Dear Alumni and Friends of the Earth Science Department,

The leaves have pretty much fallen from the trees and there is even snow on the ground, so it is that time of year to update you all on the happenings in Latham Hall. As you’ll see in this newsletter, we’ve been quite busy with the many outreach activities we do, as well as the field trips for our courses, and of course the regular business of classes, labs and research.

Things have changed quite a bit in Latham Hall, with Dr. Kenneth De Nault being granted emeritus professor status and the hiring of Dr. Alexa Sedlacek to support our new environmental science degree. We are also actively searching for another faculty position in Air Quality. We were fortunate to have the environmental science degree approved just before the start of fall semester, and in only a few months we already have 10 majors pursuing the degree! Also, the majority of prospective new students to our department indicated that they were interested in following the environmental science degree. We are also actively searching for another faculty position in Air Quality. We were fortunate to have the environmental science degree approved just before the start of fall semester, and in only a few months we already have 10 majors pursuing the degree! Also, the majority of prospective new students to our department indicated that they were interested in following the environmental science degree.

The new degree program, along with our steady offering of earth science courses for incoming freshmen, has helped keep the overall number of department majors at a healthy level, and, of course, we’re hoping for even more majors in the future.

We’ve also been discussing future directions for the department. To bring back the geology majors at this time would be difficult without enough faculty to support it, but we are investigating proposing a geology minor and also an environmental science minor – both of which could make use of our current course offerings. In fact, we’re already looking at developing new courses to bring more students into the department: an introductory environmental science course, and a geological field experience/methods course. We hope to have these courses in the Fall 2014 schedule.

Recent events have shown us that we need to not only concern ourselves about quality, which we have no problem delivering, but also quantity. Having a significant increase in our student population is one of the first foundations we can use for requesting more faculty positions.

With all of the changes in our department, we continue our efforts to expand the impact of our department on the UNI community and beyond. As you’ll see in the newsletter, we’ve continued our extensive outreach activities, and in 2014 we’ll be kicking off a new educational endeavor with the generous support of the Iowa Limestone Producers Association through a short course for teachers on Iowa’s Geological Resources. We continue to provide our students with memorable and educational (of course) experiences, such as the May trip to study the water resources of the American West, trips to the local quarries, telescope observations of the heavens, tracking of winter storms, exploration of the Maquoketa caves, and the annual trip to Casey’s Paha – how many of you remember that one? If you live in Iowa, you may be aware of a new initiative in your community, the STEM (Science, Technology, Engineering, Mathematics) initiative supported by the state of Iowa. At a November STEM event in the Five Sullivan Brothers Convention Center in Waterloo, the Earth Science department was well represented by not only faculty and staff, but also eager Earth Science majors. These folks were on hand to help keep hundreds of youngsters interested in science through a variety of hands-on activities centered on the Earth Sciences. This is probably one of our most important tasks outside of Latham Hall – to keep future generations interested in science and eager to pursue STEM careers.

(CONTINUED ON PAGE 13)
In July, the University of Northern Iowa’s IMPACT program, of which I am a team member, offered a 2-week summer institute for middle and high school teachers to learn about the science inquiry process through use of GLOBE (Global Learning and Observations to Benefit the Environment) and STORM Project (Science center for Teaching, Outreach, and Research on Meteorology) resources. I introduced participants to weather analysis and forecasting concepts. We continue to work with our IMPACT participants throughout the academic year. If you are a middle or high school teacher, please visit http://www.uni.edu/ietti/impact/about_impact/ for details about the programming we will be offering in Summer 2014.

This fall, I’m teaching the Meteorology course and 2 sections of Elements of Weather: “Air Quality” will be offered in Spring 2014. Best wishes to all!

As I sit down to write this, it is hard to believe another year has flown by. The big news at the Even house this year is Gene retired from John Deere at the end of May. All of the children were able to be there, which made it an extra special event. The times we can all get together are few and far between due to jobs and distance. A couple of moving trips were made to New Mexico and Maryland this year. On one of the moving trips to New Mexico, we came across a few hundred elk in the caldera. Of course they were just tiny dots and this is the one time I had left my binoculars home to save room! While we were in Maryland, we were able to watch Amanda participate in the Culpepper International Triathlon at Mountain Run Lake Park, Culpepper, VA. She did great!

KYLE GRAY
ASSISTANT PROFESSOR OF EARTH SCIENCE & SCIENCE ED.

It is hard to believe that I am starting my fifth year at UNI. Nothing earth shattering has happened since last year. I’ve taken no major trips or expeditions to parts unknown. I continue chugging away teaching Inquiry into Earth and Space Science (the intro course for elementary education majors). This course continues to evolve and is a joy to teach. I also taught the sequel to Inquiry (Investigations into Earth and Space Science), and this spring I will be teaching a graduate-level science education course, Research Methods in Science Education.

I continue to work on my research project where I am investigating changes in student confidence towards teaching science after completing my courses. So far the results are encouraging, and I am ready to see if I get similar results from the other Earth Science intro courses.

Outside of UNI, I was recently named an Associate Editor for the Journal of Geoscience Education and recently helped to launch a Teacher Education Division within the National Association of Geoscience Teachers.

JOE GALE
INSTRUCTOR

I am in my thirteenth year of teaching in the Department of Earth Science. I continue to teach three sections of Elements of Weather and one section of Elements of Weather Lab each semester. I also staff the Astronomy/Weather Help Room for an hour each week to help students taking Astronomy or Weather courses.

