50th Anniversary Celebration:

The Department will celebrate 50 years of awarding baccalaureate degrees in the geological sciences the weekend of February 19-21, 2015. Events for alumni and guests will include a reception, banquet, field trip, and tours of the new facilities. There will also be a dedication in our new Rock Garden to Dr. Donald McGannon, who started the department and was a faculty member from 1960 until his passing in 1983. Look for details in snail- and e-mail messages in November, which will include how to register for the weekend’s events.

We will be compiling a 50th Anniversary “book of memories” using materials provided by alumni, current students, faculty, and staff. Please be thinking about sharing items for the anniversary book – written memories of field trips, class and other experiences in the department – and combing through your collections of slides and photo. We’ll distribute the book to all of our alumni; please consider contributing, whether or not you’re able to attend the anniversary celebration. Again, look for details on how to share these items in our November correspondence.

Center for the Sciences and Innovation (CSI)

The department was temporarily displaced for about eight months while Marrs McLean was remodeled and renovated. This was the last phase of construction, which began in 2010, of the CSI. This multi-building facility encompasses ~280,000 square feet and is home to biology, chemistry, geosciences, physics & astronomy, engineering, computer science, mathematics, psychology and
neuroscience. Newly renovated spaces in Marrs McLean Hall, where Geosciences is still located, include classrooms, faculty office and research laboratories, a two-story atrium, and a bridge connection to the rest of CSI. The entire CSI complex is stunning, and we hope you get a chance to visit campus and take a tour soon!

People:

This fall, Dr. Megan Plenge, a geomicrobiologist, joined the Geosciences faculty as Visiting Assistant Professor. Megan has a B.S. in environmental science and a M.T. in science education. She taught high school science for two years before returning to graduate school and earning her Ph.D. from the Jackson School of Geosciences at the University of Texas-Austin. This year, she is teaching courses in aqueous geochemistry, oceanography, geomicrobiology, and environmental geology.

Trinity geo-alum Dr. Leslie Bleamaster (class of 1998) recently transitioned from Assistant Visiting Professor in geosciences to Science Facilities Manager of the Center for the Sciences and Innovation. This position entails working with the chairs and faculty in the all the STEM disciplines to facilitate teaching and research, monitoring critical building systems and working with facilities services to maintain them, and managing the administrative and technical support personnel. Les will still be able to teach the occasional class, which last spring included the course on Iceland with Diane Smith and economics professor Maria Paganelli. (For information, see: http://new.trinity.edu/news/interdisciplinary-iceland.)
Visiting Lecturers:

Since our last newsletter was published, the department hosted the following visiting lecturers. In addition to their presentation, each visitor spent time with our majors over lunch and/or at a reception, which provides a great opportunity for our students to visit with them in an informal environment.

March 6, 2013: Dr. Ross Yeo (retired petroleum geologist who worked for Amoco/BP in Calgary, Houston, Denver, Vietnam, London, Denmark, and Kuwait): Introduction to the petroleum industry: So you want to be a petroleum geologist...

March 25, 2013: Ms. Layla Unger (TU geo-alum, class of 1997; Geologist at Chevron on assignment with the Southern Africa Business Unit involving exploration in Angola): Why the @$%& would I want to work for Big Oil?

October 10, 2013: Dr. Heather DeShon (Associate Professor of geophysics at Southern Methodist University): Great earthquakes and new insights into subduction seismogenesis. Dr. DeShon visited Trinity as part of the GeoPRISMS Distinguished Lecturer program.

February 26, 2014: Dr. Penelope Boston (Professor of Earth & Environmental Sciences and Director of Cave and Karst Studies at New Mexico Tech): The Planet within: Caves from Earth to Mars and beyond. Dr. Boston’s visited Trinity as part of the Phi Beta Kappa Lecture program.
New University Curriculum

In addition to CSI, which is a fabulous new physical facility, Trinity has implemented a new core curriculum, which will replace the long-familiar Common Curriculum. Elements of the new curriculum include an enhanced first-year experience; core capacities courses that embed mastery of written, oral, and visual communication skills, digital literacy skills, and engaged citizenship within the liberal arts curriculum; courses that engage students with various approaches to creation and analysis in the humanities, arts, social/behavioral sciences, natural sciences, and quantitative disciplines; and interdisciplinary cluster courses wherein students explore a subject by completing three linked courses from different departments. In geosciences, we’ve responded to the challenge of implementing the new curriculum by revising courses to become “approaches” and “capacities” courses and getting involved with the first year experience and interdisciplinary clusters.

Support staff

Linda Hyatt retired last year; we were sorry to see her leave, but happy for her and Steve to be able to travel and enjoy life in retirement! Tony Perez and Denise Wilson continue to provide our students and faculty essential support in our teaching and research endeavours.

Other remarks

We are deeply appreciative for the on-going support of our mission and programs from you, our former students. Your generous contributions to the department allow us to provide substantive and enriching classroom, lab, field, and research experiences for our students; to recognize students for outstanding work through a variety of awards; and to maintain and update our teaching and research collections and facilities. Our program simply wouldn’t be the same without you!

Please update us with your contact information and what is new in your lives! We hope to see you in February for the 50th anniversary celebration, but also at alumni receptions at professional meetings. If you’re in San Antonio, don’t hesitate to stop by and make a personal visit!

