

Spring 2024

Newsletter of the Geography Alumni Chapter
University of New Mexico Geography
& Environmental Studies





Our Alumni Chapter: One of Geography's Many Projections

By Jake Wolff (MS '17)

What is the vision for our Alumni Chapter? My friend, Robert Mallory, asked me to share a few short thoughts on the topic. It's a tough prompt.

This alumni chapter is yours as much as it is mine. Any organizational vision must be flexible enough to serve the perspectives of every alumni. We all have a stake in the success of our alma mater. Sharing this forum - the newsletters, chapter and departmental events, and even occasional email exchanges - is what we should do in the UNM Alumni Chapter of the Geography and Environmental Studies Department.

Together, our Chapter can maintain a space for alumni, students, faculty, and employers to convene as it is personally, as well as professionally useful.



Tour of Valle de Oro National Wildlife Refuge at October GES Alumni event photograph by Laurel Ladwig

I'm far off in Philadelphia, yet I was delighted to hear from old classmates who enjoyed visiting <u>Valle de Oro National</u> <u>Wildlife Refuge</u> during an alumni event last autumn. Of course, news travels quickly among friends, but this GES Chapter is crucial for organizing opportunities that keep us together, no matter the geographic distance. The newsletter is a testament to these successes.

Still, there's always room to welcome more into this vision. My perspective is but one of many.

Contents

Spring Manager's Report	pages 2-3
Around the Loop and Back	<u>pages 4-5</u>
Alumni Profile: Well Prepared	page 6
Alumni Profile: Tyler Roller	page 7
Looking back on it	pages 8-9
Happy New Year!	page 9
Sustainability Studies Vision Roundtable	page 10
2023 Faculty-Mentored Research Award	page 10
What are the department's most enduring elemen	nts?page 1

SAGES Update	<u>page 12</u>
Join Team GES for City Nature Challenge ABG)!page 12
Center for Community Geography Update	pages 13-14
Dear fellow Geographers and Happy New Year	! <u>pages 15 - 17</u>
2023 Publications by GES Alumni,	
Current Students, and Faculty	<u>pages 18-19</u>
Alumni Communications	page 20
Chapter Business	page 20
Support our Department & Thank you!	page 20

Spring 2024 Manager's Report

Spring 2024 Manager's Report

Jake Wolff, our Chapter Clerk, and I went to lunch on December 28, 2023 and we talked. We talked about a range of things, but we always circled back to our Alumni Chapter. One of the things we decided was that we should have a spring networking event. We also agreed that the chapter was both of our favorite project and that what we are building matters. We are building a professional network/community of Geographers in all stages of their careers, because geography matters. As a civilization, we need as many geographers as possible.

Spring Event - March 7th

GATHER AROUND 5:30 P.M., START AROUND 6:00 P.M.

We will be hosting a networking event at the Bosque Brewing Public House at 106 Girard, SE. This is a networking and chapter growth event. The Alumni Association will be providing appetizers but alcoholic beverages are at your expense. Our hope is that this event helps foster great connections. Our Chapter Clerk, Jake Wolff (MS'18) will be our Emcee.

Here's what we have been up to:

FALL EVENT

We had a successful Fall Event on October 28, 2023 hosted at the beautiful <u>Valle de Oro National Wildlife Refuge</u>. We ordered up absolutely perfect weather from the weather gods, as well as peak fall colors, and boy, did "they" deliver, spectacularly. 20 Alumni Family members, three Masters degree holders from the 1970's, five Advisory Board members, the department chair, two faculty members, and a host of younger Alumni attended and it was a great mix.



Valle de Oro's <u>ABQ Backyard Refuge Program</u> Director Laurel Ladwig MS '20, gave us a wonderful program about the refuge, with lots a bird pictures and it was masterful. It was a Geographer speaking to a room of Geographers and we now have a very good "Geography" of the refuge. The Valle de Oro National Wildlife Refuge is a wonderful place. As geographers, we know what the word "place" means. The facilities are perfect for the site, and the LEED Silver architecture is just icing on the cake.

Laurel is our chapter member who puts the newsletter together and we are extremely thankful for that. What a gift to have someone on our team who has these skills among many others.

GEOGRAPHY AWARENESS WEEK

Our Alumni Chapter had a table at the Geography Awareness Week GIS Day event. We had good conversations with students and got to discuss the meaning of the word "Alumni" with a lot of the Rio Grande High School students who did not know what the word "Alumni" meant. The Chapter also was able to secure one-day Parking Passes from The UNM Foundation for exhibitors and V.I.P.s who needed one.

LINKED-IN GROUP

Our Linked-In Group is up to 43 members, and we are always looking for postings, so if you have any geography news, a job posting, or anything of interest, please post it. Not being a Social Media person, if you have ideas, please bring them forward. It would be a huge help.



photograph by Robert Mallory

ALUMNI PROFILES

One of the features of our newsletters is our Alumni Profiles section. We strive to have one or two for each issue. One of this issue's Alumni Profile is from a Master's Degree holder from 1973, the other two are from the 20teens. We are always looking for Alumni Profiles, so please write us and tell us how your degree has served you with your career. One thing to note in all four alumni submissions in this issue, is that they (we) all mention that we were accidental geographers. We all stumbled onto geography be accident or coincidence at UNM. As Alumni, we need to fix this. Geography is too important to just stumble onto at college. How do we get the world to realize how important this course of study is?

Social Media

Samantha Salazar '20 is working with us to establish a Facebook Group. I really do not know much about Facebook, thankfully, but know we are in good hands. If you would like to help with this initiative, please let us know.

CHAPTER STRUCTURE

Our GES Alumni Chapter is a formal chapter of the UNM Alumni Association. We started 4 years ago and requested that we take a minimalist approach to governance, by working with a Manager/Clerk model instead of a cumbersome board

of directors model. This structure makes us very efficient. The Manager and Clerk are the two elected officers and answer to the Alumni Association as well as the Chapter. Our volunteer team, so far is:

Robert H. Mallory, BA '90, Chapter Manager (elected officer) Jake Wolff, MS '17, Chapter Clerk (elected officer) Laurel Ladwig MS '20, Newsletter Editor Samantha Salazar BA '20, Social Media Coordinator Your Name Here..., Your Interest Here...

Britney Choy, is our Alumni Relations Officer from the UNM Alumni Association. She has been a wonderful help this year, and has great ideas. We are thankful that she is on-board and helping us thrive.



Bushtit Psaltriparus minimus in a backyard refuge photograph by Laurel Ladwig

Positive Feedback Loop of Goodwill

So, just what is "The GES Alumni Chapter of the Future!"? It Is a Positive Feedback Loop of goodwill. The goodwill generated, in-turn, can provide our department with a bounty of rich connections and positive support that are otherwise very difficult to achieve without the help of Alumni. I used the word "Our" very purposefully because, if you are an alum, the GES Department is partly yours as it certainly helped craft the professional you have become.

