve Mattox's group to Hawaii. This fall I accompanied the Mineralogy trip to Bancroft and was able to add to my considerable biotite collection. In October it was great to attend GSA and get to visit with alums at the meeting. Also at the meeting **Peter Wampler** arranged for a small group tour at the Saint Anthony Falls Laboratory. Cooper has graduated from Kalamazoo College as a Spanish major and is currently teaching English in Madrid, Spain. Luke is halfway through his training program in aviation maintenance, and will be graduating in August."



Students, faculty, and alumni at GSA Meeeting in Minneapolis, Minnesota. Top row: Bill Neal, Ron Green, Greg Wilson, Sam Howard, Bruce Shulz, Susan Jansen, Heather Miller, Andrew DeWitt, Christy Barszewski, Steve Mattox, Erica Dalman, Candace Vos, Kate Amrhein, Peter Riemersma, Caitlyn Leslie. Bottom Row: Pat Videtich, Peter Wampler, Kory Konsoer, Kevin Cole, Kat Barnard, Ingrid Verhagen, Ginny Peterson, Adam Mulling, Adam Davis, Mike Stockoski.

First Fall Freshman Field Trip

This past fall we experimented with a new event, a fall freshman/new student event. Ten students and five faculty members camped overnight at Hoffmaster State Park near Grand Haven. We hiked, swam in Lake Michigan and talked about the geosciences, career opportunities, and college life.

Thanks to **Pat Colgan** and **Peter Riemersma** who planned the trip and **Ginny Peterson**, **Heather Miller**, and **Pablo Llerandi-Roman** who helped out with camping and activities. Also thanks to our alumni donors who make such events possible! Hopefully we will do it again next year.



Heather Miller and some of our new department majors at Hoffmaster State Park during our first Fall Freshman Field Trip. Students took part in some team building activities and some of us even went swimming in Lake Michigan. Not bad for September!

Geology Chili Contest

We had another fun and exciting chili contest in February. It really helps to beat the winter semester blues! Thanks again to **Peter Riemersma** for turning this into an annual event. Thanks to all who attended and especially to those that contributed a chili, bread or dessert. Peter appreciates all the judges who helped make the event a success. A special thanks to GeoClub who provided the raffle minerals!

2011 Award Winners
Best Overall
Best Student Chili
Most Popular & Silver Medal
Best Valentine Chili
Best Vegetarian
Hottest Chili
Most Geological Chili
Best Dessert
Most Geological Dish
Best Side Dish

Andrew Heyboer
Andrew Heyboer
Elizabeth Koeman
Susan Jansen
Pablo-Llerandi-Roman
Mike Stockoski
Greg Wilson
Erica Dalman
Mike Stockoski
Steve Mattox

Names submitted by **Peter Riemersma** (Chili Coordinator).

Student Awards & Scholarships



Erica Dalman (B.S. Geology) and **Laura Donker (B.S. Earth Science)** were named our outstanding undergraduate majors in the department. Students must have earned a GPA higher than 3.5 to qualify for this University award.

Edward L. Tremba Geology Scholarship is awarded on the basis of merit to upper class students who have demonstrated excellence in academic performance, intellectual ability, and potential for significantly contributing to the geosciences profession

Erica Dalman Kyle Eno Steve Hoekwater Sam Howard Elizabeth Koeman Stephen Shields Kyle Siemer Kent Walters

Geology Field Studies Award - The field studies fund was established primarily to help students with the cost of field camp.

Jim Buzzell Matt Boike
Erica Dalman Kyle Eno
Andrew Heyboer Elizabeth Koeman
Stephen Shields Kent Walters

Bruce Schultz Kyle Siemer

Tulip City Gem & Mineral Club Scholarship - The recipient is chosen by the Geology faculty and is awarded to a student who has shown significant leadership and service.

Jim Buzzell

Norman and Helen Gibson Scholarship provides funding for undergraduate research projects.

Adam Davis Kase Knochenhauer Adam Mulling

Ronald McNair Scholars Program

Chadwick Williams (mentored by Ginny Peterson) **Nate Hansen** (mentored by Pat Colgan)

Geology Department Scholarships - Geology scholarships are funded by the University, requires an application by the students, and is awarded by the department.

Jim Buzzell Karl Campell Laura Chan Erica Dalman Laura Donker **Adam Davis Stephen Hoekwater** Sam Howard Kase Knochenhauer Elizabeth Koeman Hliary Lenzo **Kaitlin Leslie Ashley Meade Saray Morales Amberjane Pontius Kyle Siemer** Michael Stockowski **Kent Walters**

MAS4 (formerly S-STEMS) Scholarships - This is a competitive grant-funded scholarship program offered through the College of Liberal Arts and Science.

Kyle Eno Kase Knochenhauer

Michigan Space Grant Consortium Undergraduate Fellowships - These are competitive research awards to students working with a faculty mentor. Students were awarded a \$2500 summer stipend.

Sam Howard (mentor Pat Colgan)
Elizabeth Koeman (mentor Pat Colgan)
Kase Knochenhauer (mentor John Weber)
Adam Mulling (mentor Pat Colgan)
Kent Walters (mentor Pat Colgan)

Indian Mounds Rock and Mineral Club Scholarship – This is the first year for this award.

Adam Davis

AGI/AIPG Summer Policy Internship

Erica Dalman



Student scholarship day presenters with Louie the Laker. From left Steve Shields, Mike Stockoski, and Kyle Eno. Geology major Jordon Koster was until recently Louie the Laker (P. Videtich).

2011 Student Research

We had numerous students conducting independent research with faculty this year. Adam Davis worked with Pat Videtich to evaluate the evidence for early formation of pyrite and dolomite in the gypsum mine. Adam acquired stable isotope data and used the older GVSU SEM/EDS as well as a newer instrument at Hope College. Adam was funded by a Norman and Helen Gibson Geology Field Study Scholarship and an Indian Mounds Rock & Mineral Club Scholarship (the first awarded to a GVSU student). Adam presented the results of his work at the Annual GSA meeting in Minneapolis, and to the Indian Mounds Club in October, and to the Tulip City Gem & Mineral Club in January.