Best regards,

Diane Smith, Chair
# STUDENT NEWS

**Graduates**

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<th>December 2012</th>
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<td>Baylie Bunn</td>
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<td>Erich deZoeten</td>
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<td>J.D. (John) Gipson</td>
<td>Michael Bentz</td>
<td>Lauren Mercado</td>
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<td>Daniel Hoin</td>
<td>Luciana de la Rocha</td>
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<td>Allison Zawacki</td>
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**Current Majors:**

| Nathaniel Adams | Grace Mabry |
| Brooks Alexander | Gregory Mak |
| Hunter Barrett | Hannah Mathy |
| Cara Beasley | Taylor Michel |
| Laine Bradshaw | Mark Mlella |
| Nicholis Candusso | Yvette Muniz |
| Travis Dodson | Abran Oakes |
| Dylan Droxler | Kirby Peddicord |
| Connor Dunn | Rebecca Schauer |
| Dylan Ellett | Lauren Schroeter |
| Gianfranco Filippini | Tristan Solano |
| Clayton Ford | Leanne Stepchinski |
| Marcus Giannini | Mary Kate Stewart |
| Nicola Hill | Graham Stockhausen |
| Lydia Jones | Hadley Swartz |
| Caroline Kelleher | Sarah Thurman |
| Mark Kulas | James Uroff |
**Members of Delta Xi Chapter, Sigma Gamma Epsilon**

**Class of 2013**
- John M. Bentz
- Luciana de la Rocha
- Heath Hopson
- Trevor Koplitz
- James Shultz
- Nathan Tinker
- Dylana Watford

**Class of 2014**
- Lauren K. Mercado
- Stephen Muela
- Aaron Price
- Adrian A. Wackett
- Sarah S. Wigginton

**Class of 2015**
- Lydia C. Jones
- Gregory D. Mak
- Kirby L. Peddicord
- Rebecca D. Schauer
- Leanne M. Stepchinski

**Class of 2016**
- Mark M. Mlella

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**Undergraduate Research:**

Many of our students conduct research, working closely with a faculty member. Listed below are items completed by our students since our last newsletter: senior theses, published abstracts of presentations made by our students at professional conferences, and publications in peer-reviewed journals that include student authors.

**2013 Theses:**

Luciana de la Rocha: *A new approach to characterizing fracture networks: An analysis of natural fractures within the Stillwell anticline, west Texas* [Advisor: Benjamin Surpless]; 2013

Trevor Koplitz: *Rapid exhumation of a mid-Cretaceous arc in the Canadian Cordillera: Evidence from a provenance study in the Methow Basin* [Advisor: Kathleen Surpless]; 2013
2014 Theses:

Erich Dezoeten: The influence of ocean chemistry and syndepositional faulting on the termination of the southwest Yangtze Platform Guizhou Province, south China [Advisor: Daniel Lehrmann]; 2014

Lauren Mercado: Constraints on the depositional environments of cyclic, microbialite-bearing carbonate-siliciclastic strata; Cambrian Wilberns Formation, Mason County, Texas [Advisor: Daniel Lehrmann]; 2014

Adrian Allan Wackett: Petrology and Geochemistry of the Crawfish Inlet and Krestof Island Plutons, Baranof Island, Alaska [Advisor: Diane Smith]; 2014

Publications of Meeting Abstracts [Student authors are denoted by boldface and *asterisks]


*DeZoeten, E., Lehrmann, D., Minzoni, M. Cantrell, D., and Payne, J., 2014, Influence of seawater chemistry and syndepositional faulting on the drowning of the Yangtze

*Droxler, D.,* Lehrmann, D., Khanna, P., and Droxler, A., 2014, Comparative analysis of microbial carbonate fabrics at various scales within the architecture of a large microbial reef mound; Cambrian, Wilbers Formation, Mason County, TX: AAPG Annual Convention and Exhibition, Houston, Texas.


strata; Cambrian, Wilberns Formation, Mason County, TX: AAPG Annual Convention and Exhibition, Houston, Texas.


**Publications in Peer-Reviewed Journals:**


Lehrmann, D.J., Chaikin, D.H., Enos, P., Minzoni, M., Payne, J., Yu, M., Richter, P.,  
Basin filling patterns of Triassic turbidites in the Nanpanjiang Basin of South  
China: implications for tectonics and impacts on carbonate platform evolution:  

Minzoni, M., Lehrmann, D. J., Payne, J., Enos, P., Yu, M., Wei, J., Kelley, B., Li, X.,  
Triassic Tank: platform margin and slope architecture in space and time,  
Nanpanjiang Basin, south China, in Playton, T., Harris, M., and Verwer, K., eds.,  
Deposits, architecture and controls of carbonate margin, slope, and basinal  
settings: SEPM Special Publication 105, p. 84-113.

Morell, K., Gardner, T., Fisher, D., Idleman, B., and *Zellner, H., 2013, Active  
thrusting, landscape evolution and late Pleistocene sector collapse of Barú  
Volcano above the Cocos-Nazca slab tear, southern Central America: Geological  

Surpless, K.D., and *Beverly, E., 2013, Understanding a critical basinal link in  
Cretaceous Cordilleran paleogeography: detailed provenance of the Hornbrook  
125, no. 5-6, p. 709-727.