CHAD HEINZEL
ASSOCIATE PROFESSOR OF GEOLOGY & SCIENCE ED.

So 2013 was not a particularly joyful year at the University of Northern Iowa, but with adversity comes equal opportunity and perhaps clarity. My family and I struggled with academic cuts/uncertainty, the destruction of the M. Price Laboratory, and the breaking apart of a community. It became explicitly clear that higher education, is not unlike any other business; perhaps we were too idealistic/naiive! The face of education and that matter our civilization, is rapidly changing. So as in any democratic society, there are really only two choices: 1) cut your losses and move on; or 2) hunker down and use your skills, talents, and temporarily weakened ambition to create a civilization that you can be proud of. Some of my geochronological research has shown that during times of societal unrest, humans generally move towards familiar and perhaps comfortable settings. My family and I have selected option #2 and moved back toward our rural roots. We have relocated to rural Iowa and are enjoying a renewed sense of purpose and community. I am very excited about many recent UNI and personal developments. I am encouraged by on-going movements that seek to effectively communicate geology’s critical role in global development, conservation, poverty, climate change, energy, geo-hazards, water/sanitation, infrastructure, and use of natural resources. Here’s to an amazing 2014 - if there is one thing I have learned from this past year, it is that it will take a lot of hard work and creativity, and in the end that might not even be enough, but at least you did your part!
from the faculty and staff

winner in the annual Cyber Defense Competition at Ames. (The sponsors are our own Aaron Spurr and Computer Science’s Paul Gray.) My stepson, Artyom, took a job with the Export-Import Bank of the United States and moved to Washington, D.C. My mother-in-law works with Yuliana at Casa Montessori School; I find this a remarkable accomplishment inasmuch as Valentina speaks no English, Michael and I drove to the Air & Space Museum in Hutchinson, Kansas for Spring Break – great museum. Also, there are a great many dusty miles of nothing but wheat fields. I taught eight students “Sky Interpretation.” It’s too bad our Natural Interpretation major got awed. I also now have the distinction of having at least one of my former “Astronomy” students running for Congress. I remember her because she always sat in the front row. Another leftower 4am from a year ago. I met the President of the United States in the summer of ’12. Or, at least shook his hand. The campaign bus had come to a stop at the Pump Haus in downtown Cedar Falls – they have to eat somewhere, I guess. I got ushered up to the front of the ropes because I had with me my 92-year-old mother, and I believe they considered her a photo op. I think she still voted for Romney.

MIKE STEVENS
INSTRUCTOR

“Time is not measured by the passing of years but by what one does, what one feels, and what one achieves.” Jawaharlal Nehru So, another year has been written in the books. I’m re-acclimated to the halls of Latham and have a nice little cave on the 2nd floor by Dr. Czarnecki’s STORM Office. Speaking of Dr. C, I was able to present weather demonstrations at a couple of STEM events for him during the year. I’ve been working closely with Kyle and the Inquiry to Earth and Space Science course. We’ve changing a few things here and there that match up better with the Next Generation of Science Standards for the students aiming to be in a classroom like I was 20 years ago. During the past year, I also taught Elements of Weather and Inquiry to Physical Science. At the same time, I’ve been teaching Astronomy at Hawkeye Community College in the evenings.

In the future, I’m going to miss Dr. Walters as he heads to retirement. Our morning chats as he sips down his first cup of coffee is and has always been a great way to start the morning. He is a great mentor for instructors and a very good friend as well.

Other than that, Cynthia and I continue to raise our four 4-legged kids and are watching another 4-legged critter for the time being. Cynthia continues to work at the Gray Museum. She was moved to the collections department to help work with the damaged inventory caused by a water pipe breaking in the storeroom above. Also, she’s working on an on-line course. So, she’s been very busy this past year. We hope that the year to come is a healthy and happy one for all of you.

ALEXIA SEDLACEK
ASSISTANT PROFESSOR OF EARTH SCIENCE

I moved to the Cedar Valley this summer, after completing my Ph.D. in Geological Sciences at The Ohio State University. My husband, Patrick, and I lived in Columbus, Ohio, for six years, but moving to the Cedar Valley was like coming home. We grew up in eastern Iowa, and are happy to be back - this time with our toddler, Penelope, and pets. Cedar Falls and the surrounding community are welcoming, and we are impressed with the area’s great coffee, beautiful parks and extensive trails.

This semester, I’ve enjoyed teaching Earth History and Environmental Geology. The quality of UNI students and their willingness to work hard continues to impress me. I benefit greatly from the work of my TA’s, senior Geology major Madison Pike. Her extensive knowledge of the fossil and rock collections simplified my job. I also credit the department’s teaching collections, which are among the most well-organized and complete collections I have worked with. I joined Dr. Jim Walter’s Geomorphology class on their field trips and am learning the geology of the immediate Cedar Falls area. I believe in a hands-on approach to geology and environmental science, and I look forward to developing a field component for most of my courses here at UNI.

I am a stratigrapher and carbonate sedimentologist by training. My research focuses on the end-Permian mass extinction, the most extinction event of the past half billion years. My field area is in the Great Basin region of Utah and Nevada, and my dissertation adviser and I published a paper on our work there in Geology earlier this year. I have also analyzed samples from Italy, China, and Iran for carbon and strontium isotopes, which I use as geostratigraphic tools. In the next year, I hope to form a research group and involve our majors in field and laboratory work.

