



# ERRATICS

The EIU Geosciences Newsletter, 2026-2027



## INSIDE THIS ISSUE

|                                             |    |
|---------------------------------------------|----|
| Chair Greeting                              | 1  |
| Spotlight On                                | 2  |
| Recent Graduates &<br>Student Awards        | 3  |
| In Memoriam                                 | 4  |
| Current Students                            | 5  |
| Student Organizations                       | 8  |
| Faculty & Staff                             | 9  |
| Social Media & Supporting<br>the Department | 16 |
| Upcoming Talks                              | 19 |
| Alumni & their Careers                      | 20 |

## HOMECOMING OPEN HOUSE



WHEN:

Saturday, October 24<sup>th</sup> | 11 AM-12 PM



WHERE:

3<sup>rd</sup> floor of the Physical Science Building



WHAT TO EXPECT:

Catch up with professors and old classmates. Meet current students. Enjoy pastries and refreshments.

We hope to see you soon! Scan the QR Code or [click here](#) to let us know if you will attend:



## Greetings from the Chair



Greetings! Students who have taken classes with me know that I frequently turn to music or film as pop-culture references to introduce topics of discussion. So here goes . . . Long before Taylor Swift's "eras," there was David Bowie. Bowie was a prominent rock musician who

was known for transforming both himself and his sound over the course of his career. He adopted many personas and alter egos that helped define his evolution – from Major Tom to Ziggy Stardust, Aladdin Sane to the Thin White Duke. The chorus of one of Bowie's early songs, *Changes*, foretells his episodic reinvention by embracing personal growth amidst the fluidity of time: "Time may change me, but I can't trace time."

Adapting to change is a fundamental aspect of science. Change is what drives the scientific method – bringing us closer to truth and at times leading to revolutions in knowledge and thought. Academic disciplines and the departments they are housed in should reflect these changes to prepare students for careers relevant to current demands. Geology and geography programs across the country are currently adapting with increased emphasis on modernized skill sets and interdisciplinary collaboration.

Changes have occurred in our department before and have again this past year. We now offer a single Bachelor of Science degree in Geosciences with three familiar options: Geology, Human Geography, and Environmental/Physical Geography. Each option has its own curriculum, with recent curricular updates modifying the geography options. We still offer small classes to cultivate faculty-student engagement, we promote

mentorship via research opportunities, and we are connecting students to internships, but now under an approach that binds our disciplines. To reflect this, we have changed the name of the department to Geosciences.

We have also decided to name our newsletter. Ironically enough, this newsletter was called Geoscience Newsletter in the 1990s and 2000s. In homage to EIU's setting and having some fun with wordplay, we settled on *Erratics*. Our alumni are scattered across different states, industries, and careers, just as glacial erratics that dot our landscape were transported far from their source.

In the Department office, Brian Crozier is our new office manager. Brian comes to us from the English Department and is an avid sports enthusiast who bleeds Cubbie blue. Our previous office manager, Kembra Melton, is now down the hall from us working with the Chemistry Department.

Dr. Jim Davis decided to return to the faculty after serving as Department Chair for the past three years. I stepped into this position over the summer and have been grateful for Jim's guidance. I am looking forward to opportunities our new degree presents to unify our approach as a department, especially in matters of recruiting new students. We already have our first declared Geosciences majors, and we are focused on bringing in more. I hope you enjoy reading updates from our faculty members and the accomplishments of students in this edition of *Erratics*.

Finally, mark your calendars! We hope to see you at Homecoming on October 24<sup>th</sup>. Please join us for a department open house on the 3<sup>rd</sup> floor of the Physical Science Building from 11 AM-12 PM following the Homecoming parade. Reconnect with old friends and classmates, visit with faculty, and enjoy some pastries before heading to Tent City for tailgate festivities.

Until the next ch-ch-changes,

Jim

## Spotlight On: Ryan S. Smith (Geography '06)

Greetings from West Des Moines, Iowa! Hard to believe it's been 20 years since graduating in 2006, but the journey since leaving Charleston has been quite the ride. Fresh out of EIU, I spent about three years out west in the Lake Tahoe/Reno area working for Michael Baker International. From there, I moved to Des Moines and spent three years in the convenience store industry with Kum & Go before making the jump into sales.

For the past 15 years, I've been with **Schneider Geospatial**, currently serving as a **Senior Account Executive**. My role takes me all over the country collaborating with county and municipal governments on everything GIS—helping local agencies modernize workflows and leverage spatial solutions. Every single day brings a fresh adventure and a new community to work with.

On the home front, life is full and fast-paced. My wife Amanda is working with the State of Iowa as an Administrative Law Judge, and between our careers and keeping up with our two kids, there is rarely a dull moment. Proud dad moment: my son just started his first high school geography class and is genuinely loving it. Whenever our schedule allows, I still do my best to follow Panther basketball and catch games in person, and we are also Drake basketball fans.

One of the highlights of my professional year is heading out to San Diego for the annual **Esri User Conference**. If any fellow EIU geography alumni or faculty attend, I'd love to connect—let's set up an alumni meetup next summer or look me up on LinkedIn.

Feel free to reconnect at  
[rsmith@schneidergis.com](mailto:rsmith@schneidergis.com)

*Bleed Blue!*



## Recent Graduates

### Fall 2025

#### *Environmental/Physical Geography*

- Gabriel Eickberg
- Nikolaus James
- Ethan Schnobernd

### Spring 2026

#### *Environmental Physical Geography*

- Aaron Garvey
- Benjamin Whitney

#### *Professional Science Masters*

- Phillip Collins

### Summer 2026

#### *Geology*

- Sean Price

- Richard Wise-Lester Stoner Undergraduate Scholarship in Geography – **Ellen Wang**
- Annie Weller Memorial Scholarship in Geography – **Wrenna Clausen**
- Troyt York Memorial Scholarship in Geography – **Grant Miner**
- Geography Alumni Award – **Joe Pointer**

## Geology Awards

- Errett & Mazie Warner Geology Presidential Award – **Sean Price, Max Bruggman, & Luke Dahl**
- Dewey H. Amos Scholarship – **Himani Patel**
- Bob & Mary Jorstad Scholarship – **Adrianna Gambill**
- Jon & Diana Giffin Geologist Scholarship – **Christina Downs & Lauren Musto**
- John Popp Field Geology Scholarship – **Adrianna Gambill**
- Geology Alumni Award – **Max Bruggman**
- Kevinetta O'Brien Field Studies Scholarship – **Adrianna Gambill**