Surpless, K.D., *Sickmann, Z., and *Koplitz, T., 2014, East-derived strata in the  
Methow Basin record rapid mid-Cretaceous uplift of the southern Coast  

**Student Awards and Honors**

**Departmental Awards:**

**Outstanding Senior Student and Tinker Family Geosciences Award:**  
Luciana de la Rocha (2013)  
Adrian Wackett (2014)

**Ed Roy Outstanding Research in Geosciences Award**  
Trevor Koplitz (2013)  
Erich deZoeten and Aaron Price (2014)

**Sigma Gamma Epsilon W.A. Tarr Award:**  
Luciana de la Rocha (2013)  
Lauren Mercado (2014)
Trinity University Awards

Mach Family Research Fellowship
Aaron Price (2013)
Leanne Stepchinski (2014)

Murchison Research Fellowship
Mark Mlella (2014)

Edwin Eckert Scholarships in Geology:
Stephen Muela and Aaron Price (2013)
Nicola Hill, Mark Mlella, Kirby Peddicord (2014)

External Awards

Southwest Gem and Mineral Society Scholarships:
Erich deZoeten and Clayton Freimuth (2013)
Clayton Freimuth and Leanne Stepchinski (2014)

South Texas Geological Society Chair’s Award
Dylana Watford (2013)
Sarah Wigginton (2014)

South Texas Geological Society Harold D. Herndon Geological Scholarship
Michael Bentz (2013)
Stephen Muela (2014)

FACULTY NEWS

Bob Freed

Hello to all—especially those from the 1900’s! It’s now been 15 years since I retired from Trinity in 1999. I’m still affiliated, since 2005, with Our Lady of the Lake University here in San Antonio as an adjunct professor in their Center for Science and Mathematics Education. During summers, I teach an earth science class for primarily elementary and middle-school teachers to prepare them for passing state certification exams in science. It’s pleasing to note that I’m following in Ed Roy’s footsteps to further the teaching of earth science to teachers. I really miss him. I take the teachers on at least three field trips per class, including Enchanted Rock. In 2012, after 43 years, I had to call it quits for taking students
myself up and down that pile of rock due to spinal compression fractures from osteoporosis. Sigh.

Miki retired from middle-school science teaching in 2009. She helps me with the summer teaching at Our Lady of the Lake and keeps me from doing stupid things. Erin is finishing a Ph.D. degree in cognitive psychology at University of California, Davis. We enjoy visiting her and taking day trips to examine the local geology and also to sample the brewpubs and wineries scattered through the California landscape. Recently, Karen left the group-home system and moved back home with us. This year she earned a 3rd degree black belt in Taekwondo! We’re very proud of her.

I enjoyed seeing folks at the alumni field trip in 2012, and look forward to seeing more of you at the 50th reunion in 2015. I thank you all for sharing an important part of your lives with me during my years at Trinity. I maintain an e-mail address at Trinity—bfreed@trinity.edu—and I check in at the Bombay Bicycle Club on a regular basis, usually Friday lunch.

Walt Coppinger

Greetings from the great Northwest! Roberta and I are still living in Whitehall and enjoying the rural lifestyle and all of the beauty and occasional challenges of living in Montana (yes, it snows here…). We hope that this note finds you and your loved ones in good health, prospering in your careers, and enjoying life.

Our children and 5 grandchildren are all doing well, but are scattered across the country now so we don’t see them as often as we would like to. Denise and family (1 son) are still in Orlando; Dan now lives in Seattle and has 2 rowdy little boys; and Justine and her family (1 daughter, 1 son) moved back to Texas last summer and now live near Dripping Springs. We are enjoying retirement and the freedom it gives us. We’ve travelled a little, but mostly spend our time exploring the geology and history/culture of SW Montana. Wildlife-watching is a favorite pastime as well, especially in spring and fall seasons. A good friend here has become an avid wolf watcher in Yellowstone N. P. (90 miles away…), and spends a lot of time in the winter chasing them around in the snow and cold. They are fascinating animals. We have seen a couple of wolves locally as well, but they are really stealthy animals most of the time.

We boat and fish a lot in the summer months, mostly in the chain of lakes along the Missouri River near Helena, MT. It is an excellent trout fishery, and we take advantage of the resource to stock our freezers for the winter months.
Generally we can get out from May until November but got caught short this summer because of family issues and visits. There is always ice fishing to fall back on (the ”past-time of idiots”… ).

Geologically speaking, we have fallen into the company of a couple of retired vertebrate paleontologists / Tertiary stratigraphers. They get us out into the field more or less year round, and they are older than me, so we can at least keep up with them. This is a fossil rich area so there are lots of places to poke around and the Tertiary strat is poorly understood which makes it challenging. We make enough discoveries to keep it exciting. Last winter we found and recovered a species of Oreodont new to this area. We recovered and prepared the fossil which was ~85% articulated, including complete and near perfect skull. It also provided a nice time-marker for the stratigraphy.

So, we are happy and generally healthy. Time picks away at old bodies though. We wish all of our good friends and past students the best of luck and success in all of your endeavors. Above all, enjoy what you are doing!! Regards to all -- Walt & Roberta Coppinger

Tom Gardner

Let’s see, where did I leave off in the last newsletter? Oh now I remember; Hannah Zellner and I were doing yoga in Cerro Punta, Panama. The field lodge was a yoga studio. Can’t beat that.

Here’s what I’ve been doing for the last several years. In the summer of 2013 I co-directed a Keck project in Costa Rica and took a Trinity student, Clayton Freimuth, with me. There was a rather large earthquake, magnitude 7.6, on the Nicoya Peninsula on September 5, 2012. That earthquake caused significant coastal uplift, over 60cm in some locations. The Keck projected examined the coastal landscape response to that coseismic deformation. Clayton examined the effects of the seismic cycle on beachrock formation.

Then I’ve moved on to New Zealand. Ya gotta love NZed! Those mountains and vineyards are spectacular. I’ve been working there with faculty and two graduate students from Penn State. This past summer I took a Trinity student, Mary Kate Stewart. We are investigating the development of the North Canterbury Fold and Thrust belt on the South Island, doing some trishear modeling and constraining the rates of fold growth with dated marine terraces. Neat stuff.