Together, we are working to create: "The GES Alumni Chapter of the Future!" which is a Family. A Family of GES Alumni who care about Geography and this department. This is the beginning of our fourth year as a chapter. In those four years we have built the beginnings of a successful chapter. Good things keep happening. There is momentum and growth. If you have any ideas about what would make this chapter important to you or what would like to see as far as events, please contact us.

${f A}$ N EASY WAY TO HELP US GROW:

The most important way to help us grow is by helping distribute our newsletter. Please forward it to as many friends, Geography friends, family, co-workers and anyone you think would be interested in it.

Thank you,

Robert Mallory BA '90 Volunteer GES Alumni Chapter Manager

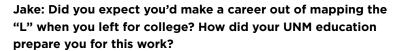
Around the Loop and Back

AN ALUMNI CONVERSATION ON LEAVING CHICAGO FOR UNM AND LANDING WORK AT HOME

In this interview, Jake Wolff (MS '17) talks to Rafen Page (BA '20) about her experience in long-range planning during a global pandemic and how she is helping to make visual accessibility the new normal among cartographers. Rafen Page leveraged her UNM education in GlScience to excel as an intern-turned-analyst at Albuquerque's Metropolitan Planning Agency, ultimately landing her a leadership role as the GIS administrator for the second-largest public transportation system in the United States.

Jake: It's funny how life sometimes takes us in circles. You left Chicago to study at UNM and now you work for the CTA. What is it like managing all the GIS data for the transit system you grew up using?

Rafen: It feels energizing and full circle to use the skills I developed in Albuquerque back in my hometown. Seeing all the hard work that goes into managing the transit system I grew up riding has been an astounding experience -- there are over 10,000 dedicated employees working to maintain and grow the transit system, including a nearly \$2 billion expansion of a South Side rail line with funds from the bipartisan Infrastructure Bill. There are so many moving parts to running a transit system, and the GIS data is equally varied. It's been inspiring and also surprisingly nostalgic. It motivates me to bring the same energy and vision into GIS data I manage.



Rafen: I did not see myself in the position I am in now. I came to UNM with very little in mind other than exploring topics that interested me, and developing those interests. I wish I could say I did more planning than that, but I came to UNM to see what I liked learning. And as I discovered those interests I pursued them and developed them to the point where I am now.

My first foray into GIS was the Intro to Maps and Geospatial Info class taught by Sagert Sheets. It was the first time I started to look beyond school and into a career that I was passionate about. I started to really focus on my GIS skills in the Intro to GIS class taught by Professor Yan Lin and each Geography and GIS class I took going forward prepared me for my internship.

Jake: What was it like getting a full-time job offer from your internship at the Metropolitan Planning Organization in Albuquerque?



RAFEN PAGE (BA '20)



JACOB WOLFF (MS '17)

Rafen: Exciting and incredibly intimidating. My internship was invaluable to me since it was the first time I saw how maps and GIS could be used outside of the classroom. It gave me the opportunity to see if it was a career path I even wanted

Around the Loop and Back, continued from page 2

to pursue at all. Near the end of my internship, and the end of my time at UNM as well, I had to start asking myself what I wanted to do with my career, what was realistic, and what I needed to do to find something creatively and financially supportive.

When I was offered the opportunity to work full time at the MPO I was ecstatic to land my first GIS job at an organization I was already familiar with through my internship. It also caught me off guard, since this all happened the first few months of COVID, when nothing felt certain. Still, I was so excited to join my coworkers as a full time employee and work for an organization dedicated to transportation planning in Albuquerque. Working at organizations that are local to where I live is important to me, and I was so happy that my first job out of UNM was in Albuquerque.

Jake: You gave back by organizing an alumni roundtable in 2021 helping UNM students sketch their paths towards careers in geography. What do you think are the most important skills that students can develop before entering the job market?

Rafen: Explore the options early on, and lay the groundwork here and there as you continue to study. When I realized what I was learning could become a career, I started researching companies around UNM that I would daydream about working for. Jobs in GIS didn't feel attainable at first, but this helped me see which companies offered jobs that resembled something similar to what I was daydreaming about. And if they did, I searched through their website for internship opportunities. I saved job and internship descriptions – internships I was not qualified for due to the level of education requirement – and I revisited the skills requirements as semesters passed.

When I was entering my senior year at UNM I remembered one internship in particular I was interested in when I was a sophomore, but did not meet the education level requirement at the time. It was an old internship announcement at that point, but I went on their website anyway, just in case. And as luck would have it, that same internship announcement was reposted with a closing date a few weeks away. I applied, and so the beginning of my career started. Mostly through study and casual internship research.

Jake: As a former co-worker, I enjoyed collaborating on projects that impacted not only the MPO but the planning profession on the whole. You proposed this really interesting piece for the newsletter. Could you talk about why visual accessibility is so important?

Rafen: It's a design standard that is steadily gaining traction within the planning and transportation profession, and more agencies are implementing signage best practices. Transit relies heavily on visual queues which are accessible to a large percentage of people, but it doesn't account for everyone. There are plenty of people who are outside of this category, and creating visually accessible spaces is only one piece of the large whole.

In Albuquerque, I started designing GIS visualizations that accounted for visual accessibility because it struck me that someone viewing a map or application I created could have a difficult time interpreting the data because none of the colors stood out from each other, or there was no alternative text. I would make a map and throw it into an application that put a filter based on common types of color vision deficiencies such as deuteranopia, and see how confusing the maps I created looked with these filters. I don't want my applications and maps to be inaccessible to people trying to view them, so I started researching how to make them accessible.

Jake: What are you most excited to work on in the year ahead?

Rafen: I am thrilled to bring the skills and expertise I learned at UNM back to Chicago. My time in Albuquerque has been invaluable to me both personally and professionally, and I'm excited to showcase that in Chicago. I'm planning to expand on the accessibility of GIS throughout the company and help promote the use of GIS in strategic planning for transportation in Chicago. GIS is a critical part of transportation systems, and I can't wait to expand its use.

Jake: And one last, quick question. What do you miss most about New Mexico?

Rafen: The Chile Pepper Race at Isotopes games. Always bet on Green Chile.

Jake: Yeah, the Cubs don't have green chile cheese fries. Stay warm out there my friend.

Rafen: Too late.

Alumni Profile: Well Prepared

Richard Eitzen (MS '73)

I've pretty much always been interested in maps. Even as a youngster I could look at a map for hours at a time. As I grew older, I continued studying maps if they were a World Atlas, or a Road Atlas, it didn't matter. I got a globe of the world as a gift and was thrilled.

As an undergraduate at UNM in the early 60s, I chose a major known as Composite Social Studies. This included classes in economics, history, geography, and the regular required courses such as English and mathematics. Also, a foreign language and education courses. I enjoyed the geography courses I took at that time. This education prepared me primarily to be a teacher in the public schools. I was a history teacher for the first four years. Both at the junior high and high school level.