## Student Award Winners Spring 2026

### Geography Awards

- Vincent P. & Pamela R. Gutowski Award for Excellence in Geography – **Aaron Garvey & Ben Whitney**
- Errett & Mazie Warner Geography Presidential Award – **Wrenna Clausen & Persephone Gordon**
- Grace Markwell Meier Scholarship in Geography – **Emily Davis**
- Robert Buzzard Memorial Scholarship in Geography – **Persephone Gordon**
- Ruby M. Harris Award – **Aaron Garvey**
- Belayet Khan Geography Award – **Donovyn Chambers**
- Dalias Price Award – **Ben Whitney, Al Jones, and Mackenzie Pack**
- Walter H. & Dortehea V. McDonald Scholarship – **Emily Davis**



Billy wearing Gamma Theta Upsilon (GTU) cords

## In Memoriam: Lester Stoner

**(Feb. 8, 1939 – Aug. 4, 2026)**



The Geology/Geography Department was saddened to learn of Les Stoner's passing on August 4, 2026. Les was a member of the G/G faculty for many years and taught a variety of physical and human geography courses in the department before retiring from EIU in 2008. I had the privilege of running a joint field excursion with him to Southern Illinois in 2002 and he was a wealth of knowledge about the region. I was new to the area at the time, and I learned a lot about Illinois French landscapes from him on that occasion! Les was a wonderful colleague and a lifelong geographer. Indeed, following retirement, he continued to work as a freelance cartographer. He was also an architect and carpenter who built homes and he was instrumental in the development of Stoner Estates subdivision in southeast Charleston.

Les' obituary notes that he was born in Charleston, IL, the son of Carter and Sarah (Jones) Stoner on February 8, 1939. He graduated from Charleston High School in 1957 where he was a varsity athlete in multiple sports, excelling in football. Following high school, Les enlisted in the U.S. Army National Guard. After completing his service, he pursued an associate's degree from Lakeland College and later earned a B.S. in Geography from EIU. Les was an avid gardener, painter and artist, and skilled woodworker.

He will be greatly missed.

Mike Cornebise

## In Memoriam: Beverly Foote

**(May 7, 1936 – Oct. 30, 2025)**



Beverly Foote was passionate about the natural environment, a geologist at heart, and among the

few female scientists at EIU in the 1960s-1970s. She was the first woman to earn a Ph.D. in Agronomy from the University of Illinois before teaching biology, cartography, and chemistry at EIU. Beverly sought me out many years ago on the second floor of the Physical Science Building. She had heard that I was working on the Embarras River and wanted to know more about my research and share her knowledge of local geomorphology and water management. This began a decade-long conversation about the Embarras and its floodplain, prairies, forests, and valley. Beverly was not just curious about this landscape; she was fully invested in its preservation and restoration. She and her husband, Dan, who was a chemistry professor at EIU, helped found the conservation groups Grand Prairie Friends and the Embarras Volunteer Stewards.

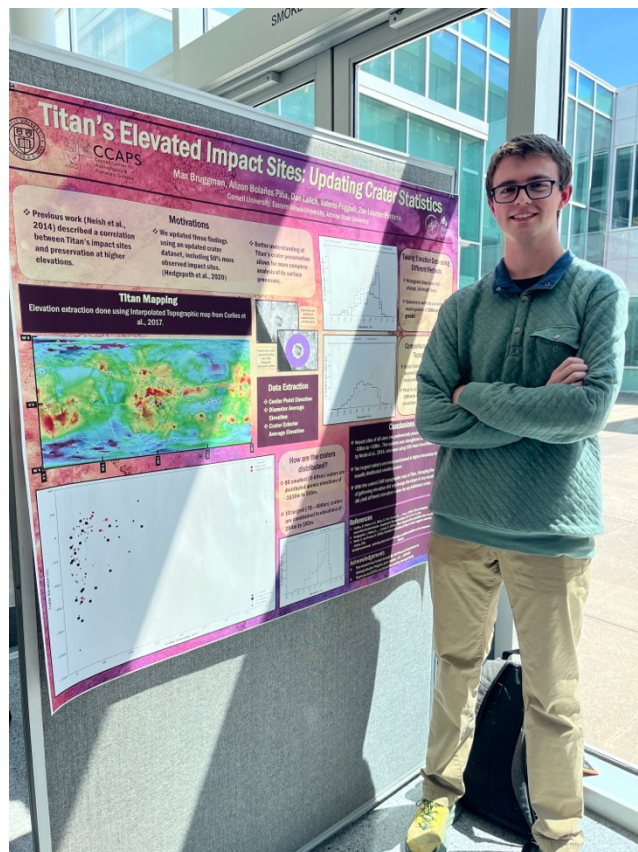
Beverly passed away on October 30, 2025. She never stopped learning and teaching, she traveled to visit natural places across the country from Alaska to Florida, she advocated for the environment and for female opportunities in science and society, and she cared deeply to actively make a difference. Condolences to her family and many friends around east-central Illinois who knew her kindness and goodness.