Next year I hope to go on Academic Leave to Australia, Tasmania to be specific, to look at active faulting. If you think New Zealand is out-of-the-way, try Tassie! It’s really down under, sticking way out into the South Ocean and the “Roaring Forties”. It should be a fun time with my field cabin on Great Oyster
Bay. The bay has that name for a reason. So if any of you are so inclined, stop by for a visit.

Family life continues to go well. Retirement is fast approaching in three years, more or less. Susan and I have narrowed down the location to somewhere in the Pacific Northwest or maybe San Diego, Honolulu, Melbourne Australia or Santa Fe. Who knows for sure what the future will bring? Our oldest son, Nathan, is still close by in San Antonio working at Panera Bread. Blair, our youngest son, is living in Nuevo York working for 2U (http://2u.com/). If you are interested in graduate education, look him up. He also has his own business, 3d nyc lab (http://3dnyclab.com/). Susan continues to work for the State of Texas, helping to keep Texans healthy, not an easy task sometimes.

I am always around, so stop by for a chat and a margarita when you are in town or meet me on the Great Oyster Bay in Tasmania next year for some oysters on the half shell.

**Glenn Kroeger**

As you may know, Trinity is implementing a new general education curriculum this year to replace the Common Curriculum, which has been in place in one form or another for over 25 years. Understandings are being replaced by Approaches, Capacities, and Interdisciplinary Clusters. I have been involved for several years in developing the new curriculum, but that involvement has reached its zenith this academic year when, as chair of the University Curriculum Council, I am responsible for managing the implementation of the new curriculum, which takes effect next academic year. Needless to say I don’t have much spare time these days.

Despite the mountain of curriculum work, I still get to teach and I am teaching Oceanography this fall as an introductory course for the first time. Megan Plenge and I are adding a series of hands-on exercises, data analysis projects and field-based experiments to the course to prepare it for the new curriculum. I expect it to become a popular entry into the major. In the spring, I will launch the new Dynamic Earth course that will become the second course in the major for all students. This course is an evolution of Exploring Earth and will serve to “level the field” for majors coming from a variety of introductory courses. It will cover the critical elements of physical geology (minerals, rocks, plate tectonics, map reading and geologic structures) in a bit more depth than an introductory course before students proceed to Earth History, Earth Materials, and Earth Surface Processes.
Things are busy on the home front as well. Karen continues teaching special education at Reagan High School. Jennifer is in her senior year at Churchill High School and is ranked first in her class. She also outscored me on the SAT (although the scale change a decade ago makes it a draw). This past summer we visited colleges from the east to the west coast, and she is now working on applications and essays while I work on financial aid forms. She is still heavily involved in orchestra. This past spring, Karen and I chaperoned the Churchill High School orchestra trip to Italy. Spending a whirlwind week in Rome, Florence and Venice with about 100 high school students is a once in a lifetime (I hope) experience. Chaperoning is hard work, but it was a fantastic trip and getting to see Jennifer lead the orchestra in a basilica designed by Brunelleschi and decorated with works by Michelangelo was wonderful.

In May 2013, I finally got permission from the National Park Service to return to designated wilderness areas in Canyonlands NP and take new gravity readings from Cyclone Graben where we first found geophysical evidence for salt diapirism beneath the graben floor back in 2004. The area was closed to all vehicle traffic and off-trail access shortly after our expedition in 2004. Aaron Price (2014) accompanied me and the data we got in three intense days of fieldwork was excellent. As his senior thesis, Aaron developed a new algorithm for calculating gravity terrain corrections and implemented it in ArcGIS. I am now using and extending that algorithm, coupled with new, high resolution DEMs to model the graben data. I continue to develop and distribute my visualization and analysis program, SeismicCanvas, and got a chance to present it to an international audience as an invited speaker at the International Union of Geodesy and Geophysics Assembly in Gothenburg, Sweden in July of 2013.

Dan Lehmamn

Greetings to all! I’m in my 5th year at Trinity. Wow, how time flies! I’m on academic leave now, and I have three papers in progress to submit by the end of the semester! Although I’ve been trying to stay out of the office as much as possible and “sequester” myself for the writing, I’m still finding myself in the lab helping students with their projects.

After 4 years of having my rock collections stored in a chaotic assortment of cardboard boxes, with the renovation of Marrs McLean I finally have a lab and the rocks all neatly organized in cabinets. My lab is nearly complete with a conodont micropaleontology facility, state of the art petrographic microscopes, high-tech photomicroscopy and point counting capabilities, UV fluorescence, optical cathodoluminescence, and fluid inclusion geothermometry.
My research program is fundamentally field oriented – which requires basic equipment like a hammer and hand lens, but I also have a new gamma ray spectrometer that has proven extremely valuable for quick geochemical data collection and, with Glenn Kroeger’s assistance, I have been taking advantage of the department’s DGPS and TS for precision surveys of a dinosaur trackway site and microbial reef complexes. Recently we have employed aerial drone photography and photogrammetry of the dinosaur trackway and the microbial reefs. The Geosciences Department at Trinity now even has its own drone!

I continue to work in south China with a new project funded by Shell and Saudi Aramco to study the role of changing basin redox chemistry and carbonate saturation state on the evolution of ancient tropical reef complexes. I have another exciting new project, funded by Chevron, Conoco-Phillips, Shell and Statoil in collaboration with Andre Droxler at Rice University, to study the architecture of Cambrian microbial reef complexes along the Llano River near Mason, TX. Soon fieldwork will resume again this fall in Mason, and I have a field trip planned with Leanne Stepchinski (senior) to China over winter break.