With a requirement of continuing education credits, looming, I searched for a course and found one in the geography department designed just for teachers. It was taught by the chairman of the department, Richard E Murphy. And, it was a graduate level course. I took the course in summer school and was hooked. It was primarily physical geography with lots of earth, sun, relationships, and some cultural, climatology, economic geography, and even some of the history of borders defined by natural boundaries for various countries. It was a fascinating and enjoyable



course, and I decided to pursue a masters in geography. The program was just beginning at UNM and I had taken extra hours so I did not do a thesis. Rather, I had an oral exam by the entire faculty (which was small). I chose to defend questioning on the Soviet Union as my region, but had many other questions as well regarding climatology, economic geography, geomorphology and even some on demographics. It was a tense time for me, but I "made the grade".

I took a leave of absence from teaching for a full year and attended summer school to complete what turned out to be the second master's degree earned at UNM. This would've been 1971 or 72. The department did not have a cartographer, so we took one semester of cartography in the civil engineering department taught by professor Huzarsky. He had been a neighbor and had a son my age and we played together as kids. I enjoyed cartography although my drafting skills we're far from superb. I defended the geography of the Soviet Union during my orals. I was quite nervous, but did well enough that I earned the degree.

I taught four more years in the public schools but now I could convince the principal to allow me to offer a one semester course in physical geography. Most students really enjoyed it. I enjoyed teaching it. After four more years, I decided to leave teaching and called some of my graduate school pals to see what they were up to. One of them recommended I apply to Public Service Co. of New Mexico. They had an environmental affairs department and I interviewed and got the job. In the beginning my duties were primarily helping to write environmental assessment studies of various parts of New Mexico for projects that we had on the drawing boards. Many of them were later completed, but others remained in the planning stages. I got to fly around the state of New Mexico in the company helicopter quite often and it was lots of fun, but got to be kind of like riding in a truck after a while. I'll never forget that we used to land in a vacant lot across from a restaurant in Deming New Mexico for lunch.

I was later promoted and transferred to a planning department where I was the coordinator for land and water as the company acquired land and water rights. I worked with environmental and engineering departments in this capacity.

I believe that my masters in geography prepared me exceptionally well for the above positions. However, I decided to leave PNM and take a sales position. The education had nothing to do with my sales career, which was very rewarding. However, I believe the general university education I had earned prepared me well for what society had to offer, whatever my choice of employment.

I was fortunate enough to retire at a very young age and my wife and I traveled a great deal seeing new countries and fly-fishing in most of them. I continue to enjoy maps and travel. Although, I am in the back nine of my life at 82 and my travel is severely limited today. So the maps are mostly unused.

Alumni Profile:

Tyler Roller, GIS Specialist and UNM Alumnus

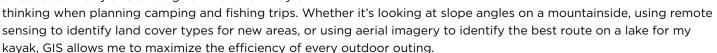
Tyler Roller (BS '18)

I have always been interested in being outdoors from a young age. I knew when I got to college, I wanted to study a degree that would not only award me a great career but also help me create a lifestyle that I would enjoy throughout my life.

When I began my career at UNM I didn't immediately choose my GIS degree. In fact, I wasn't aware of GIS initially. As I began to take more classes throughout the semesters, I stumbled upon a few GIS classes and the rest is history. I immediately switched my degree choice to Geography and began taking every GIS-related course UNM had to offer. I enjoyed creating maps that could identify real world issues such as wildfire mitigation, wildlife corridors, and crime related maps.

Since graduating from UNM I have worked with some great teams. I've created and managed maps that allow decision makers to make important decisions about crucial roadway funding and how it's used, identifying people in need using Census data, as well as identifying and addressing health issues that arise within New Mexico. I believe the GES department prepared me well for the "real-world" and exposed me to most of the GIS elements that one would need in a professional environment.

My GIS degree not only allowed me to pursue a great career but has also allowed me to more easily enjoy an outdoor lifestyle. GIS has given me a new way of



My advice for future students is this; I recommend taking a few GIS courses throughout your career at UNM even if you don't think it relates to your current major. It may benefit you later in your professional career or personal life in some form or another.



If you like this newsletter, please forward it to a friend, Help us build.

Looking back on it...

Google it.

I started UNM in the Fall of 1979 and finished up in the Fall of 1990. With the perspective that 34 years brings, what an amazing education I earned. It cost about \$5,000.00 for tuition and books. I am astonished at what I learned and have great reverence for the stewardship of the professors. They ended up as wise aunts, uncles, and grandparents.

Years do bring perspective. One of the things I think about is, how professional each professor was. I try to imagine speaking and story-telling, and lecturing like they did. I hate public speaking, and when you remember the lectures we all sat through, the professors were experts. They performed geography, right before our eyes. To put it simply, they were extraordinary. Think about doing what they did and how they did it.

As a basically shy person, I realize they were magic and they taught us all how to think spatially. Spatial Thinking is one of "The Intelligences" and it is very special,

The core of the department between 1979 and 1990 was a team of scholars consisting of: Elinore Barrett, Robert Campbell, Rodman Snead, Iven Bennet, Jerry Williams, Stan Morain, Brad Cullen, and Guy King. There were others, but I did not have them for classes.

All of these people helped shape my twenties. They were the adults in the room. They commanded respect and all were fantastic lecturers. They were a Geography braintrust and they laid the very firm foundation the department stands on today.

One day Dr. Guy King, besides "Township and Ranging" us to death, remarked that, "in twenty or thirty years people will have hand-held devices that will display maps and give routes to places." Dr. Iven Bennett talked about climate change, rising sea levels and ice-free arctic passage. Dr. Elinore Barrett talked about migration due to drought. Dr. Rodman Snead talked about peneplaneation and sedimentation of dams like the Glen Canyon Dam and probable Lake Powell abandonment. It all makes sense, now. But, at the time, in the 1980's, it was all way in the future. It seems like 2023 was the year when the future met the present. Instead of talking about these issues, we are living them. All of these visions from the mid 1980's have come to pass.

One of the things I realize, is that my education is a strange blend of Physical and Human Geography, but that there was a Berlin Wall of sorts between the two tracks. As a holder of a B.A. degree, I received a very broad and generalized, geographical education. That's the marvel of an undergraduate degree in the liberal arts and sciences. UNM did exactly what it should: prepared me with the skills of a lifelong learner, ready to integrate foundational knowledges and it has made me a great Jeopardy! player.

I have also come to realize that my degree was an "Un-Integrated Human-Environment Dynamics" kit of parts and that I had to do the "Integration," myself. I am still integrating it. It is the degree that keeps on giving, because the integration never stops.

The GES Department has migrated from an "unintegrated" two track program, to a more blended geographical education centered on Integrative Human-Environment Dynamics.

And, it is producing a very smart alumni of integrated Geographers. In the 1980's the word "Jobs" was never-ever mentioned. Now the program at UNM has taken a more active role in training students, while enrolled, to work at the nexus of human geography and environmental studies. This integrative approach trains students to quickly become leaders in their fields.