I look forward to developing this program and will give you an update next year!

JAMES WALTERS
PROFESSOR OF GEOLOGY

In June 2014 Jim will be retiring from the Earth Science Department after 39 years of service.
WHERE ARE YOU NOW?

I am currently living and working (remotely) in Brandon, Iowa, with my husband and two children (ages 8 and 11 years old). I spent the previous two years living and working in Houston, TX, for the Lunar and Planetary Institute (LPI), a NASA-funded science research organization which is a part of the larger non-profit Universities Space Research Association (USRA), as an Education and Public Outreach (E/PO) Specialist. I have been very fortunate to have been able to continue my work for the LPI from Iowa over the past year.

WHAT HAVE YOU BEEN DOING SINCE LEAVING UNI?

I have been very fortunate to have been able to continue my work with the LPI from Iowa over the past year.

WHERE ARE YOU NOW?

In my work for NASA E/PO over the past 2 years, I have been able to experience and take part in some amazing opportunities and events - from NASA mission launches such as the Mars Science Laboratory (Curiosity rover), Lunar Atmosphere and Dust Environment Explorer (LADEE), and Mars Atmosphere and Volatile Evolution (MAVEN) missions, to becoming an authorized certifier for the lunar sample education disks from Johnson Space Center, and traveling across the country to train other informal educators in NASA hands-on activities, resources, and science content. I have thoroughly enjoyed the diversity of tasks and opportunities within my current position. Not many jobs provide this range of opportunities and experiences!

WHAT DO YOU ENJOY MOST ABOUT WORKING WHERE ARE YOU NOW?

In my work for NASA E/PO over the past 2 years, I have been able to experience and take part in some amazing opportunities and events - from NASA mission launches such as the Mars Science Laboratory (Curiosity rover), Lunar Atmosphere and Dust Environment Explorer (LADEE), and Mars Atmosphere and Volatile Evolution (MAVEN) missions, to becoming an authorized certifier for the lunar sample education disks from Johnson Space Center, and traveling across the country to train other informal educators in NASA hands-on activities, resources, and science content. I have thoroughly enjoyed the diversity of tasks and opportunities within my current position. Not many jobs provide this range of opportunities and experiences!
On Sunday, October 6th, the UNI Earth Science Department celebrated Earth Science Week by participating in the Sunday at the Quarry event. This annual event is sponsored by the BMC Aggregates and provides a chance for the general public to learn more about Earth Science. Various state and local groups offered educational activities for the young and young-at heart. The museum staff at the Quarry event. This annual event is sponsored by the BMC Aggregates and provides a chance for the general public to learn more about Earth Science. Various state and local groups offered educational activities for the young and young-at heart. The museum staff at the Quarry event. This annual event is sponsored by the BMC Aggregates and provides a chance for the general public to learn more about Earth Science. Various state and local groups offered educational activities for the young and young-at heart. The museum staff at the Quarry event.

The excellent guidance and education that I received at UNI provided a solid foundation for my success in graduate school and my career. I still try to check in and say “Hi” to my former professors and the staff in the Department of Earth Science from time to time, and go out of my way to share relevant NASA and LPI internship and educational opportunities when I receive them. I’d like to thank all of the wonderful professors in the Earth Science Department for their encouragement during my time at UNI.

Senior Geology major Maddie Pike spent a large portion of her summer in the southern hemisphere, where she created geological maps as part of Michigan Technological University’s South Africa Field Camp. The camp took place in Cape Town, South Africa, the Langebian Lagoon in West Coast National Park near Langebaan, South Africa, and the Cape Fold Belt Mountains near Ladismith, South Africa, from early May to early June 2013.

“I decided to attend the South Africa field camp because I have done very little traveling in my life and wanted to see another part of the world. This field camp allowed me to see the geology of an area that is completely different from the central United States that I am familiar with, and it enabled me to learn more about the geological history of the southern hemisphere.”

Pike had always planned to enter the field of geology, and initially decided to attend UNI because of the welcoming atmosphere created by the faculty and students in the Department of Earth Science. “Classes taken in the Earth Science Department prepared me for field camp by providing me with the knowledge to assess the geology of regions of South Africa and translate that information into a map.”

In her mapping excursions, Pike was able to visit many interesting areas.

“I enjoyed every moment of my South Africa field camp experience. I was able to visit numerous areas in South Africa, but the major areas I studied include Table Mountain in Cape Town, the Langebian lagoon near the town of Langebaan, and the Cape Fold Belt Mountains near the town of Ladismith,” said Pike. Some other really interesting areas the camp visited included the West Coast Fossil Park, Botterskop Day Safaris, the Cango Caves, and the southern tip of Africa.

While exploring these regions, Pike gained valuable skills, which she plans to use in her future endeavors.

“While in South Africa I learned so much about all aspects of geology and mapping techniques that allow me to think more critically about concepts, whether they relate to geology or not,” said Pike.

After graduating, Pike is looking forward to attending graduate school for hydrogeology or paleontology and using knowledge that she has acquired from professors at UNI.

“I have had many influential professors. All of my professors have provided me with great advice, from learning the material in class, to advice on graduate school and life in general. Some of my professors have also really impacted me and have enabled me to find interests in many fields of geology, fields that I will be pursuing further in graduate school.”

