

What is “integrative human-environment dynamics”?

Chris Duvall

Professor and Chair,

Department of Geography and Environmental Studies

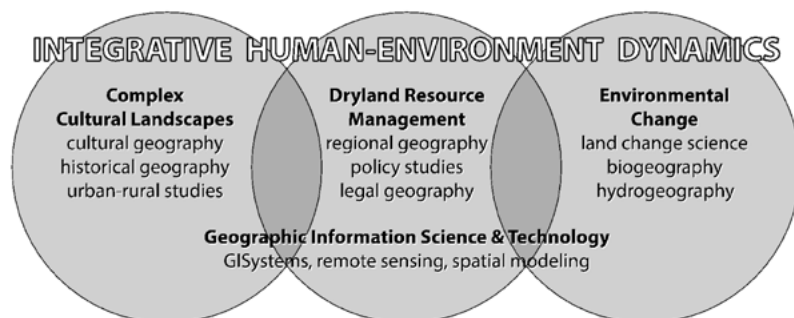


Greetings from the Department of Geography and Environmental Studies!

What is the department doing these days? A broad overview of our academic core can help summarize what’s happening.

An idea that extends across our research and teaching is “integrative human-environment dynamics”. We adopted this concept several years ago, as part of the self-study that led to the Ph.D. program. We observed that many of our faculty and students are interested specifically in human geography and others in environmental matters; however, we found an overarching idea tied together our interests beyond those who might focus their thinking on humans or the environment. “Integrative human-environment dynamics” is how we express that we are driven by the idea that social, ecological, and physical processes are inextricably linked, and always changing. Even though most of us have limited areas of specialization, our overarching aim is to understand the complex dynamics that continually shape the Earth’s surface.

Here is a diagram we’ve used to explain ourselves:



As I described above, some of us focus our thoughts on the human elements of geographic systems, to understand the complex cultural landscapes we experience. Others focus on environmental conditions—such as changing climate patterns—and many think about issues related to natural resource management, especially in arid regions. Extending across these areas of interest is the expertise that many of us have in geographic

information science and technology, which allows us to observe, analyze, and report on the geographic features and processes we’re part of. Many things produce complex human-environment dynamics, so we’re constantly thinking about how to integrate different perspectives into our research and teaching, to gain more holistic understandings of the world. That is the character and power of “integrative human-environment dynamics”.

As we begin the Spring 2023 semester, we have made great strides in establishing ‘new normal’ footing in the post-COVID world, which has enabled us to strengthen our teaching and research missions. The department is excited for 2023, and we wish you a Happy New Year!

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Manager's Report

Robert Mallory (BA '90)

Jake Wolff, our Clerk, and I went to lunch on December 29th 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 concentrate on the newsletter. We also agreed that the chapter was 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.

The newsletter is a snapshot of what the department did the previous semester and of ongoing research. Our goal with the newsletter is to build up our GES department awareness as well as the Family of Alumni around it.

The way you can help is by forwarding this newsletter far and wide, not just to fellow alumni. If you get it forwarded back to you twice, you are helping. Three times you are great, and four times, you're a rock star!

The other way you can help is by contributing information. Please tell us what you are doing and why, or let us know something important and useful, or share a memory. Your experiences can help current students imagine their paths forward. The directions are endless.

The Department produced a fantastic Geography Awareness Week of events in mid November. There are a number of articles covering it in this issue. PhD Candidate **Theodros "Teddy" Woldeyohannes**, **Dr. Yolanda Lin** and everyone else who did anything to help, you made us all proud. Our Family is about being proud. We received an amazing gift with our Geography degrees from a strong department. Yes, I am proud and you should be too.

In other news:

-We were able to furnish parking passes as our contribution to Geography Awareness Week, with special thanks to **Diana Martinez**, Director of Development for Art & Sciences.

-Our LinkedIn group is still a budding project that shows promise in building our networks. Our last newsletter issue contained an update from **Zach**

Taraschi, and **Will Mehle**, who we connected with on LinkedIn. So, if you are a LinkedIn member, it would be great to see more posts and see if we can build the group into a valuable resource. My problem is that I really don't understand it. I am doing what I can, but if a few people would help, it would be huge.