I’ve really enjoyed teaching at Trinity. I’ve modified my introductory course “History and Evolution of Life” to include field projects at the Houston Museum of Natural Science, Government Canyon and Canyon Lake Gorge. In August of 2013, we led a new Majors’ Field Trip to Wisconsin, Upper Peninsula of Michigan and Minnesota. The weather was perfect and the geology was fantastic! Although almost all of the rocks up there are Precambrian in age (not much in the way of fossils except for stromatolites), our field sites were all classic localities for the historical geology of North America – e.g. greenstone belts, banded iron formations, and the Mid-Continent rift! In May 2014, we led a Majors’ Field Trip to the Tularosa Basin, and Guadalupe Mountains of west Texas and New Mexico – another wonderful time and classic geology. This trip had lots of fossils and sedimentary rocks as well as excellent localities with metamorphic and igneous rocks and lots of great discussions on everything from Laramide and Basin & Range tectonics to archeology.

My wife Mei enjoys her new job as a librarian at Clear Spring Elementary School. My daughters Dinda and Asmara are a junior and senior, respectively, at Churchill High School. Asmara is applying for college and is interested in a major in geoscience! Dinda is a fantastic artist and writer. As I said at the start: Wow, how time flies!
Diane Smith

Greetings to all! Everyone in my family is doing well. After graduating from Rice in 2013, Carrie has been working as a software engineer in Austin. Joanna is a sophomore at Rice and is probably going to major in economics and statistics. We’re now “empty-nesters,” but it’s nice that neither of the girls is that far away. Chip continues taking computer science classes at Trinity and running his IT consulting business.

Since the last newsletter, one of the highlights for me occurred last summer when Les Bleamaster, Maria Paganelli (economics faculty mem) and I led a 10-day study tour to Iceland, after teaching a general education course on that nation’s economy, geology, and culture last spring. It was a fantastic trip, to say the least. We’re offering the course again this spring, with a study tour next July.

Another personal highlight was receiving the 2013 Outstanding Educator Award from the Association of Women Geoscientists at the Denver GSA meeting. Several former students – Layla (Stiles) Unger, Kevin McKenna, Marina Suarez, and Celina Suarez – were at the awards breakfast, which made it all the more special.

I’m very excited about the upcoming 50th anniversary celebration and the opening of the Trinity Geosciences Rock Garden! The garden has been a dream of mine for years. It will likely be a “work in progress” for some time, but we already have a decent inventory of materials to place in the garden.

My service activities keep me occupied. Last February, I was elected as Vice-Chair of the Faculty Senate, a position I hold for two years before becoming Senate Chair for another two years. At the GSA meeting in Vancouver next week, I will begin a year-long term as Chair of the Division of Mineralogy, Geochemistry, Petrology and Volcanology (MGPV). At less than five years old, the MGPV Division is the newest GSA Division, but it’s now the second largest division. (Hard rocks rule!) Lastly, I’m in the second year of a 3-year term as Councilor for the Council for Undergraduate Research.

But what really makes me the happiest is teaching and working with our students. I still love teaching volcanology and earth materials. And I’ve been percolating some ideas about a new “Urban Geology” class. Last year, I supervised Adrian Wackett on his senior thesis on ~50 Ma intrusive rocks from coastal Alaska, which he presented at a Cordilleran Tectonics workshop in British Columbia last February. In 2013, Julia Holland’s thesis, a study of mafic to felsic intrusive rocks of the Sierra Nevada Batholith that Ben Surpless and I supervised, was published in Geosphere.
I hope to see many of you in February for the 50th anniversary! And if you can’t be here in person, send us your photos and memories. Please stay in touch – it means a lot to all of us to hear from and about you.

Ben Surpless

Hello, again! The past two years have passed all too quickly, with teaching, research, and growing girls (Kayla, 8, and Daria, 5) filling my days. I’ve continued my research efforts in west Texas, where I’ve worked closely with a number of Trinity students at different stages in their undergraduate careers to investigate the evolution of fracture networks before, during and after the formation of a Laramide-age fault-propagation fold system. The initial results of this research have been exciting, with clear implication for the movement of fluids in the subsurface, and students and I have presented our research at GSA national meetings at Charlotte, NC, and Denver, CO, and at south central section GSA meetings in Austin, TX, and Fayetteville, Arkansas. I look forward to taking students to west Texas to perform further research in both January and May. I’ve also worked closely with Glenn (Kroeger) to investigate the temporal and spatial slip history of a major normal fault system in western Nevada, within the actively deforming Walker Lane. We hope to have a paper that summarizes our research in print by early 2015.

I’ve also delved into the education research world, publishing a paper in which I summarize the efficacy of our attempt to improve student science literacy in the context of our introductory geosciences labs. Related to that work, I was invited to co-lead a workshop at a national NSF conference in 2013, where I enjoyed working with other undergraduate educators to develop robust assessment programs for their NSF-funded projects.

I continue to enjoy teaching Structural Geology, Environmental Geology, and Viable Solutions to Environmental Problems, the capstone course for the Environmental Studies major here at Trinity. It’s always fun to see students engage in coursework in the lab, in the field, and in the classroom. For me, it’s the best part of teaching at a place like Trinity.

Kathy, the girls, and our new dog Stella (imagine yelling her name in a public park…) enjoyed our “big drive” across the upper Midwest and through Montana and Wyoming, camping along the way. Mt. Rushmore and the Tetons were two of many highlights along the way - the girls are already talking about next summer’s “big drive” adventure.

As Diane mentioned, we’ve moved back in to the renovated Marrs-McLean Hall, which now feels like an integral part of the larger CSI complex. The
complex is truly one of the best science building complexes that I’ve seen in the U.S. I hope that we’ll see many of you at the department’s upcoming 50th anniversary celebration here at Trinity, where you can see our new digs and enjoy the company of old friends—we’re all looking forward to seeing you! I hope all is well with you.