Robert H. Mallory '90





Campus photographs by Caitlin Lippitt

Keep in mind, my education was all before GIS and computers, so it was a completely different Geography curriculum with ancient tools. Black and white stereo-optic photo viewers, paper maps, wall charts, Kodak carousel projectors and slides. Professors used chalk and a lot of hand waving, most of the handouts were Ditto, all exams were handwritten, truly old school. I used an IBM Selectric typewriter, then an Atari 2600-Word Processor with dot-matrix printer, and finally a Radio Shack TRS 80 "Home Computer" for assignments.

My, how things have advanced in 34 years, and so has the department. It has evolved into a Geography powerhouse. In 1979, the department was only 14 years old with 5 professors headquartered at Hodgin Hall. Now, 45 years later, with 17 professors headquartered at Bandelier Hall, it has graduated approximately 900 Geographers and each one of us, is a very smart person. We have alumni working for legislatures, public agencies, national labs, utility providers, private industry, entrepreneurs, landscape services, acoustics, teaching, scholarship and anything else you can imagine.

One of the reasons we are working to build our alumni chapter, is in the spirit of lifelong learning, networking and intergenerational collaborations. The department is a hub for fostering professional relationships that advance the sciences needed to navigate our rapidly changing planet. Geographers



photograph by Caitlin Lippitt

think alike, and hopefully that will be the magic of our alumni chapter. Please help us build "The GES Alumni Chapter of the Future!"

Robert H. Mallory '90

GES Alumni Chapter, Volunteer Chapter Manager

Happy New Year!

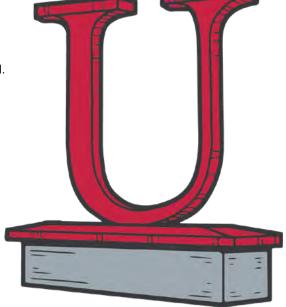
On behalf of the Alumni Association at The University of New Mexico, we extend our warm wishes for a fantastic start to 2024. Reflecting on the past semester, particularly the inaugural event hosted by the Geography Alumni Chapter, we are thrilled with the progress and momentum gained by this dynamic group that continues to grow.

The alumni gathering at the Valle de Oro National Wildlife Refuge proved to be a resounding success, showcasing a satisfactory attendance, enlightening speakers, and the establishment of valuable new connections. Notably, this season's newsletter showcases an increase in alumni submissions, aligning perfectly with the chapter's overarching goal.

Excitement abounds as we anticipate the upcoming chapter "Meet-Up" scheduled for March 7 at Bosque Brewery around 5:30 p.m. conveniently located across campus on Central and Girard. Bring another GES friend and alumni to this informal meet-up that will feature some introductions, discussions about the chapter's future endeavors, and, most importantly, an opportunity for everyone to connect together and share their memories from their time in the GES department at UNM.

Britney Choy

Alumni Relations Officer Britneychoy@unm.edu (808) 227-8299



Sustainability Studies Vision Roundtable

Dear SUST and GES Alums.

We have started a process of Vision Roundtables in the Sustainability Studies Program. We invite all students to come together in a circle and share their visions and dreams for what we can do collectively in the Program.

This is not a listening session, but a time for our community to come together, construct shared horizons and cultivate projects together.

We would like to extend a special invitation to alums to join us Friday March 22 from 11-1 for a vision roundtable. Our hope is that alums will have much to contribute!

Please RSVP directly with me, at andreashernandez@unm.edu and I will send more details. And if you would like a parking pass, please reach out to Robert Mallory at robertmallory@mac.com at least 10 days in advance.

Cheers.

Andreas

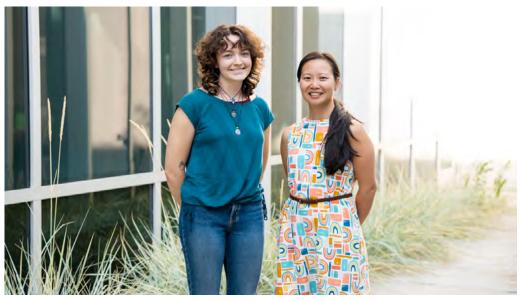
Andreas Hernandez, PhD
W.K. Kellogg Chair in Sustainable Environmental & Food Systems
Director, Sustainability Studies Program
President, Latin American and Iberian Institute
Lecturer III, Geography & Environmental Studies
University of New Mexico



2023 Faculty-Mentored Research Award

Yolanda Lin, Assistant Professor in the Department of Geography and Environmental Studies, and Anistasia Baca, a Spring 2023 graduate with a degree in Environmental Studies were selected as the recipients of the 2023 Faculty-Mentored Undergraduate Research Award for their nearly two-year research collaboration, much of which involved working with other university and government partners to help increase flood resiliency in Ohkay Owingeh Pueblo.

https://news.unm.edu/news/2023-faculty-mentored-undergraduate-research-award-recipients-selected



Anistasia Baca and Dr. Yolanda Lin

What are the department's most enduring elements?

Chris Duvall

Professor and Chair, Department of Geography and Environmental Studies

The most enduring elements of college academic departments are the faculty and the alumni. Last fall, the GES Alumni Group hosted a great meeting where I reconnected with people whom I had known during their student days, and met others for the first time. Faculty are perhaps the most consistent feature of alumni recollections, so I wanted to outline briefly our department's faculty history.

There have been 44 permanent faculty members in our department, starting with two in 1961 and standing at 17 today. The most famous faculty member was one of the first two, Prof. Yi-Fu Tuan, who departed UNM in 1966. Prof. Tuan had an illustrious career in human geography before he passed away in 2022, including election to the prestigious American Academy of Arts and Sciences in 2002. He remains one of the most influential geographers ever—and his career began here!



The rest of us faculty have not had the same level of global impact, but our research and teaching impact the character of the department while we are here. In this respect, the most impactful professors have been a group who each spent many years in our department during the 1970s through 2000s: Iven Bennet, Richard Murphy, Rod Snead, Elinore Barrett, Robert Campbell, Jerry Williams, Brad Cullen, Paul Matthews, and Stan Morain (whose 34 years here set the longevity record). I did not meet most of these people, but many alumni have shared stories about how these professors shaped their academic and professional development. Indeed, the department's Barrett-Campbell Scholarship was recently established by an alumna and her husband in recognition of the impact these two faculty members had on her life. We faculty value learning where our students' career pathways lead, because we want the best for the people with whom we learn. In fact, some of our past faculty endowed award funds to help students after their death—we annually make awards that bear the names Snead, Murphy, and Cullen.

In terms of department history, professors Brad Cullen and Paul Matthews enabled the transition from the long-tenured faculty listed above to our current faculty. In 2007-2009, Brad and Paul hired the most senior current faculty—Prof. Maria Lane, Prof. Melinda Morgan, and me. The three of us have been present for the department's remarkable expansion since then. In 2021, the size of the faculty reached 17, the largest it's ever been. Our faculty has shown leadership on campus—for two examples, Prof. Chris Lippitt has been Associate Dean for Research since 2020, and Prof. Ronda Brulotte was Director of Latin American Studies for six years until 2022—and high levels of research productivity, generating millions of dollars in research funding and <u>publishing many works</u> annually. Most importantly, our faculty is one of the most diverse among American geography departments, and includes more women (10) than men (7). Nationally and in New Mexico, more women than men attend college these days, yet the professor ranks in the U.S. remain male-dominated—about 57% of the total.