-We welcome **Brittany Choy** who has replaced Scott Sanchez as our link to the UNM Alumni Association. Brittany attended UNM and was a star athlete on UNM's Golf Team.

Our vision for the chapter is to build a Family around this department. Please help us build "The Alumni Chapter of the Future!" Which is a Family that helps one another. Tell others about the Department and your degree. Forward this newsletter to them. The world needs more Geographers...



Black-capped Chickadee at Rio Grande Nature Center State Park during a [National Audubon Society Climate Watch](#) Nuthatch survey photograph by Laurel Ladwig

PLEASE contribute photographs for future issues.

Else, be prepared for more bird photos. ;-)

Email photos to:
unmGESalumni@gmail.com UNM

Sustaining the Vision: GES and UNM 2040

Jake Wolff (M.S. '17)

The culmination of a yearlong planning process, UNM 2040: Opportunity Defined establishes shared objectives to carry our alma mater through its 150th anniversary. Like most strategy documents, it's adaptive rather than constraining, but UNM 2040 is also candid. We do confront a "trend to commodify" as well as the "perils and opportunities for public health" (7). At the 6 May 2022 launch, President Stokes showed how collaboration as one campus across many places would be critical to the university's success. Our department – Geography and Environmental Studies – is poised to lead. Not only is geography an integrative science, but we're on the forefront of Goal Four: Sustainability.



UNM President Garnet Stokes, speaking at UNM 2040 launch

At the UNM 2040 launch, **Teresa Costantinidis**, Senior Vice President for Finance and Administration, reaffirmed that "environmental sustainability is an imperative for all of us." And, most students ranked sustainability as a top priority during the planning process. The GES Department offers training – like our undergraduate minor in sustainability studies or master's track in geospatial technologies – that propel students into careers that align with their values and market demand. I remember taking a graduate-level GES course in Natural Resource Management. Students of architecture, engineering, GIScience, and water policy discussed how technological fixes for climate change are most effective with adaptive decision-making processes. As our semi-arid ecosystem grows drier, their interdisciplinary expertise becomes all the more important. My classmates from 2016-2017 now work on the Cal Fire team and in environmental agencies in New Mexico. Our alumni trajectories are a testament to GES's success in collaboratively advancing a more sustainable UNM for the benefit of our world.

[UNM 2040 Launch](#)

Exploring Social Dynamics with Social Media & GIScience

Xi Gong

Assistant Professor

Department of Geography and Environmental Studies

GES Assistant Professor Dr. Xi Gong is a Geographic Information Science (GIScience) researcher with a research interest in Geospatial Data Science, which represents an emerging interdisciplinary field intersecting three broad knowledge domains: GIScience, computational sciences, and mathematical-statistical sciences. In 2020, Dr. Gong founded the Spatially Integrated Social Science (SISS) Lab (<https://xigong.wordpress.com/siss>) in the Advancement of Spatial Informatics Research and Education (ASPIRE) Center, where he has been working collaboratively with a group of UNM scholars and student researchers on exploring the spatial-temporal dimension of complex human and social dynamics using GIScience. Social media platforms have a large user population who generate massive amounts of digital footprints, which are valuable data sources for observing and analyzing social activities/behavior. The high-volume, geo-referenced, and open-source social media data, as a type of emerging spatial big data, provide an unprecedented opportunity for uncovering the spatial-temporal patterns of social dynamics at a large scale. Dr. Gong and his team have been working in this transdisciplinary research field and published their findings in leading international journals in recent years. Some examples are as follows:



Twitter offers shorter messaging updates for faster dissemination, along with retweeting and directed following functionalities for better user interactions, which has become a popular tool for institutional outreach activities. Dr. Gong conducted a study to reveal the behavior and network patterns of institutional Twitter accounts of U.S. geography departments. Based on these patterns and the four criteria suggested in the literature, this study also discussed actionable ways for geography departments to improve outreach performance through Twitter. (Gong and Lane 2020)