Kyle Eno worked with Linda Davis on the genesis of minette dikes from near Spanish Peaks in northeastern New Mexico using geochemical analyses. Kyle presented the results of his research at the Annual GSA meeting in Minneapolis. Kyle had support from the S-Stems program.

Samuel Howard worked with Pat Colgan on a project to determine alluvial sediment deposition rates using Cesium-137 profiles using gamma ray spectrometry. Sam was supported by a *Michigan Space Grant Fellowship*. Sam was a coauthor with **Adam Mulling** on a poster presented at the Annual GSA meeting in Minneapolis. He is now a graduate student at Southern Illinois University.

Kase Knochenhauer worked with John Weber to use lichenometry and cosmogenic surface exposure dating to determine the age of the talus deposits near Devil's Lake, Wisconsin. Kase was supported by a *Michigan Space Grant Fellowship* as well as funds from the *Norman and Helen Gibson Geology Field Study Scholarship*. Kase conducted field work in the summer to measure lichen and more recently spent time at the Prime Lab at Purdue to prepare samples for ¹⁰Be analysis. Kase presented his results at the Annual GSA meeting in Minneapolis and AGU meeting in San Francisco. Kase is currently studying abroad in Ghana.

Adam Mulling worked with Pat Colgan on a project to evaluate the mass of soil organic carbon stored in alluvial sediments in Ottawa County. Adam did field work in the summer to collect sediment cores and samples and measured the organic carbon content of the soils in the lab. Adam was supported by a *Michigan Space Grant Fellowship* as well as funds from the *Norman and Helen Gibson Geology Field Study Scholarship*. Adam presented the results of his research at the Annual GSA meeting in Minneapolis and to the Tulip City Gem & Mineral Club in January.

Neal Ringerwole worked with John Weber to use paleomagnetic analysis to evaluate fault slip near a plate boundary in Tobago, West Indies. Neal received a grant from the University of Minnesota to use their facilities to collect preliminary paleomagnetic data and collected additional data using the spinner magnetometer at GVSU. Neal presented his results at the Annual GSA meeting in Minneapolis and AGU meeting in San Francisco.

Scott (Louie) Simonson worked with Peter Wampler and collaborated with fellow students Mike Stockoski and Amberjane Pontius to evaluate the impacts of storm water diversion to a constructed wetland on the GVSU campus. The students collected storm water data from

the ravines over the summer. The results of this research were presented at the Annual GSA meeting in Minneapolis.

Chad Williams worked with Ginny Peterson to evaluate the structural and metamorphic history and conditions of an aluminous rock from the Chunky Gal Mountain Fault in western North Carolina. Chad used previously collected samples and made petrographic observations and used the SEM/EDS at Hope College. He also is working with microprobe data from the University of Massachusetts. Chad was supported by the **Ronald McNair Scholars Program** and presented his preliminary results at the McNair conference in Buffalo, NY. He will present the results of his research at the SEGSA meeting in Asheville, NC in March 2012.

Nate Hansen completed his McNair Project with Pat Colgan early in the year and had his paper published in the McNair Scholars Journal.

Guest Speakers in 2011

Krishna Persad, Petroleum Geology Careers and Organic Geochemistry in Trinidad.

James Muller, Big History & Geology in Western Michigan.

Jennifer DeLoge (Geology 2006), Shell, Oil and gas and hydrogeology of Eagle Ford shale play.

Earth Science Week (October 17-21, 2011)

We had record attendance of over 350 students at Earth Science Week talks that included presentations from GVSU alumni and professors as well as outside talks of regional interest.

Bopaiah Biddanda, Exploring Underwater Sinkholes in Lake Huron and Finding Ancient Life, Annis Water Resources Institute, Grand Valley State University.

Alan Kehew, *Tunnel Valleys: A Hundred Years of Research and Controversy*, Department of Geosciences, Western Michigan University.

Steve Mattox *Twenty-three years, four continents, and twelve jobs: Insights into finding a career in geology,* Department of Geology, Grand Valley State University

Kirk Perschbacher (Geology 2007), Brownfield redevelopment: The future of environmental consulting, Lakeshore Environmental Inc. Grand Haven, Michigan.

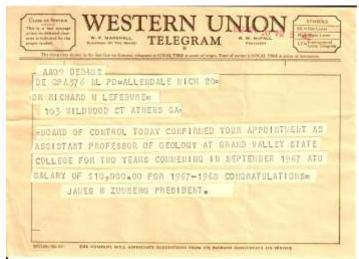
Randall Schaetzl, Michigan Geography: Location, Location, Location, Michigan State University.

Peter Wampler, *Water Resources of Haiti: The Good, the Bad and the Ugly*, Department of Geology, Grand Valley State University.

John Weber, *Balkans and Caucasus: Geological and Cultural Explorations and Adventures*, Department of Geology, Grand Valley State University.

Letters from the Pleistocene... By Patty Videtich

Janet Potgeter was attempting to sort through some old files and "clean house" when she found herself with alums **Ginny Peterson**, **Greg Wilson**, and me hovering about saying things like, "Don't throw away anything that . . .", "I'd like to sort through any . . .", and "Those are historic . . ." Poor Janet! She did find some treasures, including the telegram below.



A telegram to **Dick Lefebre** offering him a position at GVSC, "...Confirmed Your Appointment As Assistant Professor" Signed **James H Zumberge**.