In our department, we faculty have an enjoyable, collegial dynamic as co-workers. We also share an eagerness to meet new students, and to learn about the successes of the department's alumni.

Share articles, updates, and photographs for the next issue!

Email contributions to: unmGESalumni@gmail.com

SAGES Update

Chris Sylvan, Master's student

The Student Association of Geography and Environmental Studies (SAGES) is a group that is associated with the Department of Geography and Environmental Studies. The group consists of both undergraduate and graduate students and is responsible for organizing various events and activities such as social gatherings, professional development opportunities, CV/resume workshops, tutoring services, career days, and student poster competitions.

SAGES aims to facilitate networking opportunities for students both within the department and beyond. By providing a relaxed and student-organized environment, SAGES hopes to create a space where students can develop long-lasting friendships while advancing their academic and professional goals.

One of the unique aspects of SAGES is that it is a dual undergraduate and graduate student organization. This structure allows for interaction between students at different stages of their academic careers, encouraging mentorship and creating a pipeline for undergraduate students to learn more about graduate school and better prepare for their academic pursuits.

In the past year, SAGES has helped organize conference trips, student gatherings, and GIS Day during Geography Awareness Week in November. This event provided students with valuable opportunities for outreach and notworking including software workshops, colleguiums, and a student pos

networking, including software workshops, colloquiums, and a student poster competition.



Moving forward, SAGES is focused on continuing to provide professional development and networking opportunities that will benefit students' academic pursuits. Additionally, the group will be present at the upcoming AAG Conference in Honolulu, Hawaii, and the Fall SWAAG conference in San Marcos, Texas.

Join Team GES for City Nature Challenge ABQ!

GES is participating in the world-wide City Nature Challenge for the 6th year. The goal of this world-wide BioBlitz is to document urban nature and you can participate by making observations with the iNaturalist app from April 26-29 anywhere in Bernalillo, Sandoval, and Valencia Counties. Laurel Ladwig (MS 20) is one of the co-organizers for CNC ABQ and has led GES' participation since 2019, Albuquerque's inaugural year.



Join the ABQ project here:

https://www.inaturalist.org/projects/city-nature-challenge-2024-abq

and Team GES here: https://www.inaturalist.org/projects/unm-ges-city-nature-challenge-abq-2024

Prior to 2021, GES was the only UNM department actively encouraging participation in the event. In the three years that GES has challenged Biology to a friendly competition, GES has won twice. In 2023, GES made over 2500 more observations of 74 more species, with 29 more observers than the Biology Department. The School of Architecture and Planning joined in for the first time in 2023 and contributed to the overall UNM effort. All in all, Team UNM contributed all but 3723 of the 16,190 observations made across Bernalillo, Sandoval, and Valencia Counties. With annual support from the Center for Community Geography, Dr. Yolanda Lin's Information Design in Science and Society class uses the prior year's data to create info-graphics designed to recruit participants for the event. Follow @abqCityNatureChallenge on social media to see their new work in the coming months and see some of the past projects here.

The ABQ Backyard Refuge Program is one of the sponsors of the event and is encouraging participants to make observations in backyards, neighborhoods, and commercial areas. By making observations with iNaturalist outside of public lands and parks, you can help us make an urban biodiversity map of Albuquerque!

Center for Community Geography Update

Maria Lane

Professor, Geography & Environmental Studies Interim Dean of Graduate Studies

Olivia Kelly

Graduate Assistant, Center for Community Geography

The R.H. Mallory Center for Community Geography had a busy and successful fall 2023 semester. In August the center welcomed two new undergraduate fellows, Will Tatman and Taressa Nield, who are both Geography and Environmental Studies majors at UNM. The center also added a new graduate assistant, Olivia Kelly, who is a Master's student in GES. In November the center partnered with the GES department and the Student Association of Geography & Environmental Studies (SAGES) to host an event for GIS Day that included a film screening, tech demos, lightning talks by current students and alumni, and a poster competition that was judged by visiting high school students. During Geography Awareness Week, we also hosted AP Human Geography and AP Environmental Science students from Atrisco Heritage Academy along with their teacher and GES alum, Jordy Hicks to meet with current GES faculty for a discussion about climate migration and city planning/design for a warmer climate future. In December we welcomed three new Faculty affiliates: Dr. Claudia Pratesi, Assistant Professor in the College of Population Health; Gwyneth Doland, Professor of Practice in the Department of Communication & Journalism; and Dr. Joe Garcia, Adjunct Faculty in the Chicana and Chicano Studies Department. To learn more about these activities, please review the highlights below or visit www. communitygeography.unm.edu.

The mission of the R.H. Mallory Center for Community Geography is to build partnerships between UNM and its surrounding communities that are effective in addressing critical human-environment issues. To achieve this mission, the R.H. Mallory Center will continue to coordinate and fund community-engaged research and learning activities. We would love to hear your project ideas, community-partner suggestions, or support requests. Contact us at communitygeography@unm.edu.

FALL 2023 HIGHLIGHTS

FALL FELLOWS PROJECTS

Throughout the fall semester, community geography fellows Taressa Nield and Will Tatman worked with Mari Simbaña from the Cultivating Bernalillo County Grow the Growers Program to address food accessibility in the International District following the closure of the Walmart at San Mateo Blvd, and Central Ave. This partnership is focused on community mapping for foodshed awareness and planning. For her fellowship project, Taressa focused on creating a map in ArcGIS with layers that showed community gardens, food distribution centers, stores that accept SNAP/EBT benefits, and open/vacant lots that could be developed to enhance food accessibility. Will attended community potlucks throughout the semester and focused on trying to understand the needs of the International District community and develop ways to fill those needs as he continues his fellowship in the spring of 2024.