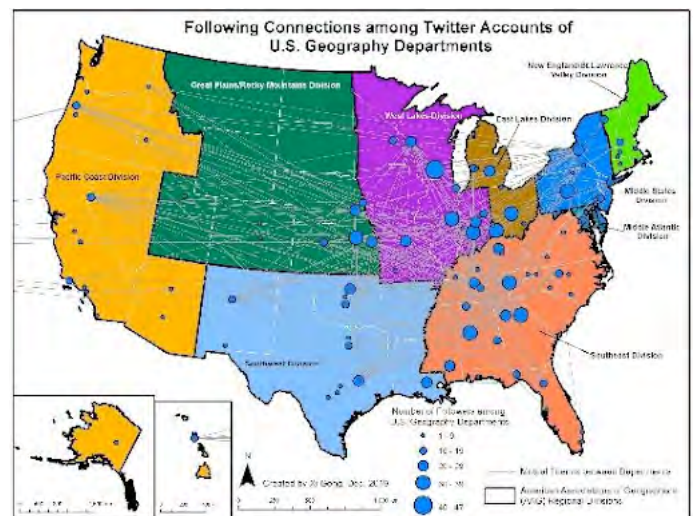


Figure 2. Following Connections among Twitter Accounts of U.S. Geography Departments

Using Twitter data related to the 2019 National Basketball Association (NBA) Finals, Dr. Gong investigated the dynamics of sports fan behavior and validated theories of fan behavior (BIRGing and blasting). For this study, it is innovative to combine spatial-temporal patterns with sentiment information from social media big data to describe fan behavior. A better understanding of the spatial-temporal dynamics of fan behavior can benefit not only marketing communications, but also help monitor and predict the psychological well-being of sports fans. (Gong and Wang 2021)

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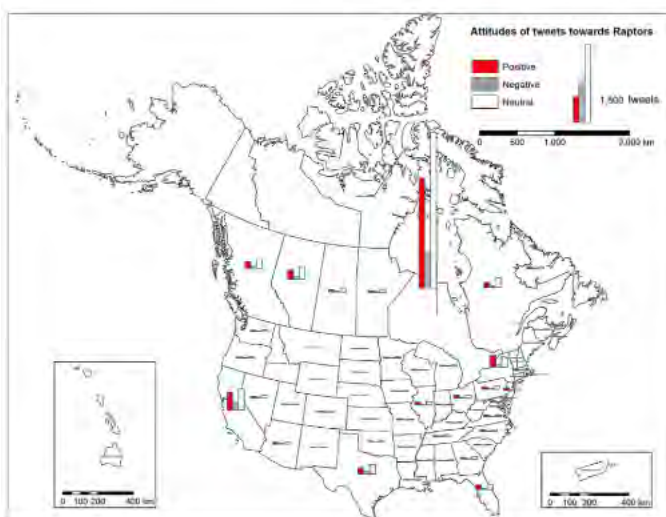


Figure 1. Attitudes of tweets toward Raptors

In the waves of the COVID-19 pandemic, each U.S. state governor has been leading efforts to curb the spread of the virus within the state. Twitter has been widely used for crisis communications by governors. Their Twitter usage patterns can largely reflect how state governments respond to the COVID-19 crisis from both geographical and social network perspectives. Through spatial-temporal analysis, network analysis, and text mining, Dr. Gong investigated how such spatial social network dynamics differ across states sheds light on the geography of communication in the emergency response. This study provides a guide for other agencies/officials to develop future crisis communication plans through leveraging social media for social good. (Gong and Ye 2021)