James Riley

## Current Students

### Max Bruggman – Geology

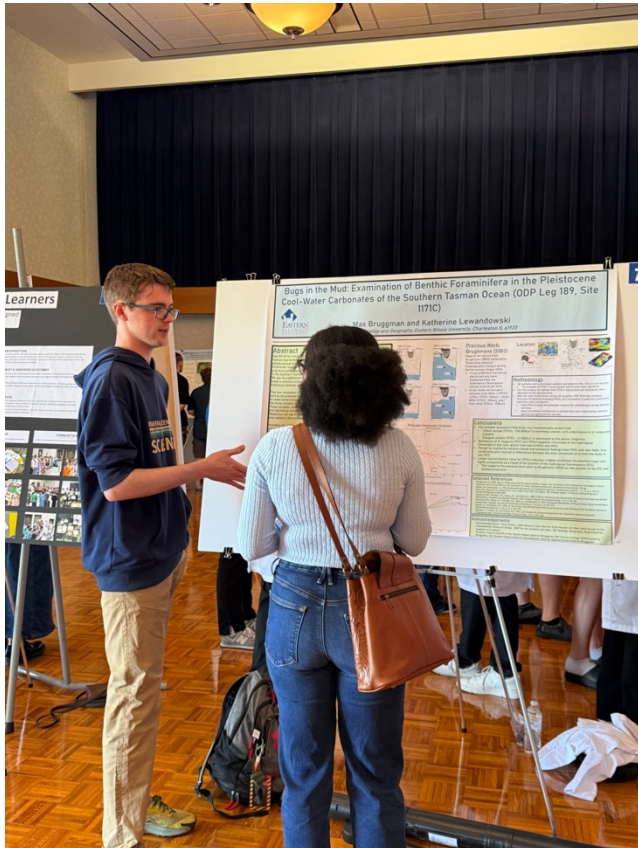
During the Summer of 2026, I had the opportunity to be a part of the Cornell Research Experience for Undergraduates in Astrophysics and Planetary Science in Ithaca, New York. For this experience, I was assigned a project as part of the COMPASSE Research Group to study Titan, one of Saturn's most geologically important moons, and the site of NASA's Dragonfly Mission, which is scheduled to launch in the Summer of 2028.



My goal was to examine preserved impact crater sites on Titan's surface and determine whether they had a geospatial correlation to a variety of variables, including latitude, surface terrain, and others. I also wanted to know how craters of differing sizes were related to one another, which could give insight into the recent surface processes of Titan. The statistical analysis we performed on these craters revealed some fascinating trends in crater preservation on Titan.



Through this project, I gained experience in ArcGIS Pro for Planetary studies, as well as continued to develop my skills in the Python and MATLAB programming languages. This semester I am working to further develop those skills by continuing my work with Dr. Lewandowski on micropaleontological data and am planning on presenting a poster of my Titan research at the American Geophysical Union's conference in December of this year!



Max Bruggman (Geology), presenting at the inaugural Student Research Day, 2026

## Wrenna Clausen – Geography

My name is Wrenna Clausen, and I am a senior Environmental/Physical Geography student at EIU! This past summer, I completed an internship with the Kendall County GIS Department in Yorkville, IL. In addition to meeting and learning from some amazing people in the realm of GIS, I was able to assist on a few projects for the county.

My first project involved digitizing historical fire insurance maps called Sanborn Maps. Through the website [oldinsurancemaps.net](http://oldinsurancemaps.net), I was able to import and georeference several time series of Sanborn Maps for Oswego, Yorkville, and Plano, IL (Figure 1).



Fig. 1: Georeferenced Sanborn Map of Yorkville, IL 1885

Once georeferenced, I was able to digitize each building shown on the maps and assign a start and end date to them through an open-source platform called [OpenHistoricalMap.org](http://OpenHistoricalMap.org). This allows anyone (it is available to the public) to use a time slider to see how Oswego, Plano, and Yorkville developed from approximately 1885 to 1912 (Figure 2). Both websites are free to use and open to contributors – feel free to check them out!



Fig. 2: Digitized Buildings in Open Historical Map in Yorkville, IL

Some other projects included using a handheld GPS unit to locate and map water main valves in Newark, IL, locating and tagging building entrances for 911 accessibility on [OpenStreetMap.org](http://OpenStreetMap.org), and searching through county property records to update current cadastral maps.

This internship really opened my eyes to the world of open-source mapping and the role it can play for county mapping needs. I will never forget my experience that I had working at Kendall County GIS!

### Emily Davis – Geography

This summer I had the opportunity to contribute to the long-standing weather observation program at EIU in cooperation with the National Weather Service (NWS). I began observing as part of a team my freshman year, but the weather station on campus has been providing information to the NWS for 18 years! I continued to observe throughout each school year, however due to my unique circumstance of growing up in Charleston, I observe during the summers as well.



Each day around 6 PM I would go to our station located near Greek Court and record the daily temperatures along with any precipitation. This daily ritual provided the NWS with information and also provided a way of testing my own forecasting skills. Observing the actual temperatures for the day allowed me to check if what I forecasted earlier that morning was accurate. I am grateful to have

had the opportunity to observe for the past 3 years, and I look forward to continuing for my final two semesters here at EIU.

### Joe Pointer – Geography

Over the summer I had the opportunity to study abroad in Europe where I spent most of my time in Florence, Italy. This 3-week excursion offered through the School of Business and Technology allowed me to experience many new things. As a Geography major, I found myself surrounded by a different culture, language, environment, and cities/regions across Italy. This was my first time abroad, so I enjoyed exploring the arts, architecture of cities, and geographic landscapes, and continue to be fascinated by all of it.



*Leaning Tower of Pisa*

This study abroad experience also gave me an opportunity to make friends on the trip. Exploring these unique places closely with both students and staff helped me develop friendships that

continue even after the end of our trip together. Some of the students were business majors, some were journalism majors, and some were geography majors – it did not matter what we studied; we were there for the same thing and that was to gain experiences and knowledge of places we had only read about before. My background as a geographer, knowledge of culture, and the time I took to learn Italian in advance helped prepare me for this excursion and made it easier to adapt. I am fortunate that I was able to attend such a special trip and gain enriching experiences in fascinating places.



*Piazza del Duomo, Florence, Italy*

## Student Organizations

### Geology Club/Gamma Chi/AIPG Chapters

The students have taken on greater leadership roles, with Sean Price and especially Addy Gambill really stepping to the mark and showing exceptional skills at making these clubs hum along smoothly. The Adopt-A-Highway program is going strong, the pumpkin-carving contest seems to have become an annual favorite and fun was had with some informal gatherings to relieve semester stresses. Last but not least, our Sigma Gamma Epsilon honor society chapter won both the Outstanding Chapter as well as Service Awards again this year – the most decorated of all the chapters nationwide. Congratulations to all of our stellar students!

### Geography Club/GTU

Gamma Theta Upsilon and Geography Club had a fantastic year. Led by our outstanding leadership, every month saw multiple activities. Bowling, game nights, movie nights, and lots of dining out were on the agenda. In April, several of our members celebrated Earth Day by painting the EIU Spirit Rock. Dr. Davis has now joined me as co-advisor and has lots of ideas. We look forward to more excitement (and possibly another trip!) in the coming year.



*GEO students on Earth Day, 2026*

## The Faculty & Staff

### **Diane Burns**

Greetings dear alumni! I hope all is well with you and your loved ones, that health and happiness are shared by everyone and best wishes for a better year to come.