Considering how much Dick Lefebvre loved electronic gadgets, it is ironic that he received his GVSC interview invitation and board confirmatiom via telegrams! Plus, apparently all of the communication done between personnel at GVSC and Dick as he secured his job at GVSC was done by letter or telegram – long distance calls were expensive and a luxury! Dick's job search at GVSC progressed incredibly quickly. In a letter dated December 14, 1966, Dick stated that he was "seeking a position in my native state" and inquired about the likelihood of "any openings beginning in September, 1967". On January 5, 1967, Johnny Lucke, chair of the Geology Department, responded describing the fledgling geology department to Dick saying, "We are in the unusual situation of having a geologist as college president James Zumberge whom you may know." Indeed, Dick had taken Zumberge's glacial geology course at the University of Michigan! Johnny went on to say, "He is listed at the masthead of this department in the catalog, but is prevented from doing much more than occasional lectures by his administrative responsibilities. Nonetheless he is vitally interested in this department and expects it to become 'one of the best small geology departments in the country.' We shall always encourage research but our primary objective is undergraduate teaching and we contemplate no graduate work in the foreseeable future in any department of the college." Dick interviewed at GVSC March 14-15, and on March 20, 1967, Zumberge sent a letter to Dick offering him an Assistant Professor of Geology position at GVSC, and Dick accepted the position in a March 24 letter to Zumberge. So from Dick's inquiry letter to his acceptance letter, a mere 3 ½

months had elapsed, an amazing feat compared to the time it takes to hire faculty today!

In the "we have come a long way department", Johnny Lucke, wrote in that same January, 1967, letter quoted above that, "We will require for this post a young man qualified to take full charge of courses in mineralogy and petrology . . ." And not only did the descriptions of the geology program only use the pronoun, "he", but the college as a whole used the pronoun "he" when referring to students.

In the "some things never change department" a July 13, 1967, GVSC news release reports that the state was cutting appropriations for GVSC. President Zumberge stated, "I am disappointed in the amount appropriated by the legislature to Grand Valley College for the 1967-68 fiscal year." The amount was \$1,985,000, a cut of \$152,981 from 1966-67. Zumberge went on to say, "I appreciate the efforts of . . . Representative Ford (as in former U.S. President Gerald R. Ford) to have the 1967-68 figure for Grand Valley increased to at least the 1966-67 level. The college is now faced with some hard decisions". In anticipation of a budget cut, one decision that had been made earlier was that "Any requisitions in excess of \$100 will automatically be reviewed by the President's Executive Committee" (Minutes of the . . . Academic Affairs Policy Council and the Dean's Executive Committee, April 5, 1967). Of course, in recent years GVSU has received many and substantial cuts in state appropriations. Interestingly, in a July 25, 1967, Memorandum from the Vice President of Academic Affairs he states that, due to the cut in state appropriations from the state, "On average, the increases in salary are a little less than 5%". What?! A little less than 5%?! These years such "huge" raises are unheard of at GVSU! Faculty during the Pleistocene had no idea how good they had it!

Another story from the Pleistocene that sounded very familiar involved building a library at GVSC. In a May 17, 1967, news release the State Administrative Board was delaying "construction of the central library building at Grand Valley State College." President Zumberge stated that, "It is a serious matter for the college to be unable to proceed with a building for which need has been recognized and funds appropriated by the state legislature". Of course, the library was eventually built and named after GV's first President who so vigorously called for its funding. History repeated itself again because it took, many years to obtain funding for the new library currently being built on the GVSU campus.

Other gems Janet found in the old files including handwritten letters from alums. With e-mail and other electronic means of communication these days, such gems are truly things of the past. On December 14, 1975, Roger Haskins (1973) wrote from Winnipeg that, "We were quite surprised to receive the first edition of the Alumni Newsletter." Then, apparently referring to the newsletter, Roger asks, "What's this 'old fossil' business? I was born in the Holocene". Roger wrote that he "joined the Exploration Operations Branch of the Dept. of Mines (last April) and I'm now in the mineral exploration business." Roger said, "Like all exploration

programs, the showings are many but the deposits are few. Sue (Marcus; 1973) is working as a Mineral Inventory geologist with the Mineral Evaluation Branch of the Dept. of Mines." Three years later (September 7, 1978) Roger and Sue had made a drastic change in jobs and climate moving to Riverside, California, where Roger worked for the BLM and reported that, "The geothermal program is picking up steam (bad pun) and rolling along." (Sorry, Roger, but sometimes, old puns just never die!) And Roger wrote that, "After being field oriented for 5 years, mapping a desk is foreign to me." In another letter written May 17, 1979, Roger "was going thru my exploration geology files" and volunteered to send Dick Lefebvre "articles regarding volcanism and the volcanogenic type of massive sulphide ore deposit" as well as information on "exploration geophysics, geochemistry, and case histories of techniques leading to discoveries of ore deposits." Ah, the good ol' paper days!

Sally Markley (1973) on March 13, 1977, wrote that she was teaching science in the intermediate grades in Norwood Public Schools in Cincinnati. She reported that a friend was the curator of minerals at the Smithsonian and that, "One of the most breath taking sights of my life was seeing the minerals in the vault in the mineral room at the Smithsonian." Even though she had only graduated four years earlier, Sally also included a check for the department. Based on a note on Sally's letter, Dick Lefebvre replied to her a mere 11 days later. Undoubtedly Dick thanking her for her letter and the contribution, but that doesn't stop us from thanking her for her support again. Thanks, Sally! Your dollars likely multiplied many times over since 1977 and are still helping our students!

June 11, 1978, Jim Dexter (1977) wrote a letter to former GVSC geology professor Ed Tremba whom by then had moved back to Albuquerque. Ed kindly sent the letter to the GVSC Geology Department for others to enjoy too. Jim wrote all about his trials and tribulations while working on zircons at the University of Kansas. He had put in many long, long hours separating out the zircons for age dating from "300 lbs of . . . (anorthosite)" in a "totally archaic" building in which the ventilation was bad necessitating keeping the windows open at all times. Jim was almost done prepping the sample when, "the hand of God reached down from the sky & slapped my zircons on the floor!!! Just like that!" Jim had "been praying for any kind of breeze in that dungeon for two weeks!" He had placed the zircons "on a piece of paper for a transfer into a vial then Wooosh! And God said: no! you will not date the anorthosite! Talk about freaking out!" But when Jim told his advisor, "he was very cool about it . . . and said to me, 'Just keep repeating to yourself: I love science, I love science!" Despite all his problems with age dating zircons Jim went on to thank Ed "for having that geochem class - it probably was the clincher for getting me this thesis!"