Kathy Surpless

Greetings! I have had a great couple of years since the last GeoNEWS went out, as I’ve been continuing my research in the North American Cordillera and developing new projects and collaborations, both in the classroom and in my research. My students and I have been focusing our research efforts in Oregon and northern California, and we’ve presented our results at the annual and Cordilleran section meetings of GSA in Charlotte NC, Denver CO, Fresno CA, and Bozeman, MT. I am continuing research in Oregon this year, and have begun planning for field work in the Sierra Nevada Mountains next summer. In addition to the research travel, I enjoy co-teaching Trinity’s Environmental Field Studies course on the High Lonesome Ranch near Grand Junction, CO with faculty from Biology, Anthropology, Art, and English. This truly interdisciplinary course is exciting for students and faculty alike, and we are continuing to offer it in future summers. I got to go to Bozeman MT twice this summer, first for the GSA meeting in May, and again in August to help lead a workshop titled “Bringing Research into the First Two Years of the Undergraduate Curriculum.” I got lots of inspiration and great ideas at that workshop and hope to implement many of them as we revise courses in conjunction with the roll-out of Trinity’s new curriculum. The August workshop was also a great excuse to take a fabulous family camping trip on our way to Bozeman, spending time in the Black Hills, Bighorn Mountains, Grand Teton, and Yellowstone. On April Fools’ Day this year, the Surpless family welcomed our newest member: Stella, a year-old Rhodesian Ridgeback rescue dog. Six months later, we can’t figure out how we lasted so long without Stella! The girls are both thriving at Northwood Elementary (3rd grade and Kinder), and we parents are enjoying the simplified pick-up and drop-off routine. We are all looking forward to the department’s 50th anniversary celebration in February, and hope to see you then. Best wishes!
ALUMNI NEWS

1965

Richard Ward is semi-retired. He consults for Kietta, a company that develops marine seismic technology. Richard spends summers in Canada and the remainder of the year either in Houston or traveling.

1966

Jack Downing writes that retirement is great! He lives six months of the year in the mountains of Colorado, and then six months in Bulverde, Texas, and travels quite a bit in between.

1970

After 36 years as a faculty member at the University of Southern California, Lawford Anderson is now in his fourth year as a Professor of Earth Sciences at Boston University.

1972

Thomas Masinter is a musician directing musical revues, which are being presented in The Cave Without A Name in Boerne, Texas. He notes that “The acoustics are magnificent!” He is currently landscaping his front yard with 12 tons of limestone blocks and thousands of pavers, and he visits the Big Bend area every spring.

1974

Jackie (Ramsey) Cox is splitting time between Abilene, Dallas, and Pagosa Springs. She’s enjoying her four grandkids and attempting to learn to play golf.

Harry “Bud” Holzman has been giving talks to various geological groups about the oil potential in Iraq. His expertise on Iraq comes from his army officer and petroleum geology experience. In 2004, the Army placed Bud in charge of evaluating the entire Iraqi energy infrastructure. He looked at everything from refineries, pipelines, and electric power generation plants and estimated the real hydrocarbon reserves of Iraq, which he believes had been vastly underestimated. In conducting this project, Bud found the geology to be very exciting, ranging from glacial deposits, deltas, saltm and tectonism. He found that his Trinity education – and shares his thanks to Drs. Roy, Freed and Coppinger – prepared him well for this task. On the personal side, Bud and his wife Teresa saw daughters Heather and Jessica graduate from Trinity in 2010.
and UT-San Antonio in 2013, respectively, both with degrees in Anthropology. Bud is currently the President of the South Texas Geological Society.

1975

Clyde Yancy is still very active in uranium exploration efforts in the western U.S. from Wyoming to South Texas, as well as developing uranium projects in Paraguay. He has presented on the uranium geology of Paraguay at several venues, including the Global Uranium Symposium and at the IAEA in Vienna Austria during their Sandstone Uranium Seminar.

1976

After retirement, Ron Price and his four kids started a Bible-based, nondenominational Christian church named Hope in Christ Church in June 2011.

1977

John Snedden started his fourth year at UT-Austin and now has 3 students (two M.S., one Ph.D. candidates) including Trinity Geology graduate Luciana de la Rocha (class of 2013). Scott Tinker (Trinity alum ‘83) also co-supervises Luciana.

1978

Thomas Reed is in San Antonio and has three children and four -- soon-to-be-five -- grandchildren. He has been married for 34 years and taught high school math plus some science for 19 years. Over the last four years, Thomas has been teaching at SAC, University of Phoenix San Antonio Campusm and for Thomas Edison State College at Fort Sam.

Scott West has been building a mineral collection for the past few years. He specializes in minerals containing lead.

1980

Leila Terhune moved back to Texas in 2011. She lives in Austin where she manages her rental properties/real estate business from home. She has three children – Danielle, 29, who lives in San Francisco; Bobby, 25, married and living in Wichita, working in the oil and gas industry; and Michael, 23, a recent Trinity graduate (class of 2013), who lives in San Antonio and is doing research at the University of Texas-Health Science Center.
1981

**Katy Withers** recently transferred into the ExxonMobil Global Geoscience Recruiting team and is enjoying interacting with their interns and students at conferences, field courses, and campuses.

**Nancy Benthien** and her husband, Ross, have lived in Cairo, Egypt for the past 2 1/2 years. They are enjoying the adventure and opportunity it brings. Their son just graduated from Brown University in Economics and their daughter is in her senior year at Trinity. She is double majoring in Chinese and Economics. No next-gen geoscientists in their family! Nancy continues working for a management-consulting firm in the area of leadership coaching and cross-cultural team development, mostly in the oil and gas industry.