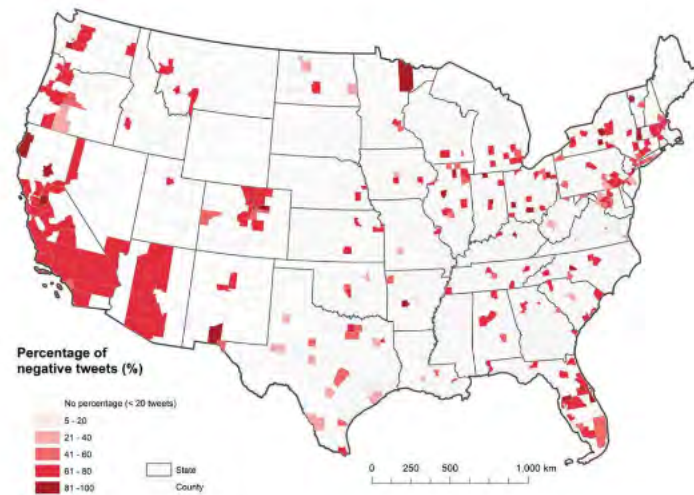
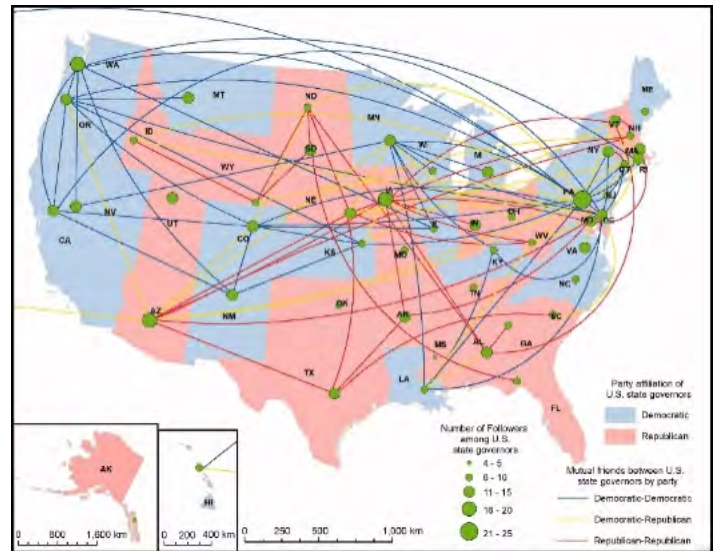


Figure 3. Percentage of negative tweets toward fracking in contiguous U.S. counties with 20 or more fracking-related tweets during 2018-2019.

Using georeferenced Twitter data for 2018–2019 in the entire United States, Dr. Gong’s team presented a holistic picture of attitudes toward fracking. In this study, a multiscale geographically weighted regression (MGWR) was used to examine county-level relationships between negative tweet percentages regarding fracking and potential shaping factors (such as socio-demographics, economic development, environmental impacts, etc). Those associations are spatially heterogeneous and vary in scale. As a result of these findings, it may be possible to predict public perceptions and make necessary policy adjustments. (Gong et al. 2022)



Dr. Gong’s team will continue to broaden and deepen the current research paradigm on exploring social dynamics with social media and GIScience. A few future directions include improving the quantity and quality of social media big data, developing new technologies for data processing, incorporating social media data into more multidisciplinary studies, and addressing the ethical issues associated with social media data sharing.

Gong, X., and K. M. D. Lane. 2020. Institutional Twitter usage among U.S. geography departments. *Professional Geographer* 72 (2):219–237. doi:10.1080/00330124.2019.1653770.

Gong, X., Y. Lu, D. Beene, Z. Li, T. Hu, M. Morgan, and Y. Lin. 2022. Understanding public perspectives on fracking in the United States using social media big data. *Annals of GIS*. doi:10.1080/19475683.2022.2121856.

Gong, X., and Y. Wang. 2021. Exploring dynamics of sports fan behavior using social media big data - A case study of the 2019 National Basketball Association Finals. *Applied Geography* 129:102438. doi:10.1016/J.APGEOG.2021.102438.

Gong, X., and X. Ye. 2021. Governors fighting crisis: Responses to the COVID-19 pandemic across U.S. states on Twitter. *Professional Geographer* 73 (4):683–701. doi:10.1080/00330124.2021.1895850.

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

**Email contributions to:
unmGESalumni@gmail.com**

Support GES!

My name is Diana Martinez and I serve as Director of Development for the Department of Geography and Environmental Studies. Through my work, I have the opportunity to connect with alumni, faculty, and friends of GES; it is a privilege to listen and learn about each individual's unique background, connection to UNM, and passions. As I work towards building these important relationships, I also maintain a focus on cultivating vital funds for GES programs and student support.

My sincerest thanks to all of you who contribute to GES. Your support means so much and makes all of the important initiatives happening throughout the Department possible. A special thank you to those who donate to student scholarship/award funds – your gifts truly make a difference in the lives of our students.

Please visit the UNM Foundation website to learn about the many ways you can give back. If you have questions or would like to learn more about donating to the University, always feel free to reach out to me. It would be an honor to speak with you and help connect you with a meaningful initiative in need of your support.

With gratitude,
Diana

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L'Institut de géographie:
*Bandelier East and West,
eat your hearts out!*

Photograph by Lou Ann Garner
Malin on a recent trip to Paris.