SUNDAY at the QUARRY

On Sunday, October 6th, the UNI Earth Science Department celebrated Earth Science Week by participating in the Sunday at the Quarry event. This annual event is sponsored by the BMC Aggregates and provides a chance for the general public to learn more about Earth Science. Various state and local groups offered educational activities for the young and young-at heart. Visitors could also smash some limestone chunks in search of fossils or calcite crystals, or travel down into the quarry itself. An estimated 750 people braved the cloudy and drizzly weather and partook of the festivities at the Raymond Quarry just east of Waterloo.

This year’s theme was Our Resourceful Earth, and like past years, the UNI Earth Science Department had a strong showing. Kyle Gray asked visitors to match common household items (like drywall) with their associated Earth materials (such as gypsum). This activity was first put together by Jim Walters and was a huge success with the younger kids. Chad Heisell had people map rocks in a small sandbox filled with different types of rocks. Several majors from the Earth Science Department (including a few teaching majors) assisted with the activities and had fun interacting with the public. Jim Walters and Lee Potter greeted visitors down in the quarry and explained the stratigraphy exposed on the quarry walls. Our newest faculty member, Alexa Sedlacek, also popped in for a while. For some reason, Siobham Morgan thought that a thick cloud layer was a sufficient excuse to avoid setting up her telescope for viewing the sun.

Despite the rainy day, the event was a success, and we look forward to the 2014 event.

EVE HALLIGAN
(EVE LAMPSON) CONT.

This program has expanded and grown considerably since I left as a part of the museum’s outreach activities. The museum staff at the Imaginarium has done an excellent job! As a result, hundreds of middle school students in the Waterloo Community School District have now learned science and engineer-

EVE LAMPSON (EVE HALLIGAN) CONT.
It’s nearing the end of another year, and Earth has gone around the sun again. This is the time to greet old friends and remember those who are no longer with us as we take joy in celebrating new friends. I’m glad to have made it around the sun once more. Going around the sun is a concept that would have meant nothing to our distant forbearers. I have quite often thought about how our knowledge of the size and arrangement of the universe has given us a different sense of our place in the world. A few centuries ago, people thought in terms of only thousands of miles to all that exists. Now we think in terms of billions of light years and a world billions of years old. Likewise, not many generations ago, people had no knowledge of the microscopic. Amoebas, bacteria, and diatoms (you know I would get around to those) could not be imagined. One has to wonder what people in the future will be talking about if we are now unaware of. That’s why we build atom smashers, spaceships, and microscopes — why we have universities.

Speaking of diatoms, I have been looking for those single-celled algae in 55-million year-old coal. After attending a diatomite workshop at Iowa’s Lakeside Lab in June, I started to examine coal from Montana and North Dakota. So far, I’ve had no luck, but if I find any, you can be sure you’ll hear about it next year. The North American Diatom Symposium was held this year in Bar Harbor, Maine, and because somebody has to attend these meetings, I sacrificed my time and resources to spend warm summer days by the ocean. It was hard!

Betsy and I have been in some 26 states and two Canadian provinces this year — from Maine to California and Montana to North Carolina. We are trying to warm the planet by burning all that gasoline. And as I write this blurb, the world outside my window could use a little wintering. Winter has arrived in Cedar Falls.

Here’s wishing you a happy and prosperous year as we go around the sun one more time.
The IMPACT Program began its eighth year of programming in July 2013 after receiving a three-year grant from the Iowa Board of Regents through the Title II A Improving Teacher Quality State Grant Program for Higher Education. The grant management team at UNI includes Dorawan Hayek and Lori Sawell (Information Technology Services – Educational Technology), Marcy Sauxee (Iowa Academy of Sciences) and Alan Czarnetzki (Earth Science). Eight middle and high school teachers are participating in the 2013-2014 program year. Participants attended a two-week summer institute on the UNI campus in July 2013 and are receiving on-going support via the Iowa Communications Network, webinars, and school visits by the grant management team. The goal of IMPACT is to provide participating teachers with sustained, intensive professional development that results in demonstrable and measurable improvement in student academic achievement in mathematics and science. The content areas we focused on were weather analysis and forecasting (using materials developed by the STORM Project in the Department of Earth Science), GLOBE (Global Learning and Observations to Benefit the Environment) protocols for making scientific measurements, and inquiry techniques for the science classroom. Participating teachers develop two Technology Integration Action Plans (TIAP) for their classroom using STORM and GLOBE content. Many of the current and past participants will be presenting on implementation of their TIAPs and the resulting student projects at the Spotlight on Technology Day, scheduled for February 27, 2014, on the UNI campus. IMPACT participants receive a modest stipend and can register for graduate credit.

If you are a middle or high school teacher, please visit http://www.uni.edu/impact/about_impact for more details about the programming IMPACT will be offering in summer 2014.

Currently, there is a somewhat-irritating ad running on cable television. The ad shows a husband and wife discussing their financial situation and then cuts to a gorilla who says “but don’t listen to me, I’m just the 800-pound gorilla in the room.” The gorilla is intended to be a metaphor representing the need for long-range financial planning, something that is obvious but often ignored. Some bloggers have criticized the ad as being a mixed metaphor and point out those creators of the ad should have used “the-elephant-in-the-room” metaphor if they were talking about something that people know (or see) but still choose to ignore. It doesn’t matter. My story deals with neither elephants nor metaphors. However, one large gorilla is involved. What I write about happened nearly 30 years ago when a “200-pound gorilla” visited the 1984 Tri-State Geological Field Conference in north-central Iowa. One of the field trip stops was a karst region, north of Floyd, Iowa, where numerous well-developed sinkholes are present in farm fields and pastures. The sinkhole that I selected for a field stop was connected to an underground cave large enough to accommodate a few people, or one large gorilla.