### **Mike Cornebise**

Greetings from Charleston! I hope this newsletter finds you well. This marks my 27th year at EIU and I continue to work in the College of Liberal Arts and Sciences Dean's Office. Former CLAS Dean Barbara Bonneken retired from EIU in June and moved to St. Paul, Minnesota to be closer to family. By all accounts, she is doing well and enjoying retirement. As a result of her departure, I was named Interim Dean of the College. It's been an eventful start of the year, but overall, I can report that things are going well in the G/G Department and the CLAS. I hope you can all join us on October 24th for EIU Homecoming! It would be great to see you. My family is also keeping busy. Sam is planning to complete his MBA program at EIU in December, and Sofia begins her senior year (also at EIU) as a Public Relations major. Roxanne continues to serve as a substitute teacher in the Charleston and Mattoon school districts. Hope you have a wonderful year!

### **Cameron Craig**

Salutations! All is well and in great spirits for another year to serve my university, department, and students! I continue to teach Weather & Climate, Spaceship Earth, Broadcast Meteorology, Cultural Geography, and World Regional Geography." I also continue to work closely with my broadcast meteorology students at WEIU's EMMY award winning news program, "NewsWatch." We continue to have a strong team of Broadcast Meteorology students who keep viewers informed across the region. We also

continue having a fantastic relationship with National Weather Service Lincoln in providing climate data from the Dalias Price Memorial Weather Observation Station.

### **Jake Crandall**

Hello alumni and friends, it's that time of year again! Having been here now for the better part of a decade you'd think I'd be used to it by now, but each year seems to fly by a little faster than the last one. Emily and I are ecstatic about the progress our little yellow lab Molly has made. We have managed to get her to sleep in for an extra half hour, so our 5:30 am starts are now a luxurious coffee-fueled 6:00 am. While writing last year's update, I was certain she was eating the insoles of my favorite boots. This year... well ok, maybe we haven't made as much progress as I thought. Molly has developed into a fantastic companion in the field but more importantly, the highlight of our day at home. Our tortoise, Gorby, continues to be our grumpy accomplice in mirth.

Professionally I have had the opportunity to review several papers for high-impact journals, including a publication submitted to Nature, a pre-eminent research journal. The experiences have been challenging, edifying, and rewarding. I look forward to continued participation in the peer review process and thoroughly enjoy the first looks into cutting edge research projects that the privilege provides.

Emily, Molly, Gorby and I hope you've had an enjoyable past year and wish you all the best in the year to come.

Be well.

### **Brian Crozier**

Greetings! My name is Brian Crozier, and I am the new Office Manager for the EIU Geology and Geography Department. I am 42 years old and currently live in Champaign, but am originally from Casey, just 20 miles southeast of the EIU campus.

While I graduated from the University of Illinois, I came to many events on the EIU campus as a child, and several family members graduated from this University, so I feel as if it has always been a part of my life. Before joining EIU as an office staff employee, I worked in radio broadcasting for almost 20 years all across the Midwest, with most of my broadcasting focused on sports. My teams are the Cubs, Bears, Illini and the EIU Panthers. Anyway, I was hired by EIU in August 2024 and worked as Office Manager for the English Department until I was named as the Office Manager for this department on July 1<sup>st</sup> this year. Thank you to everyone that has made my start with the department so pleasant - I am excited to be the office manager for Geology and Geography, and I hope that everyone has a great school year!

### **Jim Davis**

This fall I enter my 24th year at Eastern Illinois. This year has brought some changes as after three years as department chair, I returned to faculty this year. I continue to teach my familiar lineup of courses including Cultural Geography, Sports Geography, and Weather and Climate. It has been great to be back in the classroom full time. I also continue to serve as the Faculty Athletics Representative for EIU. This is my 16th year in that role.

This past summer our travels took us into the deep south as we travelled through Alabama and Mississippi along the Old Natchez Trace Parkway. Along the way we were able to see the history and culture of the region and paid a visit to the birthplace of Elvis in Tupelo. The road home led us up the Blues Highway along the Mississippi River where I was able to get some great pictures for my music geography lecture in Cultural Geography.

The family also continues to do well. My oldest daughter Amanda returned home to start her graduate program in Nutrition at EIU. She is also serving as the Sports Nutrition GA for the athletics department. Emily is now a senior in the geography program and continues to work with Cameron Craig and the Broadcast Meteorology program. I

hope you all are doing well and will visit when you find your way back to Charleston.

### **Bob Jorstad (Emeritus)**

This past year getting together with family has been a major part of my life. My wife and I have traveled to Minnesota to visit family in addition to frequent get togethers here on the central coast of California.

We are continuing to be active with adult fitness classes at our local gym and taking walks. I especially walking on the beach. We are beginning to resume our ballroom dancing. I still play electric bass in our church praise band. With all the practice i am getting better.

Other travels this past year include our annual visit to Hawaii. Obviously, I can recommend traveling to the 50th state; each island really is a different experience. From our local airport we can fly to Las Vegas for less than it costs to drive. Always nice to see a show or two and have some really great meals.

The bucket list trip this year was an Alaska cruise tour. We started in Fairbanks where we met up with friends and our daughter to do some sightseeing. Leaving on the train we went to Denali National Park. The park is truly spectacular. We didn't see the peak due to clouds; it is covered about a third of the time in summer. Leaving the park we sailed back to Vancouver via the Inside Passage; always a great experience.

### **Belayet Khan (Emeritus)**

More than ten years into retirement, I find myself looking back on a 40-year journey at Eastern Illinois University with profound gratitude and a deep sense of fulfillment. Retirement has provided me with the opportunity to pause and appreciate what those four decades truly meant—not simply as years of employment, but as a remarkable chapter of my life shaped by students, colleagues, friendships, service, and a shared commitment to

education. My years in the Department of Geology and Geography gave me the extraordinary privilege of teaching, learning, contributing, and growing within a university community that ultimately became my academic home. Eastern was far more than a place where I worked; it became a place where I belonged.

Over nearly four decades, I had the privilege of working with wonderful colleagues and students who made my years at EIU truly special. Through teaching, committee service, and other campus activities, I was fortunate to contribute to a university community in which I felt a deep sense of belonging. Collaboration, collegiality, and a shared commitment to students were central to my experience at EIU.