Community Geography Fellows at Valle de Oro National Wildlife Refuge

GEOGRAPHY AWARENESS WEEK AND GIS DAY

The center kicked off Geography Awareness Week by hosting over 100 students and teachers from Rio Grande High School for a GIS Day Symposium. Our goal was for the GIS Day activities to aid high school students, members of the University of New Mexico community, and members of the wider Albuquerque community to learn about geography and the real-world applications of GIS that are making a difference in our society. GIS Day is an opportunity to share accomplishments and inspire others in the discovery and use GIS. Experts (and experts-intraining) from UNM and our external partners were present to answer students' questions and offer insights into potential GIS career paths. The students watched the film Our Story: The Indigenous Led Fight to Protect Greater Chaco which details the human-environment struggles in Greater Chaco in the wake of continued oil and gas development. They also had the opportunity to watch lightning talks presented by current GES Ph.D. candidate Theodros Woldeyohannes, as well as returning alumni Robert H. Mallory, Annie Quintana, Sagert Sheets, and Brendan Kearns. As a part of the symposium, we held a poster competition that was judged by the visiting RGHS



GES Alumni at GIS Day: Sagert Sheets, MS'17, Hayley Hajic, MS'17 and Aron Roberts, MS'19

students. Later in the week, we hosted several students from GES alum (MS'20) Jordy Hicks' AP Human Geography and AP Environmental Studies classes at Atrisco Heritage Academy. These students were given tours of UNM's campus, participated in a plant scavenger hunt around Bandelier East, and met with GES faculty for a presentation on the GES department, courses of study, and classes offered. They also got to participate in a discussion with faculty about topics that they were covering in their AP classes. Faculty in attendance gave brief overviews of their research to provide

students with an idea of the wide variety of geography research areas that they may pursue. The students were also given the opportunity to attend the department's annual Murphy Lecture titled "Intentional Intersectionality: Exploring Climate Change Through the Lenses of Vulnerability and Inclusion" by University of Vermont Professor and Vermont State Climatologist, Lesley-Ann L. Dupigny-Giroux, Ph.D.

Plans for Spring 2024

The Center for Community Geography's Associate Director, Dr. Miriam Gay-Antaki will be taking over as Interim Director for the spring 2024 semester. We have several events and partnerships planned for the spring, including sponsorship of events for the 100th anniversary of the Gila Wilderness, participation in UNM's annual Spring Teaching Conference, and planning of Community Engagement Week events. As we have done for the last several years, the Center for Community Geography will serve as the UNM campus



Dr. Miriam Gay-Antaki, Interim Director

coordinator for City Nature Challenge 2024. We will also open applications for Fall 2024 and Spring 2025 fellowships as well as faculty funding awards that are part of our Classroom Fund for Community Engagement. Be sure to follow @ nmcommunitygeog on Instagram and Twitter to see our work in real time.

Please share articles, updates, and photographs for the next issue!

Email contributions to:

unmGESalumni@gmail.com

Dear Fellow Geographers and Happy New Year!

Theodros Woldeyohannes, SAGES Secretary

This past Fall the UNM Department of Geography and Environmental Studies (GES) and the Student Association of Geography and Environmental Studies (SAGES), in partnership with the UNM R.H. Mallory Center for Community Geography and the UNM GES Alumni Chapter, hosted another great Geography Awareness Week (GAW). GAW has always been of great importance to our department, our next generation of geographers, and to the role of geography at our institution. This year, we provided great opportunities for student outreach, connecting current and past students. The events of GAW were a showcase of how a degree in geography can lead to a multitude of excellent opportunities in research, encompassing everything from physical and human geography to spatial science in Integrative Human Environment Dynamics. Through showcasing these possibilities in geography over a week across campus, we increased our ability to recruit new students into geography and train the next generation of geographers that will be critically needed for the health and continuation of our discipline. GAW ran from November 13th - 17th and consisted of GIS Day and the annual Murphy Lecture.



Theodros Woldeyohannes

GIS DAY

The third day of GAW was our flagship event, GIS Day. Launched in 1999, GIS Day is an annual event celebrating the technological field of geographic information systems (GIS). GIS is a scientific framework that facilitates the gathering, analysis, and visualization of geographic information. UNM's participation in the international celebration of GIS helped those on campus and around the Albuquerque area learn about the real-world applications of GIS and how geography makes an impact on our society. GIS Day consisted of three main events, a film-screening, symposium, and poster competition.



GIS Day started with a symposium that featured experts (and experts-in-training) from UNM and external partners giving lightning talks and hosting interactive booths and job recruiting opportunities. External partners included various academic, governmental, and industry institutions. The symposium included a student poster competition and provided opportunities for students to engage with experts and come together as geographers. GIS Day took place in both the Ballroom and Atrium of the UNM Student Union Building (SUB) reserved by SAGES as a venue for the day's events. Around 200 people attended the symposium events, with even more students passing by to check out booths and interactive exhibits. Having these high traffic, central campus areas hosting geography events certainly put us on the map! The GIS Day symposium was not only an excellent engagement and outreach opportunity for UNM students, but also





photographs by Caitlin Lippitt

prospective geographers from local high schools. For example, around 100 students from Rio Grande High School (RGHS) attended the event!

The symposium began with the arrival of over 100 students from RGHS, hosted by the R.H. Mallory Center for Community Geography. This was a very exciting opportunity in which the Rio Grande Ravens brought students and

teachers from many different high school social studies classes, spending GIS Day on the UNM campus to learn about college-level and professional geography. They attended GIS Day presentations, spent time in the exhibit hall, judged the poster competition, watched a film-screening, and went on a campus tour.

With the RGHS students in attendance, GES's Dr. Maria Lane, the director of the R.H. Mallory Center for Community Geography, gave initial opening remarks that stressed the importance of geography, and the history of GIS Day and GAW. After the remarks the students watched a film screening. Next the Lightning Talks began. These short 5-7 minute talks were given on various geographic topics, and included invited guest speakers from academia, industry, and government, as well as GES faculty and PhD students from GES and Earth and Planetary Sciences (EPS).

In the Atrium there were several booths set up from external partners, representing a diverse group of different institutions from academia, government, and industry. Attending institutions included: Earth Data Analysis Center (EDAC), Central New Mexico Community College (CNM), Mid-Region Council of Governments (MRCOG), Village of Los Lunas, Sandia National Laboratories, Merrick & Company, and the Office of Congressman Gabe Vasquez. SAGES, GES, and the Alumni Chapter set up booths as well. Many thanks to all the external partners that attended and made GIS Day possible, as well as all the GES students and faculty that helped run our table throughout the day! These booths were not only informational and for recruiting purposes, but also featured interactive exhibits. This included an interactive virtual reality (VR) exhibit set up by the UNM Health and Environmental Research GIS Lab. These interactive exhibits attracted much attention from students passing by in the SUB.

The VR exhibit, titled *Travel the World Through Virtual Reality*, allowed attendees to visit locations around the globe using virtual reality! Attendees learned how to use the National Geographic VR app using an Oculus Quest 2 VR headset to virtually explore the world. This exhibit was a showcase of the growing opportunities to map geographic principles and frameworks such as GIS into VR applications. At the VR exhibit, participants were transported to various locations on earth, such as Machu Picchu, using National Geographic VR.



RGHS students trying out VR exhibit



photograph by Caitlin Lippitt

Poster Competition

As part of the symposium event, UNM students presented posters in the Navajo Lounge and competed for prizes judged by the RGHS students. Posters covered a range of various topics and featured research from both undergraduate and graduate students.

MURPHY LECTURE

The final day of Geography Awareness Week was the Murphy Lecture, as tradition. Every fall during GAW, the department hosts the Richard Murphy Memorial Lecture to highlight a prominent researcher from the field. The lecture is funded through an endowment established in honor of the department's first chairperson, Professor Richard

Murphy. This was the 12th year of Murphy Lectures which started in 2011, representing the continuation of a proud legacy.