I had arranged for a departmental colleague to enter the sinkhole and associated cave prior to the arrival of field-trip participants. As explanations and discussions took place around the periphery of the sinkhole, I heard excited comments coming from the gathered group: “Look, something is moving down there!” “It looks like a large animal of some kind!” “I see a hairy head and arm!” “Oh, my gosh, it’s a gorilla!”

The “gorilla” turned out to be UNI geology professor Kenneth J. De Nault, attired in a rental outfit from a local costume shop. The 200-pound primate added some surprise, excitement, and humor to the field conference. He even directed traffic at selected stops, much to the amusement of those passing by. Who says Midwest geology is dull?

Sam Wood 83, of Menomonie died Monday, February 11, 2013. Sam was born May 18, 1929, in Oelwein, Iowa to Sam and Lucille (Smith) Wood.

He married Lois Iverson on August 19, 1950, in Briceyln, Minnesota. He served in the Navy on the USS Sicily during the Korean War and was awarded the Navy Unit Commandation ribbon for his service.

Sam completed his undergradu-
ate degree at the Iowa State Teachers College, now known as the University of Northern Iowa. He later obtained a mas-
ter’s degree from the University of Iowa followed by post-grad-
uate studies at the University of Missouri-Columbia. Sam had a long career in education starting with teaching positions in several Iowa cities. He then became the Guidance Director for the Fond du Lac, Wisconsin, school district. In 1964 he began his career at UW-Stout as the Assistant Registrar. He retired in 1991 as the Assistant Chancellor for Student Services/Dean of Students. At that time, the Stout Student Association medal-
ion was renamed the Samuel E. Wood Medalion award.

Sam is survived by his wife Lois and their four children, Mark (Ju-
lia) Wood, Dale (Robin) Wood, Roger (Heidi) Wood and Diane (David) Flowers. He has 11 grandchildren and 2 great-grand-
children and is also survived by his sister-in-law Mary (Robert) Staniland. Sam was preceded in death by his sister and brother-in-
law, Dorothy and Tony Stucky. His greatest joys in life were for his family and working with the students at UW-Stout. The family would like to thank the Menomonie Mayo Medical staff for their care and compassion in his final hours.

Jacob “Jake” Michael Wolter, 27, of Dubuque, Iowa, passed away on Thursday, December 5, 2013 at Mercy Medical Center after a sudden turn with a life-long battle.

He was born on May 25, 1986 in Dubuque, Iowa to the son of Michael and Mary Jane (Kuster) Wolter. He attended St Joseph The Worker grade school, graduated from Wahlert High School in 2004 and attended UNI where he graduated in 2008.

He married Lindsey Massey on September 1, 2012 in Waukee, Iowa. Jake was working at the FSA Office in Epworth, Iowa as a Soil Conversation Technician. He was a member of Ducks Unlimited, Pheasants For-
ever and a life member of the NRA.

Jake was an avid outdoorsman and enjoyed 4-wheeling with his four legged friend Duke. But when he wasn’t hunting or fishing he could be found cheering on his favorite teams the Iowa Hawkeyes, Miami Dolphins and Chicago Cubs. Jake lived every day as an adventure and always with a smile. He was a very dedicated and loving husband, son, brother, grandson and uncle.

He is survived by his wife Lind-
sey his parents, Mike and Mark Wolter of Dubuque, brother, Ne-
than (fiance Megan Vanda-Vega) Wolter of Cedar Rapids, Iowa, mother and father-in-law Dave and Kim Massey of Waukee, Iowa, immediate family the Stephen (Scott) Adams, of Grimes, Iowa, and his n"pads Katie Adams. His grand-
parents showing how loving are Kristel, Dawn and Barbka Wolter, and many aunts, uncles, and cousins and his faithful companion “Duke”.

He was preceded by his grandfa-
th and Fishing buddy Gregory Kuster. In lieu of flowers a Jake Wolter memorial fund has been established.

The family would like to thank the team of doctors and nurses in Dubuque and at The University of Wisconsin Clinics and Hospi-
tals for their years of hard work and determination. Especially Dr: Donald Reyonston, Dr. Jere Ho-
liansan and Dr. Mark Moore.
beginning to think about retirement. How soon I retire will depend on whether a couple of proposals submitted recently get funded. Wife, Deb (BA, Ed. 1978) received recognition as Emporia's 2014 Teacher of the Year and continues to teach seventh grade students. Son, Tyler, married Cassie Johnson on April 27, 2013 and we are happy to welcome her to our family. He is employed as a chemical engineer in the Beaumont, TX area. Should any fellow Panthers travel on Interstate 35 through Emporia, feel free to contact us. We can serve as a temporary stop or an overnight stay.

STEVE LITTLE
B.A. Earth Science Teaching (76) & M.A. (86)
Clive, IA
B.B. Grade Science Teacher/Dept. Chairman & Coach for Girls & Boys 8B Grade Basketball
West Des Moines Community School District
I am currently in my 37th year of teaching science. I spend much of my time with my "significant other" (going on 9 years) traveling and dining. My son will be hopefully graduating from Graceland College within the next year. I am still a "died-hard" shareholder of the Green Bay Packers and although they are testing my patience this year.