The greatest highlight of my career was, without question, teaching undergraduate students. I looked forward to every class and was continually inspired by students' curiosity, enthusiasm, and engagement. Their questions and willingness to learn gave me a strong sense of purpose. Teaching was not simply a profession for me; over the years, it became my passion and my calling. I am deeply honored to consider teaching my life's work.

I am also profoundly grateful to God for the blessed life my wife and I have enjoyed in Charleston, which has been our beloved home for many years. We are especially thankful for our three children and their academic and professional accomplishments. Our older daughter is a Financial Advisor with an investment company in Indiana. Our younger daughter is an Emergency Medicine physician and Assistant Professor of Medicine at Emory University Hospital in Atlanta. Our son, following his education at Northwestern University, Rush Medical College, and the University of Illinois, completed a fellowship in oncology and hematology at Cleveland Clinic and has joined a hospital in Chicago. We are particularly grateful for the excellent education and supportive community that Charleston provided for our children. My wife's dedication to our family has been an essential part of all that we have accomplished.

My wife and I have also enjoyed a lifelong love of travel. We have had the opportunity to visit many countries, including Thailand, Singapore, Malaysia, Brunei, Australia, India, Bangladesh, Sweden, Finland, Spain, Poland, Netherlands, the Czech Republic, Saudi Arabia, Jordan, United Arab Emirates, Egypt, Morocco, and Tunisia. These journeys have broadened our understanding of the world and enriched our lives. Yet, despite our love of travel and new adventures, we always cherish returning home to Charleston, where our family comes together whenever possible.

Looking back, I feel an overwhelming sense of gratitude for my years at Eastern Illinois University. Early in my career, I hoped to find an academic home where I could contribute, belong, and find fulfillment. Eastern became that home. By the grace of God, my vision became a reality in ways far beyond what I could have imagined. The friendships, students, experiences, and memories of my EIU years will remain among the greatest treasures of my life. I look forward with gratitude and optimism to whatever new adventures the future may bring.

## **Barry Kronenfeld**

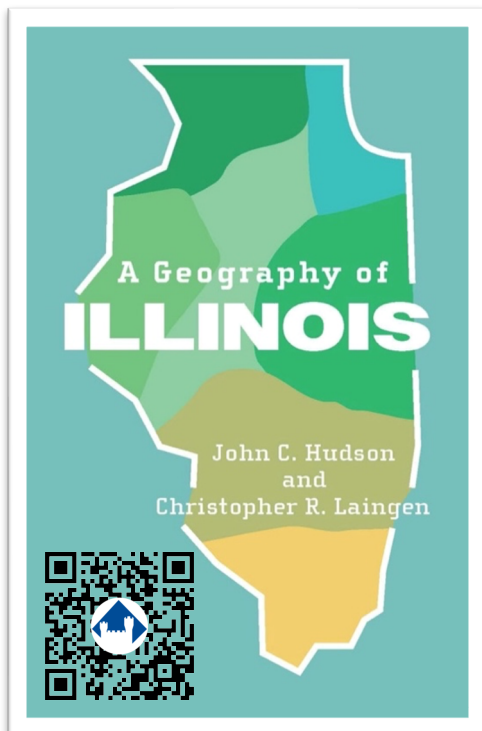
Hello Geography, Geology & GIS alumni. This has been a busy year! Last fall PSM/GIS grad Cameron Clark presented a poster at the Illinois GIS Association Annual Meeting in Naperville. His poster detailed a workflow for constructing generalized hydrography data for the state of Illinois. Great job Cameron! The work is being continued by current student Ashton Pietzman, and I am seeking support from the USGS. I was also busy as a member of the organizing committee for CaGIS 2026 which finished up a couple of weeks ago. Held this year in St. Louis, the conference brought together academic researchers and government and industry specialists in cartography and GIS. It went really well and the energy in the air in the St. Louis geospatial industry is palpable. Outside of academics, my wife and I spent a lovely two weeks in eastern Germany and Czechia, learning the history and visiting the sites

in Berlin Dresden and Prague. It really is a fascinating region. Sometimes it feels the world is going a bit crazy these days, but travel helps remind us that people everywhere are still warm, friendly, and diverse.

## Christopher Laingen

August 2026 marked the start of my eighteenth academic year at EIU. The previous year was enjoyable, both professionally and personally. Professionally, I continue to enjoy the courses I teach, and I remain active in research and publishing—most notably with a group of historians who are reviving interest in studies related to the Midwest, the Midwestern History Association and its journal, *Middle West Review*.

I also have a co-authored book coming out next spring—which might be of interest to all of you *ILLINOIS GEGRAPHERS!* called “A Geography of Illinois,” co-authored with Northwestern University geography professor John C. Hudson (and published by the University of Wisconsin Press).



<https://uwpress.wisc.edu/Books/A/A-Geography-of-Illinois>

Personally, things could not be better, either. My wife (Mary) continues her work on campus as the EIU Pre-Health academic advisor; and our two kids—Kenny a 9<sup>th</sup> grader and Edy a 7<sup>th</sup> grader—keep us busy with sports and other extracurricular activities.

This past year we were very fortunate to be able to go on a few memorable hiking adventures. In June, my son and I—along with an EIU alum and former swimmer and swim coach, Matt Bos and his daughter—hiked the 70-mile Solitude Loop Trail in Wyoming’s Cloud Peak Wilderness. In July, my wife and I—again with Matt and his wife, Amanda (an EIU Athletics “hall-of-famer”)—flew out to Utah and hiked the ~80-mile Uinta Highline Trail. And to round-out the summer, in late July a grad-school buddy of mine and I spent a week hiking and fishing in Montana’s Beartooth Mountains.

Next summer’s adventure: New Zealand.