Ed Tremba, wrote on November 1, 1978, following a GSA meeting in Toronto, that he, "Sure enjoyed renewing acquaintances with **Buck, Al, Ann, Linda, Ron, Nancy, and Norm**. Also enjoyed meeting **Lynn** and **Tom** for the first time. Will we ever recover from the Toronto dress code?" Ed

went on to say that, "I've told all my friends in Albuquerque the highlight of the trip to GSA for me was the first two days, mostly spent with GVSC people."

Apparently **Doug Thorpe (1974)** lost his thick, Michigan skin quite quickly after leaving GVSC because, probably following a Christmas party, on January 22, 1979, he wrote from Tempe, Arizona, "It was nice to see the old place again but I think next time will between April and late October. It was a huge relief to get back to the spring like weather we are having out here even with another flood. The flood caused my class on 'gold panning" to be postponed. I managed to complete my chemistry for my rocks . . . and <u>all</u> the analyses totaled between 98.50 and 101.5%. Dr. Burt is urging me to coauthor another paper on the staurolite-chloritoid-garnet-biotite-quartz-muscovite schist like the one I gave GVSC." A what?!

Ron Green (1978) on June 28, 1979, wrote a long missive to the department from St. George, Utah, while engaged in a gravity survey for the Department of Energy. Ron was going to school at the University of Utah and reported that he "hadn't seen a rock in a class" since he arrived but had had "copious quantities of a_{ii} 's and $\int dx$ and ohms enough to satisfy the most misdirected of professional students." Ron "hadn't decided whether to stop after next year or transfer into modern dance and go after my 25 year watch". He went on to say that, "There are people from mining companies and oil corporations lurking in most dark corners and behind bushes but I've remained true to my destiny as an unemployed groundwater geophysicist." He ended his letter with two postscripts, "P.S. After last summer in the Artic and this summer in the desert, my body has been experiencing thermal cracking & decomposition, any suggestions? P.S.S. Dare you post this guano on the board?" Well, Ron, I'm not sure that they did post your letter because I don't see the little telltale pin holes that are visible on most of the "Letters from the Pleistocene", but it certainly is posted now!

For one last trip back to the Pleistocene, I will report on a Geology 499 (Independent Research) paper Janet found that was written by our Unit Head and alum, Ginny Peterson. Her project resulted from the work she did with former GVSC professor **Jack Henderson** mapping on Baffin Island. The title of her report is, A Study of the Stratigraphy, Structure, and Metamorphism of the McBeth Gneiss Dome and Associated *Piling Group Metasediments.* Now I am not saying that Ginny is truly from the Pleistocene, because what would that make me?! However, the first sentence in her "CONCLUSION" reads, "In light of the current theory of plate tectonics, this area could be considered to be a former miogeosynclinal or shelf environment." Seriously, just like Ginny never lost her love for the field, structure, and metamorphic rocks, after reading the "Letters from the Pleistocene" that Janet uncovered, I concluded that many of us went on to graduate school or jobs and studied the topics we pursued in our independent research projects or seminar (Geology 485) papers at GVSC/GVSU. So, Janet, please keep an eye open for more "Letters from the Pleistocene"!

Publications by Students and Faculty

GSVU faculty student authors are indicated by bold. Students are indicated with an asterisk.

<u>Journal Articles</u>, <u>Books & Book Chapters</u>

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Giorgis, S., **Weber**, J., Hojnowski, J., Pierce, W. & **Rodriguez***, **A.**, 2011, Using orthographic projection with geographic information system (GIS) data to constrain the kinematics, Central Range Fault zone, Trinidad: *Journal of Structural Geology*, v. 33, 1154-1164..

Kim, H.J., **Miller, H.R.**, Herbert, B.E., Perdersen, S., & Loving, C. 2011. Using a wiki in a scientist-teacher professional learning community: Impact on teacher perception changes: *Journal of Science Education and Technology*, DOI 10.1007/s10956-011-9336-x.

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Peterson, V., Garver, J.I., Semken, S. & Williams, W.J.W., 2011, Enhancing participation of two-year college faculty in The Geological Society of America: *GSA Today* v. 21, no. 12, p. 36-38.

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Weber, J. & Frankel, K., 2011, Book Review: Structural Geology by Haakon Fossen, in, *EOS*, v. 92, no. 20, p.?

Wolfinger*, C., Mattox, S. & Jenerou*, K., 2011, Representation of Gender and Race in Children's Earth Science Trade Books: *Michigan Science Teachers Association Journal*, v. 56, no. 2, p. 19-22.

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Bush, D.M., Jackson, C.W. Jr., Runyan, R.M., **Siemer, K.W.,** Perison, E.M., **Llerandi-Román, P.A.** & **Neal, W.J.**, 2011, Detailed Surficial Mapping of Small Islands for Coastal Management, Puerto Rico: *Geological Society of America Southeastern Section Meeting Abstracts with Programs*, v. 43 no. 2, p. 78.

Cole, K., 2011, Debris flows in forest landscapes along the mainland British Columbia Coast: *Geological Society of America Annual Meeting Abstracts with Programs*, v. 43, no. 5 p. 444.

Colgan, P.M., Walters*, K.A. & **Koeman*, E.C.**, 2011, Cesium-137 Profiles in Post-settlement Alluvium, Eastern Ottawa County, Michigan: Is Alluvium a Significant Carbon Sink in Terrestrial Ecosystems? *Michigan Academy of Science and Letters Annual Conference*. Saginaw Michigan, March 18, 2011.