DEBBIE YERKES
B.A. Geology (78)
Columbia, SC
Government Information Librarian
University of South Carolina
Nothing new to report, except that I am looking to retire in 4 years. Just wanted to say Hi to all my fellow grads from the 70's.

KENDALL MATTSON
B.A. Earth Science and Biology Minor (88)
Walcott, IA
Technical Instructor for Heavy Equipment
John Deere
It has been another super busy year training technicians on Hi technologies and other projects. AECOM's new system in the valley and working to protect the San Pedro Valley in southern Arizona. I have now been married for 25 years. We have four children, the oldest of whom is now attending Iowa State. I have many good memories from UNI and would like to go back to see all the changes on campus.

BRIDGET MCINTYRE JACOBSON
B.A. Earth Science (88)
Urbandale, IA
Elementary School Nurse
Blank Children's Hospital
After years working with the National Park Service and National Forest Service in first firefighting and then in Prescribed Natural Fire Burning and Fire Behavior, I went back to school and got my degree in nursing. I've been an RN now for 20 years. I first worked in the Pediatric Intensive Care Unit at the University of Wisconsin in Madison. When I had our family I changed positions from the PICU to the NICU. So far in my career I have had wonderful people to work with, but it has been a challenging career. I'm looking forward to retirement in 4 years. Just wanted to say Hi to all my fellow grads from the 70's.

PAUL DENEUI
B.S. Geology (91)
Cedar Falls, IA
Operations Manager
Cardno ATC
The summer of 2013 included a family trip to Cody, Wyoming, to visit family and explore Yellowstone National Park. The geysers and geologic features amazed us all. The wildlife viewing was fun with numerous close-ups with binoculars on the roads. The scenery is a much appreciated change to Iowa with not much topping the Bearthooth Highway and the Silver-Slate area. Other stops along the way out and back included the Corn Palace, Mount Rushmore, Savoy, SD and Devil's Tower. We're looking forward to what adventure we'll take in 2014!
CINDY FREIBERG
B.A. Earth Science/Geology w/minor in Physical Geography (‘94)
Chase, IA
Marketing & Sales Initiator
Geoscience
I have taken a new position beginning in December at Gemini, where I am helping with marketing our new products and developing our key accounts. Our company is doing very well, and we have some very exciting new products that will help us grow in the coming year. Jim and I just celebrated our 38th wedding anniversary on Nov. 22nd. We are enjoying all eight of our grandchildren, who are all so unique. They love to talk about geology and astronomy with me and we encourage them all to see the science that surrounds them. I see the world through their eyes and it is a big exciting planet. As always, I stay busy traveling to MN and WI to enjoy the seasons and our family. Hope you are all well and enjoying life to the fullest. God bless you all.

GORDON KRUEGER
B.A. Earth Science and Environmental Planning (‘91) & M.S. Environmental Science (‘91)
Cedar Falls, IA
Environmental Safety Specialist
University of Northern Iowa
Currently the Hazardous Waste Manager and Radiation Safety Officer with the University. I obtained my certification as Hazardous Materials Specialist in March of 2013. I have been married nearly 20 years to my wife and best friend Donita who we happened to meet in the Earth Science Department. She is also a graduate of UNI and has a minor in Human Resources. We have a daughter who is currently living in Kansas City with her fiancee David Grayson. I enjoy travelling and attending conventions. I have been quite fortunate in my free time is spent reading Dr. Seuss books in funny voices, making silly noises by blowing into a gui or turning peek-a-boo and changing diapers.

JASON MARTIN
B.A. Earth Science Teaching (‘96)
Seoul Korea
Middle School Science Teacher
Korea International School
Back in the classroom after a nine-year sabbatical. After teaching in Egypt and Brazil my family moved back to the states where I entered the family business in Waterloo, IA (home). Our family decided to take a big step back into the overseas adventure and we landed in Korea. Leif continues to be employed by UNI for the Out-of-State and Overseas Field Experience office, and I am teaching Middle School Science. Our girls, Willow (12) and Ayla (10), are adapting to the new world of middle school. Life is good and we are blessed to be experiencing such a wonderful adventure. Hope everyone is doing well.

GINGER LAILDOW
B.A. Earth Science (‘98)
Des Moines, IA
Project Manager
RNAlliance

AMY FREIBERG MILLER
B.A. Earth Science (‘99)
Brockport, NY
Science Instructor
Boone High School
I continue to work as an RRN at our community hospital and Jeremy is still with Malt O Meal. As the kids grow, so does the list of activities that I do in 6th and 7th grade. He enjoys basketball, football, and baseball. Noah is 9 and in 4th grade. Noah enjoys swimming and basketball and wants to try soccer this spring. Hannah is now 6 and in last grade. She loves to read and stays busy with gymnastics and Girl Scouts. Des Moines. As a family we continue to try to camp in MN and WI as much as possible.

2000’S
ANGELA M W SCHMITT
B.A. Earth Science (‘00)
Oswego, IA
Administrative Assistant & Fitness Instructor & Wheaton Healthcare/William’s Wellness Center
Just returned to UNI this fall to take post-BA classes for teacher licensure in all-science education. It’s great to be back!

JACK L NORTHRUP
Earth Science Education (‘01)
Council Bluffs, IA 51503
Planetarium Director
King Science and Technology Magnet Center
This year I have been able to travel around the country meeting other planetarium directors and operators. It is fun to see how other astronomy educators handle teaching in the dark and manage their groups of children.