Near Tungsten Pass, High Uinta Wilderness



Fulcrum Lake, Beartooth Mountains

## Katie Lewandowski

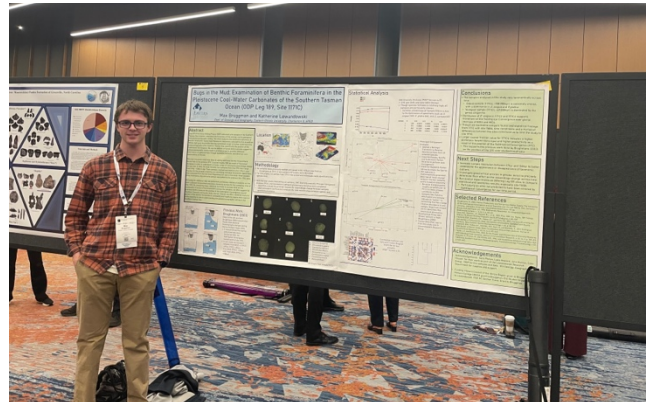
Greetings! The big change this year for me is teaching an online science methods course for science students in the MAT program. There are six science students this year representing physics, earth science, and life science. They all have placements in schools around the state, some in high school, some in middle school. After a year in the program, the students graduate with a masters. They have undergraduate degrees in science, but don't have the pedagogical background. They take online courses in the summer and then start their placements in the fall semester teaching all week long while also taking my science methods class. The continue taking classes the next semester, but not with me.

Other than that new online methods class, I've been teaching my usual: GEO 2450G, GEO 2200, BIO/PHS 3400, GEO 4850. This fall, I am teaching GEO 4850 Environmental Geology and GEO 2450G Oceanography, along with the online methods course. Last fall, I taught a seminar in Paleoclimatology, an upper-level elective, which was a blast. I also took Geoscience Club students on a trip to the Cincinnati area in November of last year. They collected Ordovician fossils in Maysville and we got a "behind-the-scenes" tour of the collections at the Cincinnati Natural History Museum.



*Geology students at the Cincinnati Natural History Museum*

Last year, Max Bruggman continued working as a research student with me on my benthic foraminifera from Ocean Drilling Program core samples from Leg 189. These sample were drilled south of Australia, near Tasmania. He presented at both an Illinois Honors College Conference up in Chicago and at the North-Central Geological Society of America meeting in Memphis, TN last March doing a fantastic job.



*Max Bruggman*

For our big trip this year, my husband and I visited Alaska. We had tried 2 times previously to make it there, but the pandemic and then a flight cancellation meant that we didn't make it there. It was worth the wait! We visited four National Parks: Denali, Wrangell-St. Elias, Kenai Fjords, and Lake Clark. The Alaska Range is so beautiful. We visited Lake Clark to see the coastal brown bears clamming. We were not disappointed. As part of a small group (~12), we saw more than 30 bears, many of them mother bears with 2-3 cubs. Wrangell-St. Elias is really interesting for a geologist, both because of the abandoned copper mill that is accessible there and because of the ever-present moraines. The copper mine was abandoned in the late 1930s and just left as it was. We were going to hike on the Root Glacier, but there was a jökulhlaup, or glacial outburst flood, that happened the day before we got there, so the glacier was too unstable for us to hike on. Don't worry, we had a lovely hike up to the glacier.

Cheers!

Katie



*Bears at Lake Clark National Park, Alaska*



*Copper Mill, Wrangell-St. Elias National Park, Alaska*

## **James Riley**

*I watch the ripples change their size  
But never leave the stream  
Of warm impermanence*



*Medano Creek is an intermittent stream that drains snowmelt from a pocket along the western flank of the Sangre de Cristo Mountains at Great Sand Dunes National Park in Colorado. It usually flows April-June and is notable for surge flow, small rhythmic waves released every 20-30 seconds by antidunes that temporarily build and break on its bed before the flow disappears into the porous sand downstream.*

## **Betty Smith, Emerita**

Greetings to colleagues, friends, and students! Hope this finds you well. Since retiring in July 2019, I continue to live on my 25-acre registered Jacob sheep ranch in Cottonwood, California, about 2 hours north of Sacramento. I raise sheep for meat and breeding. Currently there are 11 ewes, 10 lambs and 2 rams, Dynamo and Orion. I will put the rams in with the ewes the end of November and

leave them for 3 months. When weather is chilly, the rams get frisky! The females cycle every 3 weeks. Lambing begins 5 months later. April and May the lambs will be born.



*Registered Jacob ewes and lambs*

200 grape vines and a small home winery keep me busy. I am working on wine from my first grapes. The white is made from mostly Orange Muscat and the red is Tempranillo. It takes about 5 years from planting until you have enough grapes to make wine.

The San Francisco AAG last March (only 4 hours away) offered two all day field trips in which I was very interested: (1) “From Fire Recovery in the Santa Cruz Mountains Redwoods to Coastal Processes along the Pacific Coast Highway” led by Geographer William Selby, Santa Monica College (he has published several geography textbooks), and; (2) “Exploring Regenerative Viticulture in Napa and Sonoma” led by Colleen Myles from Texas State University. Both were fun and informative, well worth the time.



*Aging white wine (Orange Muscat) and red wine (Tempranillo) in home winery*

In March I completed the Winemaking Certificate from University of California, Davis, an online program that draws professional winemakers as well as students from around the world. It was challenging and took me 5 years; I am slow but steady like a tortoise! Had to take a remedial chemistry class before I could even start.

Highlights of my travel adventures began with a Thanksgiving week road-trip with my sister to the coastal redwoods. In June there was a wine tour in Vienna, Austria (think Grüner Veltliner white wine) followed by another wine tour on the slopes of Mount Etna, Sicily, visiting organic wineries and learning how their techniques differ from ours here in the US. In February I am planning an adventure in the Adelaide Hills of Australia with side visits to Melbourne and Sydney. What fun!

I remain quite active in the Midwest Association for Latin American Studies. Last year I was president and busy with the Board organizing the fall 2025 conference in Chicago. We ended up putting it all online because of the dreadful chaos in the streets. We were afraid members and participants might be targeted. I am looking forward to our fall 2026 conference at Colorado Mesa University in Grand Junction, Colorado. I will present a paper entitled, “Field Survey Report from the Galapagos Islands of Ecuador regarding Perceptions of Environmental Problems and Solutions.” Have a great year everyone!



## Dave Viertel

2025-26 was a great year. I've been teaching my mix of gen eds plus land use planning, urban and remote sensing. I will get a chance to teach lidar again this coming Spring. I've continued my work on the International Education Committee, alternating between Vice-Chair and Chair for the coming year. While the GISci Masters has wound down this past year, I'm excited to be advising undergraduate students again and work on upcoming recruiting efforts.