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Howard*, S.M. & **Colgan, P.M.**, 2011, The use of cesium-137 activity to determine deposition rates of alluvial soil in Ottawa County, Michigan. *Michigan Space Grant Consortium Fall Conference Abstracts*, p. 32.

Ketelaar*, J. & **Mattox, S.,** 2011, Finding Your Diamond Deposit, *Michigan Science Teachers Association 58th Annual Conference Program*, p. 42.

Klawiter, M., Engelmann, C., Vye, E., Gochis, E., Huntoon, J., **Mattox, S.** & Rose, W., 2011, For Place-Based Earth Science Learning Opportunities, There's No 'Place' Like Home, *Geological Society Of America Abstracts With Programs*, v. 43, no. 5, p. 182.

Mattox, S. & Rutherford, S., 2011, Successes and Challenges of Establishing a Statewide Credit-By-Exam High School Geology Course in Michigan. *Geological Society Of America Abstracts With Programs*, v. 43, no. 5, p. 594.

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- **Mattox, S.,** 2011, Preparing for the August 2011 Hawaii Fieldtrip for Michigan Teachers: *Michigan Science Teachers Association 58th Annual Conference Program*, p. 20.
- **Mekik, F.,** 2011. Can we tell the difference between carbonate chemistry of the surface ocean and the sediments in the last 21,000 years? Tools, proxies and caveats, *AGU Fall Meeting*, San Francisco CA.
- **Mekik, F.,** 2011. Catching misconceptions and misinformation about ocean/climate science among college students: a long record of pre and post exams, *AGU Fall Meeting*, San Francisco CA.
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- **Riemersma, P.E.**, 2011, Using a mock trial to educate, motivate, and challenge students in an upper level general education geoscience course: *Geological Society of America Abstracts with Programs*, v. 43, no. 5, p. 253.
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- Simonson*, S., Wampler, P.J., Pontius*, A. & Stokoski*, M., 2011, Using total suspended sediment data to evaluate the impacts of storm water diversion to a constructed wetland at Grand Valley State University, Allendale, Michigan: *Geological Society of America Abstracts with Programs*, v. 43, no. 5, p. 114.
- **Smith*, S.** & **Miller, H.R.**, 2011, How Secondary Science Teachers use Mathematics in the Classroom: Supporting Students' Understanding of Analyzing and Representing Data. *Michigan Academy of Science Arts & Letters*, March 2011, Alma, MI.
- **Standriff*, S.** & **Mattox, S.,** 2011, Modeling the Melting of Permafrost by Climate Change, *Michigan Science Teachers Association 58th Annual Conference Program*, p. 40.
- **Wampler, P.J.** & **Sisson***, **A.J.**, 2011, Pathogen pathways, contamination, and sustainable water resource solutions for Haiti: *Geological Society of America Abstracts with Programs*, v.43, no. 5, p. 666.

Awards & Grants

- Howard*, S.M. & Colgan, P.M., Estimating organic carbon storage rates in recent stream sediment using Cesium 137 activity: Ottawa County, Michigan, Michigan Space Grant Consortium (NASA), \$2,500.
- **Koeman*, E.** & **Colgan, P.M.,** *The impact of land-use changes on carbon storage in small streams, Ottawa County, Michigan,* Michigan Space Grant Consortium (NASA), \$2,500.
- **Mekik, F.**, A Multi-proxy Search for the Deglacial Deep Sea Carbonate Preservation Maximum, National Science Foundation, \$84,029.
- **Mulling*, A.D.** & **Colgan, P.M.**, Carbon storage in postsettlement stream sediment in Ottawa County, Michigan: Quantifying a human-induced terrestrial carbon sink, Michigan Space Grant Consortium (NASA), \$2,500.
- Oliver, K., Barrows, N., **Miller, H.R.**, Dobson, C. & Schiller, *Science Teacher Education and Development (STEAD)*, Michigan Department of Education, \$219,946.
- Oliver, K., Ambrose, B., Barrows, N., Vigna, J., Dobson, C., Herrington, D., **Llerandi-Roman, P.**, Henderleiter, J., **Mattox, S., Miller, H.R**. & Soman, S., *Integrating Service Learning in the Integrated Science Program Curriculum*, FTLC, Grand Valley State University, \$4,400.
- **Videtich, P.** & **Peterson, V.**, *Pew Technology Enhancement Grant in support of materials for GEO 212 and 312*, FTLC, Grand Valley State University, \$1,076.
- **Videtich, P.**, *Field Research in Earth Science Happenings* (*FRESH*), GVSU Regional Math and Science Center. \$800.

Walters*, **K.** & **Colgan**, **P.M.**, Carbon storage in stream valleys in West Michigan: Does stream size matter? Michigan Space Grant Consortium (NASA), \$2,500.

Wampler, P., Faculty Scholarly Dissemination Grant Presentation, Center for Scholarly and Creative Excellence, Grand Valley State University, \$500.

Weber, J. & **Knockenhauer*, C**, *Lichenometry and cosmogenic surface exposure dating of possible fossil talus deposits*, Devils Lake State Park, Wisconsin, PRIME Lab, Purdue University (NSF), \$7,500.

Weber, J. & Leslie*, C., Active folding and Exhumation, U-Th-He and fission-track Thermochronology, Apsheron Peninsula and Caucasus Mountains, BP-Azerbaijan, \$50,000.

Weber, J. & **Boike*, M.,** Lake Trichonis Fault System and Rift Basin Neotectonics from GIS and apatite U-Th-He thermochrnology, GVSU PIC Internationalization, Grand Valley State University, \$3,000.

Weber, J., *Central Range Fault GPS measurements,* Trinidad and Tobago, Office of Disaster Preparation and Management, \$10,000.

Weber, J. & **Ringerwole*, N.** Fault slip and paleomagnetic analysis of the tectonics of Tobago, West Indies, University of Minnesota Institute for Rock Magnetism (NSF), \$1,500.