I am currently working with our local astronomy club and the school district set to open a new Planetarium in the upcoming spring. It has been interesting developing our own content on the traditional Astronomy/Visit the Planetarium. I am still teaching 5-B-Astrology and eighth grade Cisco IT Essentials.

NICK PAGE
B.A. Earth Sciences (‘02)
Des Moines, Iowa
Environmental Specialist
Iowa Department of Natural Resources
I've been working at the Fernbank Museum of Natural History in Atlanta, GA for developing problem-based learning opportunities for these courses to be used in 2014-15. Recently I have been implementing a Research and Development Pipeline for all STEM Thel, and I plan to be an action’s leader to perform our students into researchers.

Whatever I think back to my years at UNI, I realize how deeply I was sculpted by those experiences, and therefore I am continuously grateful.

KADER BORSETH
Earth Science Major, Geography and Anthropology Minor (‘05)
Duxor, GA
Education Program Manager - Earth Science Education Programs and FILN, Volunteer Fernbank Museum of Natural History
All is well and good in Georgia. I am enjoying camping, hiking, and exploring all the wonderful places Georgia has to offer. I have been working at the Fernbank Museum of Natural History for 5 years, and it is going well. I create and teach earth and physical science programs on topics like Chemistry, Weather, Earthquakes and Volcanoes, Astronomy, Paleontology and more. I also manage about eighty 12-18 year olds in our competitive youth volunteer program. The teens staff camps and teach various natural history topics to guests of all ages. I have a great time mentoring teens and teaching all of my favorite earth science topics! Megan’s program this year was really cool to watch and I got to make up for those two months. I hope this note finds everyone well, and if you are ever in Lincoln, let me know!

AMANDA EVEN
B.A. Earth Science (‘09)
Silver Spring, MD
Coordinator for Adventure Trips
University of Maryland-College Park
I’ve been working for the Maryland Adventure Program (MAP) for three years. Exciting adventures with the program this past year included a service learning expedition to Los Amistad International Peace Park on the border of Costa Rica and Panama, and week-long trip leader training at the Cape May Lighthouse. My primary responsibilities include project management, soil and rock identification, stratification, lab coordination, soil and rock testing and generating boring logs. I am currently working as project manager for the Northeast minewater reconstruction project. This involves fieldwork, such as drilling operations, assigning lab tests, managing data, and report and client services for the project of bridges, roads and trails at the I-95 and I-80 interchange in Danbury, CT. I am married to my wife, Jennifer, and our beautiful baby boy Grayson. I enjoy travelling and attending conventions! Whenever I think back to my years at UNI, I realize how deeply I was sculpted by those experiences, and therefore I am continuously grateful.

BOBBI BRACE
B.S. Geology (’97)
Lincoln, NE
PhD Student
University of Nebraska-Lincoln
Greetings everyone! I am in the first year of my PhD studies in the Neuroscience Program at the University of Nebraska-Lincoln researching calcareous nanofossil biostratigraphy. This October, I returned from a 60-day Integrated Ocean Drilling Program cruise on the JOIDES Resolution in the Japan Sea examining the evolution of the Asian Monsoon. It was a very exciting, but incredibly rewarding experience. Now I am back home in Lincoln working to make up for those two months. I hope this note finds everyone well, and if you are ever in Lincoln, let me know!

The following text is split into two paragraphs for easier reading:

Hello Fellow UNI Alumni! I am still enjoying my job working on shale gas and shale oil exploration in Argentina. The travel is great, and the geology is quite challenging. My family is also doing well. My 4-year-old daughter Miranda has recently learned about the moon she was named after; she thinks that’s pretty cool. I am still very happy that UNI decided to drop the Geo majors, it is such a great time to get a job in the petroleum industry, if you graduate with a Master’s degree! Hope Everyone is doing well, look me up if you are in Houston!

I continue to work as an RRN at our community hospital and Jeremy is still with Malt O Meal. As the kids grow, so does the list of activities that I do in 6th and 7th grade. He enjoys basketball, football, and baseball. Noah is 9 and in 4th grade. Noah enjoys swimming and basketball and wants to try soccer this spring. Hannah is now 6 and in last grade. She loves to read and stays busy with gymnastics and Girl Scouts. Des Moines. As a family we continue to try to camp in MN and WI as much as possible. I have discovered that you really can do whatever you decide to do. I was asked, what classes would you love to teach? My reply was “Earth Science of course!” For the third time I have started an Earth Science course this year and I am glad to say I am loving teaching Meteorology and Astronomy classes. I am hopeful to join back up with UNI this summer for developing problem-based learning opportunities for these courses to be used in 2014-15. Recently I have been implementing a Research and Development Pipeline for all STEM Thel, and I plan to be an action’s leader to perform our students into researchers.

Bradley was also nominated for the NPS Freeman Tilden Award this past fall. He was one of six candidates within the Midwest Region to potentially move forward into the national ranking. Although he was not selected, it was truly an honor to be nominated by his peers.

Bradley’s wife, Cherri, entered her classes at the University of Northern Iowa. She continues to teach English and coach cheerleading. This past fall, her cheerleading program transitioned from sideline cheer to competitive cheer. At their first contest in October, the cheerleaders took fourth place in the state.