1982

After years in banking, **Melissa Malmberg** is now selling residential real estate. She has two great kids, Michelle (19) and Chris (14). Nancy is also an active volunteer in neighborhood charities. In her free time, she enjoys yoga and hiking.

**Scott Tinker** married Allyson in 1983 and they have had four kids together. Two graduated from Trinity University, one in geosciences and one in engineering. Scott has stayed close to Trinity through the years and is very grateful that smart graduates are making his degree better every year.

**Betsy Bergmann Jimenez** still lives in the San Francisco Bay Area with her husband and two sons.

1983

**Michael Kruc** finds that “It’s hard to believe it's been 31 years since I graduated from Trinity! The memories are as clear as yesterday.” Michael calls his past decades "Schizophrenic Career Progression.” He spent 10 years in the Air Force, worked on a Master’s Degree in Human Resource Management, then worked in the computer software industry for the past 19 years… but he never worked in the geology career field…. see, who says you need to be locked into one thing the rest of your life!

**Tom Sims** is currently working on building a two LNG train project in Mozambique, Africa. “This project will be an economic and social "game changer" for not only Mozambique, but East Africa as well.”

**R. David Shiels** is happy to say that Shiels Engineering is about to celebrate its 10th anniversary in providing Geoscience and Engineering Consulting services.
Mike Walsh is getting close to retirement after 28 years with the San Antonio Fire Department and is looking forward to new challenges.

Jeff Wilt and his wife, Beth (O'Leary) Wilt, '86, have seen their oldest graduate cum laude from the Honors Program in the Walton School of Business at The University of Arkansas. Their second Razorback graduates next spring. As part of the ownership of Alpha, Jeff is in charge of business development as they grow within Texas - providing engineering for the built environment. Water resource projects have continued to increase in both need and as a part of their work....“Exciting times right now!”

1984

Martha Jagucki has no new happenings to report. She is still working for the U.S. Geological Survey in Columbus, Ohio.

Helen Valkavich lives in Chicago with husband Terry Badger and daughter Natalia and son William. They love the big city but miss their friends in Texas.

Stephanie Sivalls Latimer was recently elected President of Sandstorm Aggie Moms Club in Odessa. Her daughter, Reagan, is a Junior at Texas A&M.

1985

Gene Ames started a new exploration and production company on January 1 of 2014 with Trinity grad David Clay as partner and exploration manager.

Chris Whitten’s oldest daughter, Alice, is a Senior (Class of 2015) at Trinity.

1986

Eric Radjef, with his wife Tara, are raising two young boys in old South Austin.....“We're all here because we're not all there.”

1987

Robert Young just celebrated 20 years as founder/owner of Priority Builders, Inc. in San Antonio www.prioritybuilders.com

Merrick Mainster recently joined Apache Corporation as a Petrel Support Advisor. He will be supervising the implementation of best modeling practices as well as advising and supporting general modeling workflows.

1989

Paul Hughbanks says “New Orleans is cool.”
1994

After graduating from Trinity U., Christie Cochran is still with the same employer, one of the largest whitewater rafting companies in the world. She homeschools her two children, who are avid mountain bike racers, at the ages of 5 and 7. Christie also ran her first marathon last fall and is training for her second marathon.

1996

In the past year, William (Matt) Burns moved with his wife, son, and daughter from the northern Virginia suburbs of Washington DC to a 17 acre property at the north end of the Blue Ridge and became a partner in a small CPA firm in Leesburg, Virginia, where he does tax consulting and return preparation for small businesses, their owners, and the owners’ estates and trusts. And on occasion, Matt gets to talk geology with a client or his son's Boy Scout troop.

Ana Unruh Cohen has survived one year of working in the U.S. Senate.

1997

Kevin McKenna and his family recently visited Hunter Peak Ranch on the Clarks Fork of the Yellowstone River near the northeast entrance to Yellowstone Park. This was the ranch where he and Tom Gardner stayed during Kevin’s 1996 Keck Project. It is still owned and operated by the Carey’s, and, fortunately, it hasn't changed much in the last 18 years. From Kevn: “It was good to go back and visit; that Keck Project was a springboard to launch my career in 3D geological modeling.”

1998

Jon Sanders is in his 13th year at the National Academy of Sciences and loving every moment of it!

Jennifer (Wright) Dussor took a position in the public sector after 16 years in the consulting industry. She has enjoyed all the new lessons that come with such a transition. Jennifer relocated to the Dallas area in the latter part of 2014 and is excited about being closer to family and old friends.

1999

Sarah (Newland) Pearce is in her 13th year at the San Francisco Estuary Institute, working on watershed sediment budgets, watershed contaminant loadings studies, and regional assessments of sediment deposited in flood control channels. She’s also the statewide lead trainer for the California Rapid
Assessment Method for wetlands (www.cramwetlands.org), and spends many hours assessing the health of wetlands across the state. This fall, Sarah’s time will primarily be spent assessing the health of the Merced River as it flows through Yosemite National Park! She is still playing soccer on a (highly successful) women's team, and is now coaching both her daughter Avery (8) and son Soren (6)...with no plans to stop anytime soon!

2000

Lela Prashad has been participating in conversations with the Columbia University Tow Center on the ethics and applications of sensors in journalism. She also wrote a piece for the edited volume Sensors and Journalism entitled "People Within the Pixels: http://towcenter.org/sensors-and-journalism/.