Things are going great for my family as well. My daughter Ella is looking at colleges. Varsity tennis and band at the high school keep us very busy. My wife continues to advise several hundred students over in the Education department—nice to be able to work close to one another. I am looking forward to seeing students, parents, and former students at homecoming, parents weekend, and beyond!

## Feeling Social? Come see what's happening on social media!

We are in the process of updating and consolidating our social media accounts and recommitting to our presence on them. There have been two Facebook accounts affiliated with the department. We are shutting down this account:

<https://www.facebook.com/share/18iTGmnDoF/?mibextid=wwXlfr>

and we encourage you to migrate to this account:

<https://www.facebook.com/groups/46025220618/?hpir=1#>

Jim Davis (jadavis2@eiu.edu) is our point of contact for Facebook matters.

We also have an Instagram account:

[https://www.instagram.com/eiu\\_geo?stkn=MTkzd2Zsamo5ZXFtcw==](https://www.instagram.com/eiu_geo?stkn=MTkzd2Zsamo5ZXFtcw==)

Jake Crandall (jrcrandall@eiu.edu) maintains our Instagram, but look out a student takeover coming soon.

## Your Support Makes a Difference

Students in the Department of Geosciences benefit from gifts and donations from generous alumni and friends of the department. These funds offer enriching experiences and scholarships that many of you can attest to firsthand. Your gift ensures that these same opportunities will be offered to the next generation of students. Gifts to the department help support:

- Merit and need based scholarships
- Educational and professional development opportunities
- Efforts to recruit prospective students

You can make a gift by scanning the QR code below or by visiting: <https://www.eiu.edu/giving.php>.



EIU "Giving" QR Code

If you want to support student opportunities such as field trips and fieldwork, mentored research, and travel to present projects at conferences, as

well as department recruiting activities, please select *Geosciences* from the drop-down list. If you want to donate to a specific scholarship or fund, please select *Other Gifts* from the drop-down list and type the name of the scholarship under *Special instructions*. Our scholarships and funds follow:

- Geography Alumni Award: sophomore or junior in Geography
- Geology Alumni Award: sophomore or junior in Geology
- Dewey H. Amos Scholarship: outstanding junior in Geology or Earth Science
- Robert G. Buzzard Scholarship in Geography: junior or senior in Geography
- Jon and Diana Giffin Geologist Scholarship: at least sophomore in Geology with plans to continue
- Vincent P. and Pamela R. Gutowski Scholarship: any major in Geography
- Ruby M. Harris Award: senior in Geology, Geography, or Earth Science
- Robert and Mary Jorstad Scholarship: junior or senior in Geology or Physics
- Belayet Khan Geography Scholarship: junior or senior in Geography
- Walter H. and Dorothea V. McDonald Scholarship: junior in Geography or Earth Science
- Grace Markwell Meier Award: outstanding member of Gamma Theta Upsilon (GTU)
- John Popp Field Geology Scholarship: seniors in Geology attending field camp
- Dalias and Lillian Price Memorial Endowment: supports student observers obtaining daily climate data for the National Weather Service

- Errett and Mazie Warner Presidential Award: juniors or seniors in Geology, Geography, or Earth Science
- Annie L. Weller Scholarship: junior or senior in Geography
- John George Wozencraft, Jr. Memorial Award: either Mathematics (even years) or Geography (odd years)
- Troyt York Memorial Scholarship: junior or senior in Geography
- Wise and Stoner Undergraduate Scholarship in Geography: junior or senior in Geography
- Other: establish your own scholarship or memorial fund

Please contact Dr. James Riley ([jdriley@eiu.edu](mailto:jdriley@eiu.edu) | (217) 581-2142) if you have questions, would like to discuss giving to the department, returning to campus and visiting the department, or giving a colloquium.

**(On page 19):** Two alumni – David Frye and Shane Shumaker – will be returning to campus in early October to talk with students about their work and career opportunities.

**(On page 20):** We also updated a display in the department that features some of our alumni to make prospective majors aware of the wide range of career opportunities in geosciences.

More information on the department, faculty, and student opportunities can be found on our website:

[eiu.edu/geoscience](http://eiu.edu/geoscience)



AY26-27 GEO Department, Left to Right: Diane Burns, Dave Viertel, Jake Crandall, Chris Laingen, Katie Lewandowski, James Riley, Barry Kronenfeld, Jim Davis, Jay Gatrell. Not pictured: Mike Cornebise, Cameron Craig, Brian Crozier.



*Geosciences Webpage QR Code*

**Department of Geosciences | 600 Lincoln Avenue | Charleston, Illinois | 61920**

# DAVID FRYE

THE TALK THEY SAID WAS TOO **HOT** TO GIVE!



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Physical Science 3040

1 week only!



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# SHANE SHUMAYER

THE FIRST RULE OF NGA IS YOU DO NOT TALK ABOUT NGA.



Friday, October 9  
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## UNTIL NOW:

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# What can I do with a major in GEOSCIENCES?

## Ask the people who were once in your shoes.

## We prepare students for a range of diverse careers.

## This is what our graduates do . . .



### Lauren: **BROADCAST METEOROLOGIST**

I analyze weather data and forecast atmospheric conditions to deliver accurate, timely weather information to the public across television, digital, and social media platforms. I also communicate complex weather events in a clear, engaging way, helping viewers understand potential impacts and stay safe during changing weather conditions.



### Doug: **PROJECT GEOLOGIST**

I work as a Licensed Professional Geologist (P.G.) for an environmental consulting firm where I help clients understand and manage environmental conditions at commercial/industrial properties. Every week is different, ranging from overseeing field investigations and analyzing environmental data to managing projects and working with clients to solve complex problems.



### Shane: **GEODETIC SURVEYOR**

A geodetic surveyor is not a standard land surveyor. Instead of marking property boundaries, I map the physics of the Earth (gravity, elevation, and precise coordinate reference systems) to ensure that military aircraft fly safely, missiles strike their targets accurately, and space operations function seamlessly.



### Abbey: **EXPLORATION GEOLOGIST**

I integrate many types of data to evaluate regions in new basins that may be of interest for energy development. I use temperature and lithology logs, surface geology maps, and structure data in the public domain, along with geophysical data (such as gravity, seismic, and magnetotelluric) to build 3D geomodels to allow for deeper, more unconventional approaches of geothermal energy exploration and development.