Logan turned 14 this year, and Darian is 11. Each of them stay busy with school, activities, and after-school sports. Logan ran cross country this spring and is as an 8th grader and took first place in the JV meet. Darian’s love remains with dance, although she just started basketball and soccer to enjoy the competition. Like probably every alumni, the family keeps busy most every month!
rewards for work I do with MAP, this year I've gotten more involved in other areas at the university. These opportunities include: serving as a staff adviser for Alternative Breaks, coaching for Transfer 2 Terp (a program that assists transfer students), serving on the Division of Student Affairs Learning Outcomes Committee, and teaching academic leadership courses for the School of Education. This past November, I co-hosted the Association of Outdoor Recreation and Education (AORE) National Conference in College Park. The conference brought together professionals and students in the field of outdoor recreation and education to exchange information, promote the preservation and conservation of the natural environment, and address issues common to college, university, community, military, and other not-for-profit outdoor recreation and education programs. After two years of planning, it was rewarding to see the conference come to fruition.

When not working, I'm preparing for the next race. This past year, I completed the Delaware Marathon, the Smallwood Olympic Triathlon, and the Culpepper International Triathlon.

MARIÁ HOEKSTRA
B.A. Earth Science Teaching ('09)
Cedar Falls, Iowa
8th Grade Earth Science Teacher
Holmes Jr. High
Cedar Falls Community School District
Life is going so fast! My daughter, Adaline, is 3 years old now. My husband and I both worked in the Cedar Falls area and love it here. We are enjoying the fast-paced world of being young professionals and parents. It is a crazy life, but very rewarding as well. Hope all is well at Latham.

JOE ZEITLER
B.S. Geology ('09)
Junoek, AK
Production Geologist
Hecla Greens Creek Mining Co.
After leaving UNI, I headed to South Dakota to begin graduate work at the South Dakota School of Mines and Technology. I finished my Master’s Degree in Structural Geology and Ore Deposits in the fall of 2012. Prior to that I had moved up to Juneau Alaska in July 2012 to begin working at the Greens Creek Mine. At the mine, my duties include face sampling and underground mapping in addition to working closely with the other geologists, engineers and miners to ensure we are extracting ore in a profitable manner. Probably the best part of my job is knowing that every day is different and never boring. I hope that everyone out there is well and enjoying their time after UNI as much as I.

2010’S
SEAN NEWLIN
B.S. Air Quality ('10)
Cedar Rapids, IA
Environmental Scientist
Stanley Consultants Inc.
I am currently studying for the GRE, planning to go to grad school for mechanical engineering next fall.

BRITTNEY (FRY) TILLER
Earth Science ('12)
Wapello, IA
Environmental Education Coordinator/\Naturalist
Louisa County Conservation
I am just wrapping up my first year as a full-time Naturalist for Louisa County Conservation. It has been an awesome year of field trips, classroom and public programs, and youth trips! The highlight of my year was showing the 3rd graders the first moon phase through our telescope. Their eyes lit up as they saw the beauty of our natural world!!! Matt and I just bought a small house and got a cute little puppy so needless to say, life is good, and we are so very blessed.

ALICIA HERZOG
B.A. Earth Science ('13)
Cedar Falls, IA
50613
Student Life Assistant Program Coordinator
 Hawkwells Community College
I recently took a job at Hawkwells and am working part-time at the YMCA. I am hoping to find a job in a science museum outside of Iowa sometime mid-2014.

BRICE JENSEN
B.A. Earth Science Teaching ('11)
Roeland Park, KS
Physics Teacher
North Kansas City Schools
I am currently in my second year of teaching 9th grade physics down in Kansas City. On top of teaching, I started an environmental club at our school, which has really taken off. Last February, I proposed marriage to Kelley Hampton, a UNI biology alumni and current graduate student at KUMC for cancer research. We are having a fun time planning for our wedding and taking care of our two kittens.

ELIZABETH WELDER
B.A. Earth Science ('12)
Navada, IA
AmeriCorps Forestry Aid
State Tree Nursery-DNR
Dr. Iqbal received a $50,000 research grant from the Iowa Nutrient Research Center (INRC) at Iowa State University. The Center was recently created by the state of Iowa to implement Iowa’s nutrient reduction strategy that was originally developed by the Iowa Department of Agriculture and Land Stewardship, the Iowa DNR, and Iowa State University. The goal of this initiative is to reduce nutrients in surface water from both point and nonpoint sources in a scientific, reasonable and cost effective manner (ISU, 2013). The long term goal of this initiative is to promote research on farm processes, the environment and water. Dr. Iqbal's project deals with distribution, transport, and biogeochemical transformations of agriculturally derived nitrogen and phosphorus in the Cedar River watershed. This project is expected to find insights into the geo-hydrological relationships between Iowa’s agricultural lands and adjacent water bodies. The proposed project will be conducted by hydrologic sampling in the watershed, including the main-channel Cedar, Little Cedar River, Shell Rock River, West Fork Cedar River, Black Hawk Creek, and Wolf Creek: The specific goals of this project are to (1) conduct geo-hydrologic mapping to identify probable hot spots of pollution by soil runoff nutrients; (2) delineate avenues of nutrient and sediment transport caused by high intensity rain events and flooding; and (3) study biogeochemical transformation pathways of nitrogen and phosphorus in the watershed.

CODY MIRELES
B.A. Earth Science ('13)
Sunchang, Jeollabuk-do, South Korea
B.A. English Teaching ('13)
Sunchang, South Korea
I speak in as much Earth Science as possible.

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