Geology students at Van Hise Rock during the fall structure trip (J. Weber)

Alumni News

Jim Walters (Geology 1970) – "This fall was the first time in 36 years I did not greet new students into my classes. The reason was that I was on Professional Development Assignment for Fall 2011 and I did not have any teaching assignment. Sort of like a sabbatical, and an opportunity for me to do some research after stepping down as department head at the end of the 2009-2010 academic year. So, my wife Bonnie and I went up to Alaska and studied permafrost and patterned ground features at my research sites in the High Valley and Maclaren Summit regions north of the Denali Highway. Best wishes to everyone in the department!"

Sally Covyeau (Geology 1973) – Sally runs a soup kitchen called Double Portion in Menasha, Wisconsin. She reports that she and her husband recently travelled to Flagstaff, AZ to check out retirement possibilities there.

Roger Haskins (Geology 1973) – Sent a nice Christmas letter were he reported that he and Susan recently travelled to England. They even collected fossils in Lyme Regis where Mary Anning first collected ithyosaur fossils! Awesome!

Dick Williams (Earth Science 1973) reports that he has been retired for years and that he doesn't plan changing.

Larry Austin (Geology 1974) – Larry continues to be active with AIPG and has been chair of the National Screening Committee. He recently came by to give a talk for our majors and encourage them to join AIPG. Thanks Larry!

Ron Sheets (Geology 1979) – "I am still running around West Africa looking for gold deposits for Canadian and Australian companies. This past year I moved from the desert of western Mali to the equatorial rainforest of Ghana. It was great to see the campus, reunite with old friend and meet the current faculty and students during my visit in October."

David Anderson (Geology 1980) – "...I am currently working at Drillinginfo in Austin. DI is a web based data/information provider for the oil and gas industry. My current title is Director of Engineering Products. I am currently working on a new Map UI, oil/gas Production Allocation algorithms, Decline Curve Analysis Charting (reserves), plus our new enhanced completions data set. While some may surmise that I have fallen far "from the Geological Tree" I am working very closely with the Geologic Director on a couple projects and I have always sought to incorporate the geologic framework into any project that I am tackling. My family and myself are really enjoying Austin so far (we have been here only 18 months). There are some very scenic outcrops to view while driving about and a natural spring runs right through downtown."

Richard Christensen (Geology 1984) – "I wanted to reintroduce myself to the Grand Valley Geology Department, as a GVSU geology alumni from 1984. I am a Senior Hydrogeologist for Acuity Environmental Solutions, located outside of Indianapolis, Indiana."

Adam Wygant (Geology 1993) has accepted the position of Section Chief, Permitting and Technical Services Section, Office of Oil, Gas and Minerals, Michigan Department of Environmental Quality.

Stephanie (Tassier) & Timothy Surine (Geology 1996 & 1995) – "Happy New Year! I rarely send updates because we've been enjoying the same jobs and living in the same place for quite a while now. But we do have non-geology news from the past year. We welcomed twin boys, **Samuel Archer** and **Christopher Charles Surine**, last year. They were born September 12th and are busy keeping us on our toes! "

Christie Griffin (Geology 1999) - Is now living in Milwaukee, Wisconsin.

Shana McCrumb (Biology/Earth Science 1999) is an adjunct professor at GVSU in the Biology Department.

Andrew McCarthy (Geology 2000) is a Senior Geologist with COG Operating LLC in Midland, Texas. Andrew reports that he recently bought 20 acres on top of a mountain in the Big Bend area, pretty cool!

Benjamin Jewell (Group Sci. Geology 2003) was recently awarded a *Presidential Award for Excellence in Math & Science Teaching*. He is a 5th grade teacher at Bauer Elementary in Hudsonville, Michigan.

Dave Hendrix (Earth Science 2004) – Dave recently stopped by for our Chili Cookoff and to say hello. Dave is currently doing substitute teaching and looking for a full time position.

Brian Beach (Geology 2006) – Brian recently started in a graduate program in hydrogeology at Western Michigan University.

Kory & Samantha Konsoer (Geology 2006) – "The biggest news on our front is the newest addition to our family. On Sept. 4th, Samantha (Earth Science 2006) and I became the proud parents of William Kelley Konsoer! In other news, Samantha completed her post-baccalaureate certification in GIS from the online program offered by Penn State. She is still working with Kenny Construction, based out of Chicago, and has been promoted to GIS Specialist II. I am still working on my PhD at the University of Illinois, Urbana-Champaign."

Jill Kurek (Geology 2006) – is working for Weatherford Labs in Lakewood, Colorado in the wellsite geosciences department.

Kat Barnard (Geology 2007) – "I wanted to update you on what I'm doing. I'm still working on my Ph.D. at Portland State University. I'm researching the role that soil plays in wine flavors from the Willamette Valley (i.e. terroir). I also have a *NSF GK-12 fellowship* where I assist in an 8th grade classroom to enhance my communication skills and create inquiry based curriculum. It is a really fun job!"

Sydney Boos (Geology 2007) – Sydney dropped by recently and talked to Patty Videtich. She reports that she is now working for Canrig, USA, Bakersfield, California.

Joel Kenyon (Geology 2007) – "Grad school is great - I'm enjoying being back in school. And I'm certainly appreciating my experience at GVSU. There is something to be said for earning an undergrad degree from a department where the professors are focused on teaching, and not running all over the world to secure funding for grad students! Kelly is working for an environmental consulting firm in Denver, keeping plenty busy with oil and gas work in CO, WY, and TX. I recently quit my job to focus on school- I'm on track to be done in May, so I'm on the home stretch."



Joel Kenyon took part in GVSU's career fair. We really appreciated seeing Joel on campus! (S. Mattox).

Carson Klemp (Geology 2007) – "... 2011 started off busy for me: Freeport McMoRan announced the reopening of the Chino Mine in October 2010, I was brought back to the Mine on a part time basis until the end of the year while completing my Reclamation Quality Control in the mornings. Starting January 1st I was promoted to a Geologist II position with Freeport McMoRan and am currently helping getting the Ore Control computer system updated and up and running..."