This year's lecture was given by **Dr. Lesley-Ann L. Dupigny-Giroux** to a packed lecture hall in Mitchell Hall. The lecture, titled *Intentional Intersectionality: Exploring Climate Change through the Lenses of Vulnerability and Inclusion*, explored the ways in which researching and teaching about climate change concepts and response strategies can be explored with an emphasis on human a geographic covulnerabilities, so that all peoples and ways of knowing are honored and incorporated.

The Murphy Lecture, which is part of the broader colloquium series hosted by GES, is a lasting example of GES's ability to bring in renowned researchers in the field, and provide networking opportunities for our students!

In CLOSING

All in all, Geography Awareness Week (GAW) was a major achievement that everyone involved should be proud of. This includes: the Student Association of Geography and Environmental Studies (SAGES), The Department of Geography and Environmental Studies (GES), the R.H. Mallory Center for Community Geography, the Geography Alumni Chapter, and the Earth Data Analysis Center (EDAC). Many thanks to all the guest speakers and external partners that made GIS Day

We stand delians where we water as if and the transit birds in arran range.

photograph by Caitlin Lippitt

DEPARTMENT OF GEOGRAPHY & GEOGRAPHY & ENVIRONMENTAL STUDIES 2023 MURPHY LECTURE INTENTIONAL INTERSECTIONALITY:

EXPLORING CLIMATE CHANGE THROUGH THE LENSES OF VULNERABILITY AND INCLUSION



CENTER FOR ADVANCEMENT OF SPATIAL INFORMATICS RESEARCH & EDUCATION

AFRICANA STUDIES PROGRAM

NATIVE AMERICAN

EPARTMENT O

Lesley-Ann L. Dupigny-Giroux, Ph.D.Professor & Vermont State Climatologist

INTERMOUNTAIN WEST TRANSFORMATION



SCHOOL OF PUBLIC ADMINISTRATION

FRIDAY NOVEMBER 17TH 3:00-4:00PM Mitchell Hall 122 Refreshments will be served at 2:30 in the Bandelier East lobby outside 105.

Dr. Dupigny-Giroux will explore the ways in which researching and teaching about climate change concepts and response strategies can be explored with an emphasis on human and geographic vulnerabilities, so that all peoples and ways of knowing are honored and incorporated. Lessons will be drawn from her use of geospatial technology in formal classroom settings and with lifelong learners to make climate change science inclusive and accessible.

possible. GAW this year truly showed the power of our Department and what Geography has to offer. Here's to an even bigger and brighter GAW next year!

University of Vermont

Sincerely.

2023 Publications by GES Alumni, Current Students, and Faculty

GES Faculty | *current and former GES students

*Ayala, Michael Ayala, Maria Lane, and Rommel Montúfar. 2023. "Motivations to adopt agroecology in rural communities of the northern Andes of Ecuador." ESPOCH Congresses: The Ecuadorian Journal of S.T.E.A.M. 3(1): 666-693. DOI 10.18502/espoch.v3i1.14479.

Bai, Judy, Katherine Ma, Shangyang Xia, Richard Geng, Claire Shen, Limin Jiang, **Xi Gong**, Hui Yu, Shuguang Leng, and Yan Guo. 2023. "Pan-Cancer Mutational Signature Surveys Correlated Mutational Signature with Geospatial Environmental Exposures and Viral Infections." Computational and Structural Biotechnology Journal 21: 5413–22.

Chaulagain, Smriti, Mark C. Stone, Ryan R. Morrison, **Liping Yang**, Julie Coonrod, and Noelani E. Villa. "Determining the response of riparian vegetation and river morphology to drought using Google Earth Engine and machine learning." Journal of Arid Environments 219 (2023): 105068.

Chen, Haifei, **Liping Yang**, and Qiusheng Wu. 2023. "Enhancing Land Cover Mapping and Monitoring: An Interactive and Explainable Machine Learning Approach Using Google Earth Engine" Remote Sensing 15, no. 18: 4585. https://doi.org/10.3390/rs15184585

*Converse, Rowan L, Christopher D Lippitt, Grant M Harris, Steven E Sesnie, Matthew J Butler, David R Stewart. "Progress toward automated migratory waterfowl census using drones and deep learning". Proceedings of the 1st ACM SIGSPATIAL International Workshop on Al-driven Spatio-temporal Data Analysis for Wildlife Conservation, November 2023, Pg, 17-20 https://doi.org/10.1145/3615893.3628757

Gay-Antaki, Miriam. 2023. "Embodied Geographies of Environmental Justice: Toward the Sovereign Right to Wholly Inhabit Oneself." Environment and Planning E: Nature and Space, 25148486231151802.

*Girlamo, Christopher, Yan Lin, Joseph Hoover, *Daniel Beene, *Theodros Woldeyohannes, *Zhuoming Liu, Matthew J Campen, Debra MacKenzie, and Johnnye Lewis. 2023. "Meteorological Data Source Comparison—a Case Study in Geospatial Modeling of Potential Environmental Exposure to Abandoned Uranium Mine Sites in the Navajo Nation." Environmental Monitoring and Assessment 195 (7): 834.

Gong, Xi, *Yanhong Huang, Jenny Duong, Shuguang Leng, F Benjamin Zhan, Yan Guo, Yan Lin, and Li Luo. 2023. "Industrial Air Pollution and Low Birth Weight in New Mexico, USA." Journal of Environmental Management 348: 119236.

Gong, Xi, Lin Liu, *Yanhong Huang, Bin Zou, Yeran Sun, Li Luo, and Yan Lin. 2023. "A Pruned Feed-Forward Neural Network (Pruned-FNN) Approach to Measure Air Pollution Exposure." Environmental Monitoring and Assessment 195 (10): 1183.

Gong, Xi, Yujian Lu, *Daniel Beene, Ziqi Li, Tao Hu, Melinda Morgan, and Yan Lin. 2023. "Understanding Public Perspectives on Fracking in the United States Using Social Media Big Data." Annals of GIS 29 (1): 21–35.

Gong, Xi, Shuyang Peng, ***Yujian Lu**, Shaohua Wang, Xiao Huang, and Xinyue Ye. 2023. "Social Network Analysis of Nonprofits in Disaster Response: The Case of Twitter during the COVID-19 Pandemic in the United States." Social Science Computer Review 41 (6): 2029-54.

Guo, Yan, Judy Bai, Katherine Ma, Shangyang Xia, Shuguang Leng, Hui Yu, and **Xi Gong**. 2023. "Cancer Disparities in Race Exposed through Geospatial Analysis of Mutational Signatures and Environmental Exposure." Cancer Research 83: 3505–3505.

He, Chao, Qian Wu, Bin Li, Jianhua Liu, **Xi Gong**, and Lu Zhang. 2023. "Surface Ozone Pollution in China: Trends, Exposure Risks, and Drivers." Frontiers in Public Health 11: 1131753.