### Josh: **GEOCHEMISTRY LAB COORDINATOR**

I oversee the use, training, and maintenance of quadrupole ICP-MS, multicollector ICP-MS, and IR-MS instruments at a university. Instrumentation is used to measure trace element concentrations, radiogenic isotopes, light stable isotopes, and metal stable isotopes. My role also allows me to teach courses in Economic Geology and supervise student researchers.



### Noah: **GIS & IT MANAGER**

I direct comprehensive geographic information systems across a several county region, overseeing projects involving grants, utility networks, and critical infrastructure. This role manages and assists with the maintenance of county parcel records and ensures the continuous accuracy of NG911 spatial databases to support regional emergency response and strategic planning.



### Jacob: **GRADUATE STUDENT / RESEARCH ASSISTANT**

I study the distributions of two crayfish species, one invasive and one native, to inform conservation decision-making for state wildlife agencies in the western U.S. My position entails field sampling for crayfish and physical stream habitat, lab work developing an eDNA assay for my native species, collaborating with biologists from state agencies, and analyzing data to understand patterns in species distribution and habitat use.



### Saegan: **ENVIRONMENTAL PROTECTION ENGINEER**

I work to identify and address sources of water pollution while protecting aquatic life, drinking water, recreation, and other beneficial uses. My work includes inspections, permitting, complaint investigations, enforcement, and technical assistance involving municipal, industrial, stormwater, wastewater, and mining operations. I also evaluate environmental conditions, review regulatory documents, and coordinate the resolution of compliance issues.



### Eric: **PHOTOGRAMMETRIST**

I am responsible for producing planimetric and terrain data maps from aerial imagery and mobile-collected LiDAR for road-related projects. I also review mapped planimetric features and terrain data to ensure accuracy, assemble data composites and produce image mosaics for final product delivery to surveyors and engineers.



### Michael: **COMMUNITY TREE STEWARD**

I support the development of a strong urban forestry program for a municipality in New England as both a custodian of saplings in our tree nursery and as a surveyor of street, forest, and park trees. I engage and communicate with residents and city staff to organize trainings, volunteer events, and educational programming for the long-term care and overall comprehension of the ecosystem services offered to us by our urban forest.



### Amanda: **ENVIRONMENTAL GEOLOGIST**

I investigate environmental conditions below the ground, solve real-world challenges related to soil and groundwater contamination, and help guide projects from fieldwork through regulatory approval. It is a career that blends geology, environmental science, and hands-on problem-solving to make a meaningful impact on communities and the environment.

### Abby: **STAFF SCIENTIST**

I work with a team of scientists and software developers to design and maintain the long-term digital archives of planetary geoscience data from past, present, and future NASA missions, such as the Mars Exploration Rovers, Mars 2020, and the Apollo and Artemis programs. I help ensure the usability and accessibility of geochemical and geophysical planetary mission data for current and future generations of the planetary science community.



### Trisha: **SENIOR PRODUCT MANAGER**

I guide the development of software that helps agricultural businesses safely and efficiently manage the movement of fertilizer, grain, and other bulk materials. My background in geography and GIS, from developing LiDAR-based technology for autonomous farm equipment to advancing agricultural standards, helps me understand how metadata, location information, and digital boundaries integrate to connect technology with farming operations.



### John: **UNIVERSITY HISTORY INSTRUCTOR**

I teach survey courses in U.S. and World History. My research interests center on 19<sup>th</sup> Century German immigration and the experiences of German-American soldiers in the Civil War. Although I am a historian, I continue to focus on geographic trends while teaching and especially in my research.



### Neil: **ENVIRONMENTAL ASSESSMENTS RESEARCHER**

I investigate properties to identify and evaluate potential environmental and geological hazards. My work involves researching historical records, geological maps, regulatory files, and site-specific environmental information; conducting on-site field investigations and interviews with property owners, industry representatives and government agencies; and analyzing that information to determine potential risks.



### Joe: **LAND SURVEYOR CREW CHIEF**

I conduct house-line surveys in the Chicago suburbs where I lay out new houses to be built using GPS to mark building corners and foundation lines, utility lines, and elevations across parcels of land. I also perform ALTA and topographic surveys to determine precise boundary lines on properties being considered for development into new subdivisions.



### David: **WILDLAND FIREFIGHTER**

I patrol my duty location in the intermountain west looking for wildfires. When there are no fires, I lead crews in prescribed fire preparation and thinning. I also assist suppression efforts at larger fires across the country with hand crews, engines, or helicopters. I use maps to find best approaches to access fires and to ensure firefighter safety with escape route planning.



### Harvey: **HIGH SCHOOL TEACHER**

I teach an Earth science course for high school freshmen focusing on topics such as chemical reactions, half-lives, speciation across regions, and fossil records to investigate aspects of geology, climatology, mineralogy, and astronomy. I also lead an elective environmental science course which is a student-driven research and discussion class about modern implications for our changing planet.



### Phillip: **GIS SPECIALIST**

I oversee and perform field data collection using Trimble GPS units, while maintaining all geodatabases and maps for the Public Works Department. I also help with prescribed burns, asset management implementation, CAD-to-GIS migration, and collaborating with the City engineers and technicians.



### Shirley: **PHD STUDENT**

I am pursuing a PhD in Computational Geophysics where I combine my geology background with seismic interpretation, computational methods, and machine learning to better understand the subsurface for energy exploration and carbon storage. Using my work experience in industry, I now conduct geophysical research to help solve energy and subsurface challenges in the U.S. and globally.



### Geno: **HYDROGEOLOGIST**

I lead the on-site execution of test plot programs by organizing field crews, coordinating with clients and contractors, and managing the installation of instrumented monitoring nests across tailings and waste rock facilities to evaluate long-term cover performance for mine closures. I also lead groundwater monitoring and sampling events at mine sites, handle field logistics and oversight, and help drive technical work that supports closure strategies.



### Melissa: **METEOROLOGIST**

I collect weather, water, and climate data using radar, satellites, weather balloons, and the Automated Surface Observing System. I use this information, along with model data, to issue forecasts—including the 7-day, fire weather, aviation, and marine forecasts—and weather watches and warnings to provide decision support services to federal, state and local government agencies for the protection of life and property.



## Looking for direction? **GEOSCIENCES** give you the opportunity to make a difference in the world.