Patrick Womble (Geology 2007) is a Staff Research Associate at Univ. of California - Merced working in the Sierra Nevada on hydrologic projects.

Jason Heivilin (Geology 2008) – Jason is currently working for Newmont Mining in Winnemucca, Nevada.

Sarah Nagorsen-Rinke (Geology 2008) works for Freeport MacMoran in Bagdad, Arizona. She finished her M.S. this year at Central Washington University.

Miguel Merino (Geology 2009) recently was a co-author of a paper in *GSA Today* entitled *Learning from Failure: The SPREE Mid-Continent Rift Experiment*. His is a grad student at Northwestern University.

Keisha Durant (Geology 2009) – "I completed my MSc. in Geological and Environmental Sciences at Stanford University as part of the Basin and Petroleum System Modeling Research Consortium in September 2011. I also started a new job around the same time at Shell Exploration and Production Company in Houston, Texas as part of the Gulf of Mexico Regional Team. My husband and I are living in downtown Houston and are really enjoying it here (particularly the winter weather)."

Kate Amrhein (Geology 2009) – Kate wrote recently that she is now in grad school at Kansas State University. She says she is impressed that in Kansas there are rocks exposed everywhere!

Anthony Rodriguez (Geology 2009) – "I was married last year in Austin, Texas to my lovely wife, Berenice Rodriguez. I graduated with my Master of Science degree this past summer in Energy Geosciences from the Jackson School of Geosciences at The University of Texas at Austin. My thesis title was Regional Structure, Stratigraphy, and Hydrocarbon Potential of the Mexican Sector of the Gulf of Mexico. We currently live in Houston and I work downtown as an Earth Scientist for Chevron."

Cameron Ross (Geology 2009) is in the process of completing his M.S. degree at Oklahoma State University.

Andrew DeWitt (Geology 2010) –"I am in my final semester here at Missouri State University where I'm working on my MS in Geospatial Sciences in Geology and Geography. My thesis research is in fluvial geomorphology with the working title *Downstream variations in channel morphology and stream power in the James River basin, southwest Missouri Ozarks..."*

Nathan Noll (Geology 2010) – "Things have been busy but I am enjoying Johnson City, TN. Since my wife will be finishing her nursing program for two years following the completion of my M.S. in Biology I have decided to do a second M.S. through the new Geoscience program at ETSU. The Geoscience program will allow me to focus more on vertebrate fossils. Dr. Schubert has agreed to be my advisor. My geoscience thesis will focus on isotopic studies of fossil Proboscidean material from the (Pleistocene) deposits...."

Ester Posner (Geology 2010) - Esther Posner is completing her M.S. degree at the University of Arizona in experimental petrology. Her first professional paper is in press in *Acta Crystallographica*. Esther plans to do her Ph.D. in high-pressure experimental geochemistry at University of Arizona, University of Michigan, or Bayreuth University in Germany.

Alex Villhauer (Geology 2010) is a Field Scientist at PM Environmental in Michigan.

Elizabeth Koeman (Geology 2011) – Elizabeth completed her field camp in South Africa, and is now in a Ph.D. program at Notre Dame, South Bend, Indiana.

Christy Kroskie (Geology 2011) – Christy is a Field Specialist II with Baker Hughes in Pennsylvania.

Kyle Siemer (Geology 2011) – "I am a graduate student at University of Toledo, and my masters project is focused on analyzing and modeling geologic hazards using remote sensing techniques. My study area is in Saudi Arabia and Egypt, and our team is using a technique called radar interferometry to measure land subsidence...."

Stephen Shields (Geology 2011) – "I just finished up my first semester at Missouri State University, and loved everything about it..."

Jeremy Espinoza (Geology 2011) – Jeremy recently wrote saying that he is now working as a staff geologist at LT Environmental in Denver, Colorado.



Kyle Siemer and **Jim Buzzell** receive senior awards from Peter Wampler at the Geology Awards Seminar (P. Colgan).

New Grads are Already Paying Taxes!

Our new 2011 graduates have already gone on to industry jobs or to graduate school (most with RA or TA support). For those of us nearing retirement this really warms our hearts to see them working and paying into social security!

James Buzzell - Geosearch Logging Inc., Pennsylvania
Kyle Eno – currently applying for grad school
Jeremy Espinoza – LT Environmental, Colorado
Andrew Heyboer – Holland Brewing Co., Michigan
Stephen Hoekwater - Practical Environmental Consultants
Inc., Byron Center, Michigan

Samuel Howard - Southern Illinois Univ. (M.S. Program) Elizabeth Koeman - Notre Dame, Indiana (Ph.D. Program) Christy Kroskie - Baker Hughes, Pennsylvania Ashley Meade (Vandenburg) Tecumseh High School, New

Carlisle, Ohio
Stanban Shields - Missouri State Univ. Missouri (M.S.

Stephen Shields – Missouri State Univ., Missouri (M.S. Program)

Kyle Siemer – Univ. of Toledo, Ohio (M.S. Program) **Brad Stevens** – South Haven School Dist., Michigan **Kent Walters** – Univ. of Cincinnati, Ohio (M.S. Program)

2011 Donors to the Department

Thanks to everyone who gave generously to the department this past year. We are very sorry if your name was left out by accident.