J.D. Godchaux’s firm’s newest project, The One D Scorecard (http://onedscorecard.datadrivendetroit.org/), was recently released. This project is an effort to compare 54 of the largest urban regions in the U.S. across five "priority areas" - economic prosperity, educational preparedness, quality of life, social equity, and regional transit. J.D. is keenly interested in your feedback on their work, so pass it on!

2002

Jennifer (Sjolin) Wilson leads the communication team for two water websites that help protect public health and the environment nationwide and on tribal lands. SmallWaterSupply.org serves operators of small water and wastewater utilities with user-friendly resources. PrivateWellClass.org offers a free email-based course for homeowners with water wells. Both projects are funded by the U.S. Environmental Protection Agency and are collaborative efforts between the Illinois State Water Survey and the Illinois Water Resources Center.

Kathy (Murphy) Whidden got a master's degree in 2006 from Boston University and then worked at Weston Geophysical Corp in Lexington, Massachusetts, doing nuclear test ban monitoring research. She’s been in Salt Lake City, Utah, since 2010 and is enjoying working in an academic setting. The skiing is pretty good too! Last summer, Kathy and her husband John traveled to Ireland to attend the wedding of fellow Trinity Geosciences alum Nathan Franklin.

Jeremy Brady finished his Doctor of Physical Therapy from Texas State University in 2013 and is currently working to specialize with outpatient spine and running injuries. His focus over the next years is to work on education, prevention and pre-hab of musculoskeletal issues.
2003

This fall Kyle Cavanaugh will be starting as an Assistant Professor in the Geography Department at U.C.L.A.

Celina Suarez is an assistant professor at the University of Arkansas-Fayetteville. Her most recent news is that she recently got engaged to Andy Lamb, who is currently a U.S. Geological Survey Mendenhall post-doctoral scientist. They met at Boise State University, where Celina was doing her post-doc. He has two amazing daughters, Eva and Ella.

Things are busily humming along for Marina Suarez. Marina started at the University of Texas-San Antonio in the fall of 2011. Since then, the stable isotope lab has been nearly constantly busy. Marina has had the pleasure of seeing several of her master’s students complete their theses and go on to jobs. Marina’s research into the Cretaceous climate system continues; she has made a number of trips to localities in China and Utah and hopes to expand to other continents in the future. In the meantime, her dog, Malachite, continues to tolerate her frequent travels and long hours at work. Lastly, Marina has been blessed with her first nephew (Jaxon), who was born to Marina’s younger sister in November 2013… she can’t wait to help him start his first rock collection!

2004

Annie (Covault) Treverton continues to explore Latin and South America for oil and gas for Chevron in Houston. She is in the midst of preparing a paper based on her Master’s thesis work (University of Texas at Dallas), with plans to submit it to the Geological Society of London Special Publication on Normal Faults next year (Summer 2015). She continues to participate in choirs around the city, and currently sings with the semi-professional Houston Camerata. Annie and her husband, Raoul, took to the road for five months in 2012-2013 to travel to many of their dream destinations in eastern Africa, China, southeast Asia, and South America. The best geology on their trip was in Chile and Argentina!

2007

Amanda Fremion married Dr. George Kim on October 12, 2014. She will then be moving to Chicago and continuing her work from home with Evangelism Explosion International.

Scott Rubio graduated in 2010 from the University of Houston with a M.S. in Geophysics. He worked for Coastal Energy drilling assets in Thailand and
Malaysia for 4 years. Scott just began working Middle East exploration for Hunt at the beginning of August 2014.

2008

Alexandra Wenholz Dunbar spent two years in New Jersey working as an AmeriCorps volunteer for New Jersey community Water Watch and NJPIRG Energy Service Corps for 2 years after graduating from Trinity. After her environmental work, she moved back to the great state of Texas and received her teaching certification. Alexandra will be starting her 5th year as a Dual Language Kindergarten teacher. She was also married last March to Rudy Dunbar.

2009

After completing his M.S. in Geology from New Mexico State University in 2011 and working at Chesapeake Energy Corporation for 3+ years in Oklahoma City, Evan Kochelek and his wife are relocating to Austin, Texas for a job with Parsley Energy.

2010

Allison Teletzke lives in Houston and works New Ventures at Chevron.

David Clay and Gene Ames III (TU geo-alum of 1984) have been working together for the past five years at Ames Acock Oil & Gas, which is an exploration and production company focused in the Texas Gulf Coast, East Texas and Permian Basin. David manages all prospective development and field geology. He is the current Vice President of the South Texas Geological Society. David and his wife, Erin, just celebrated their one-year anniversary. Erin is a 2nd grade teacher at Woodridge Elementary.

2011

This summer Megan D’Errico will be leading a summer field course to the Trinity ophiolite in northern California and a side field trip to Crater Lake National Park, Oregon.

2012

Zach Sickmann just finished his first year of graduate school at Stanford University. His current projects are in Patagonia and Northern California.

Brant Konetchy will soon be defending his master’s thesis for his degree in hydrogeology at the University of Kansas.
Alexa Goers is currently a master’s student at the University of Kansas working on a comparative ichnology of Pleistocene, Holocene, and modern carbonates in the southern Bahamas.

2013

Heath Hopson is currently researching Upper Cambrian microbial reef systems in Mason, Texas as a graduate student at Rice University.

James (Jake) Shultz says “Nothing new -- minus getting married to Jennifer :)

2014

Erich de Zoeten has a new internship and is Wilderness First Aid & CPR certified.

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Group photo from 2013 Majors’ Field trip to northern Minnesota and Wisconsin.
Group photo from 2014 Majors’ Field trip to New Mexico and west Texas