Lardier Jr, David T, Meredith A Blackwell, *Daniel Beene, and Yan Lin. 2023. "Social Vulnerabilities and Spatial Access to Primary Healthcare through Car and Public Transportation System in the Albuquerque, NM, Metropolitan Area: Assessing Disparities through GIS and Multilevel Modeling." Journal of Urban Health 100 (1): 88-102.

Lee, Jeongyoon, Young Joo Park, and **Xi Gong**. 2023. "How Do Government Grants Affect Nonprofit Financial Effectiveness? The Mediation Role of Process Accountability." Administration & Society 55 (1): 122–57.

Levin, Ronnie, Cristina M. Villanueva, *Daniel Beene, Angie L. Cradock, Carolina Donat-Vargas, Johnnye Lewis, Irene Martinez-Morata et al. "US drinking water quality: exposure risk profiles for seven legacy and emerging contaminants." Journal of Exposure Science & Environmental Epidemiology (2023): 1-20.

Lin, Yolanda C, Einat Lev, *Ria Mukerji, Tobias P Fischer, Charles Connor, Wendy Stovall, Michael P Poland, et al. 2023. "Lessons Learned from the 2022 CONVERSE Monogenetic Volcanism Response Scenario Exercise." Volcanica 6 (2): 345–66.

Lin, Yolanda C, Asa B Stone, Gareth Byatt, and *Lindsey Rotche. 2023. "How Is Counterfactual Thinking Integrated in Organizational Risk and Resilience Practices?" Journal of Risk Research, 1–22.

*Liu, Zhuoming, Yan Lin, Joseph Hoover, *Daniel Beene, Perry H Charley, and Neilroy Singer. 2023. "Individual Level Spatial-Temporal Modelling of Exposure Potential of Livestock in the Cove Wash Watershed, Arizona." Annals of GIS 29 (1): 87-107.

Nebbiai, Martina, *Natali Cáceres-Arteaga, and K. Maria D. Lane. 2023. "Liminal waters, contested imaginaries: Andean comunas and Ecuador's new water law." Water International 48(7): 883-900. DOI: 10.1080/02508060.2023.2286100

Ruwanpura, Kanchana N, and **Miriam Gay-Antaki**. 2023. "Feminist Geographies." In Concise Encyclopedia of Human Geography, 150–55. Edward Elgar Publishing.

Solis, Gabriel Antonio, Tania L. Balderas, Iuri Bauler Pereira, Samantha R. Cooney, Cynthia Yuan Gao, David Helps, *Ramona R. Malczynski, Emma B. Mincks, Isobel Plowright, Joseph A. Ukockis, and Lauren Whitmer. "Against "Normalcy": A Collective Testimony of Student Workers Organizing During the Pandemic." International Labor and Working-Class History 104 (2023): 209-23. doi:10.1017/S0147547923000108.

Warner, Benjamin P, *Tucker Colvin, and *Ria Mukerji. 2023. "Recentralizing State Power in Decentralized Small Drinking Water System Governance in New Mexico, USA." International Journal of Water Resources Development 39 (1): 26–47.

Yang, Lu, Song Hong, Hang Mu, Jingwei Zhou, Chao He, Qian Wu, and **Xi Gong**. 2023. "Ozone Exposure and Health Risks of Different Age Structures in Major Urban Agglomerations in People's Republic of China from 2013 to 2018." Environmental Science and Pollution Research 30 (14): 42152-64.

Yuan, Xinxing, Alan Smith, Fernando Moreu, Rodrigo Sarlo, **Christopher D Lippitt**, Maryam Hojati, Sreenivas Alampalli, and ***Su Zhang**. 2023. "Automatic Evaluation of Rebar Spacing and Quality Using LiDAR Data: Field Application for Bridge Structural Assessment." Automation in Construction 146: 104708.



photograph by Caitlin Lippitt

ALUMNI COMMUNICATIONS

At the Department's website geography.unm.edu under the "Keep in Touch" pull down menu there is a list of three Listservs which you might find interesting.

Colloquia & other department events:

publicgeo-L@unm.edu

Job announcements:

GEOG-JOBS-L@LIST.UNM.EDU.

General updates from our chapter:

GEOG_ALUMNI-L@LIST.UNM.EDU

These Listservs are a great way to stay in contact with current events and goings on at the department.

To sign up, follow these steps:

Send an email to listserv@list.unm.edu

Leave the subject line blank

In the body of the email type:

"subscribe (name of the listserv) and your first name and last name" ONLY.

You will receive a confirmation email right back. These listservs are very easy to unsubscribe from and instructions for that are listed not eh "**Keep in Touch**" page as well.

Please post to the GES alumni listserv whenever you have news or events that might be of interest to fellow alumni. The alumni listserv is an expedient way to get timely information to our community. This newsletter will be published a two times per year and we look forward to this being a forum for sharing articles about both academic and professional work. Please contribute articles about your professional and community projects or applications of geographic research. You can send articles to UNMgesAlumni@ gmail.com. We are working to keep our alumni connected and would appreciate more alumni to join us in this effort!

CHAPTER BUSINESS

Help us keep your contact information accurate:

On the UNM Alumni Association Website:

www.UNMALUMNI.COM

Under "Chapter & Groups" navigate to:

"UNM Geography & Environmental Studies Alumni Chapter"

About half way down on the page you will see at red bottom marked "Membership Form"

Please click on that and fill in your information. This will provide the most accurate information to the Association for distribution of The Mirage, our newsletter and any other alumni-related information.

SUPPORT OUR DEPARTMENT!

For many alumni, there is a strong desire to make a difference in our world by supporting future generations of students. If you have been touched by your experience with the Department of Geography at UNM, and would like to support our work, please consider contributing to one of the following funds.

Elinore Barrett and Robert Campbell Endowed Scholarship in Geography

R.H. Mallory Center for Community Geography:

Brad Cullen Geography Grad Student Fund

Richard Murphy Memorial Scholarship in Geography

Friends of Geography Fund

Department of Geography and Environmental Studies Chair's Fund

Our sincerest thanks go to all of you who have already donated.

If you would like more information about contributing to the Department of Geography, please feel free to contact ydomingu@unm.edu.

Visit the UNM Foundation website: www.unmfund.org

If you would like more information about contributing to the Department of Geography, please feel free to contact ydomingu@unm.edu.

THANK YOU!

Thank you to all who generously support the Geography & Environmental Studies department with a donation! We are grateful you have been touched by your UNM experience and as a result have chosen to make a financial contribution that honors the university and people who have positively impacted your lives.

If you would like more information about making a cash contribution to the Department of Geography, please feel free to contact Yolanda Domínguez at 505.277.3194, Yolanda.Dominguez@unmfund.org or

visit https://artsci.unm.edu/give/index.html

There are many easy ways to make an impact on the department with a donation. Yolanda can help you learn more about making gifts via stock/wire transfer, IRA required minimum distributions (RMD), or through a proviso in your estate plans!