Larry & Mary Austin Thomas Baldwin Kathryn Barnard Robert Bodziak Arthur Brintnall Mike & Joanna Buboltz **Jonathan Carlisle Kevin Cole & Susan Jansen** Patrick Colgan & Kelly Heid Larry & Mary Kay Fegel Thomas & Nina Hendrix Patricia Hossink Iohn H. Kobs. III D.D.S. **Jeff Lefebvre** Lauryl Lefebvre Sandra Lefebvre Karen Like **Iudith Mast** Stephen & Tari Mattox Figen Mekik William & Mary Neal **Suzanne Pearce Ginny Peterson & Jonathan Burr** William & Elsie Peterson **Pioneer Natural Resources** Steven Polkowski **Ronald Sheets Robert & Julia Sherwood** Richard Stolarz **Stephanie & Tim Surine Edward & Rose Tremba Kay Van Opynen** Patricia Videtich John Vrona **James Walters Ann Marie Willette Greg & Becky Wilson**

Ron Sheets (B.S. Geology 1982) Alumni-in-Residence Awardee 2011

After leaving Grand Valley State Colleges Ron did a summer job mapping around the wilds of Nova Scotia Canada with the Geological Survey of Canada and **Jack Henderson** (former Professor of Structural Geology at GVSC). This work included mapping the Meguma Group gold prospects which became the subject of Ron's MSc thesis (received from Ohio State in 1986) and it was during that summer when he became smitten by fieldwork.

Since then Ron has jumped back and forth between the minerals industry and academia. He obtained a PhD in

Geological Sciences (1996) from Virginia Polytechnic Institute and State University, during bust times in the minerals industry, and lectured at Southern Illinois University in Carbondale, University of Alberta and Rhodes University in South Africa (as part of the MSc programme in Exploration Geology). Ron also spent a couple of summers work with the United States Geological Survey's Branch of Resource Analysis conducing dry sulphide synthesis experiments to produce sphalerite group minerals for geothermometry and synthetic fluid inclusion research into the pressure-temperature-volumetric properties of aqueous solutions. Not just your ordinary prospector, Ron has published articles in professional journals and chapters in guidebooks on the formation of copper and gold-silver mineral deposits.

During industry boom times Ron always returns to exploration and a chance to get into the field. He has explored for iron, copper, nickel, gold, silver, platinum-group metals and diamonds in USA, Mexico, Canada, South Africa, Namibia, Botswana, Zimbabwe, Tanzania, Central African Republic, Mali and Ghana. Recent successes include being involved with the teams that discovered 2.5 million ounces of gold in the Passendro area of Central African Republic, 860,000 ounces of gold in the Lupa Goldfield of south-western Tanzania and 550,000 ounces of gold in western Mali (now being mined). These adventures ranged from living in a tent and bathing in the local river for six months while mapping, to falling out the sky in a faulty helicopter, to being caught up in a coup d'état attempt where 200 people had to evacuate a minesite camp in one day to avoid clashes between rebels and government forces. Other than that things have been pretty normal.

Ron last worked in the U.S. in April 1993 and hasn't had the opportunity to visit Michigan or GVSU since he graduated in 1982. Thank you Ron!



2011 Alumni in residence **Ron Sheets** (G. Peterson).

Please Support Geology/Earth Science Funding

Thanks to the generosity of alums, friends, and faculty of the Geology Department we have several endowed funds that help to support our students and further the mission of the department. Once an endowed fund exceeds the \$30,000 level the department can spend up to 5% of the fund each vear. As indicated earlier the Norman and Helen Gibson Geology Field Study Scholarship reached the endowed level this past year and were able to start awarding scholarships this past spring. The Richard H. Lefebvre Geology Field Education Fund is close to the endowed level and could use your support to push it over the top. Information about each fund and guidelines for contributing are provided below. In this challenging economic climate the support from these funds is particularly critical and any support you can provide is very welcome. Information on how to donate can be found at https://secure.gvsu.edu/giving/index.cfm?sb path=giveonline1. If you have questions about the process of giving, please contact University Development at 616-331-6000 or universitydevelopment@gvsu.edu.

The endowments that support the department are as follows:

Funds that directly support students:

- Edward Tremba Geology Scholarship This scholarship is awarded on the basis of merit to upper level students who have demonstrated excellence in academic performance, intellectual ability, and potential for significantly contributing to the geosciences profession. Students must have a GPA of 3.0 or better.
- Norman and Helen Gibson Geology Field Study Scholarship This scholarship honors long-time Tulip City Gem and Mineral Club member, Norman Gibson and his wife Helen. It supports students pursuing geosciences or geoscience education research.
- Geology Student Field Camp Fund* This fund provides support to students who are attending field camp.

Funds that support the department mission:

- Richard H. Lefebvre Geology Field Education Fund* This new scholarship will help to support department field
 trips. The cost of field trips has gone up significantly
 without an increase in our budget and we have had to
 resort to passing along those expenses to students. This
 fund will help us maintain a strong field-based focus to
 education in the department
- **Geology Development Endowment** This fund helps with special needs in the department such as matching funds for equipment or outside speakers.
- Paul & Florence Miller Mineral Collection This fund was started by Paul Miller, who made a significant donation of minerals to the department. The fund supports additions to the collection as well as displays.

*these represent slight name changes being made to clarify the intent of the funds



First recipients of the Norman and Helen Gibson Field Study Scholarship, **Adam Davis** and **Adam Mulling** with members of the Gibson family (**Sue Van Wieren, Pat Hossink, and Ron Gibson**) at a meeting of the Tulip City Gem and Mineral Club. Both students presented their research at the meeting (G. Peterson).

Please Join our LinkedIn Group

Our department now has its own LinkedIn Group called, *GVSU Geoscience Professionals*. It is designed to connect students, faculty, alums, and friends of the department. We also hope that alums will post job ads, new items, and professional career advice for our current geology, earth science, and geochemistry majors. At this time we have 89 members. Please consider joining the group!

Please send the following information about yourself in one of three ways:

Email to Janet Potgeter at: geodept@gvsu.edu

Mail it to us @ Geology Department, GVSU, Allendale, MI 49401

We have an online form for direct electronic submission at:

http://www.gvsu.edu/geology/

Name: (If your name has changed since you were a student here, let us know your previous name also)

Graduation year: _____

Employment/Life status or changes:

Contact information* (address, email, phone)

 Note that we will not post contact information on the web site apart from your city of residence – please let us know if you do not want us to share your contact information with alumni or friends who request it.