FOUNDATION



Geography Awareness Week

Dear fellow Geographers, and Happy New Year!

The Department hosted the largest slate of events for Geography Awareness Week (GAW) in its history. GAW has been of great importance to our department, the next generations of geographers, and the role of geography at UNM. GAW has provided great opportunities for student outreach, and networking. GAW events showcased how geography can lead to opportunities in research, encompassing everything from physical and human geography to spatial science and Integrative Human Environment Dynamics. Through these events, we increased the chances of recruiting new students into geography and begin training the next generation of geographers, which are needed to maintain a healthy discipline and ensure its continuation.

As president of the Student Association of Geography and Environmental Studies (SAGES), my main focus was to revive GAW, which was dormant and a shadow of its former self due to the Pandemic. The pandemic made hosting the in-person events and networking opportunities impractical. GAW's revitalization was monumental, which would not have been possible without the student body, the Geography and Environmental Studies (GES) department, and our partner organizations. I want to give special thanks to my fellow SAGES officers **Annie Quintana** (vice-president), **Eric Brannen** (treasurer), and **Cassandra Huneau** (secretary), who stuck with me through it all. This was the largest and most impactful GAW in our Department's history, with major events each day of the week, and hundreds of students, faculty, and field experts participating! GAW ran from November 14th – 18th which consisted of an outreach events, an eCognition workshop, GIS Day, a film screening, and the annual Murphy Lecture.

GAW was a major achievement that everyone involved should be proud of: the Student Association of Geography and Environmental Studies (SAGES), The Department of Geography and Environmental Studies (GES), The Center for the Advancement of Spatial Informatics and

Research Education (ASPIRE), the R.H. Mallory Center for Community Geography, the Geography Alumni Chapter, the Earth Data Analysis Center (EDAC), University Libraries, and the Global Education Office. I give many thanks to all the guest speakers and external partners who made GIS Day possible. GAW showed the power of our department and opportunities in geography.

Here's to an even bigger and brighter Geography Awareness Week next year!

Theodros M. Woldeyohannes

President of the Student Association of Geography and Environmental Studies (SAGES)



[Theodros M. Woldeyohannes](#)
[1st year PhD student and Graduate Research Assistant](#)

Geography Awareness Week: eCognition Workshop

GES graduate students researching at the intersection of Geography, Geospatial Data Science, and Health

Theodros M. Woldeyohannes

President of the Student Association of Geography and Environmental Studies (SAGES)

On the second day of Geography Awareness Week, the University of New Mexico chapter of the American Society for Photogrammetry and Remote Sensing (ASPRS) hosted a workshop for eCognition software, an advanced platform for automating geospatial data analytics. The workshop took place in the Geography and Environmental Studies (GES) Spatial Computing Lab (SCL) in Bandelier East. I want to give special thanks to Mark Evans, the director of the SCL, and the GES students that helped to install the software and set up the lab for the workshop! The workshop was a great success, with high turnout and broad interest from students across campus. I believe that this event was a great showcase of the facilities of GES, and a direct example of geographic applications in action! The event was organized by GES graduate student Pratistha Sharma, with Lisa Sinclair of the Earth Data Analysis Center (EDAC) as the lead instructor.



Lisa Sinclair of EDAC leading eCognition workshop

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Geography Awareness Week - GIS Day

Theodros M. Woldeyohannes

President of the Student Association of Geography and Environmental Studies (SAGES)

The third day of Geography Awareness Week (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 two main events, a symposium, and an open house for UNM's new geospatial center, the Center for Advancement of Spatial Informatics Research and Education (ASPIRE).

Symposium

GIS Day started with a symposium that featured experts (and experts-in-training) from the University of New Mexico (UNM) and external partners giving lightning talks, 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. This was the largest GIS Day event in the Department's history, with 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 prospective geographers from local high schools. For example, over 80 students from Rio Grande High School (RGHS) attended the event!



SAGES President Theodros Woldeyohannes giving opening remarks

Planning this event was at times overwhelming but was in the end an excellent learning experience for the Student Association of Geography and Environmental Studies (SAGES) that will be passed down to future cohorts in our department. This was a large logistical undertaking that included setting up booths and event spaces for external partners, seating, poster mounting, providing refreshments and lunch, and setting up a stage for guest speakers. I want to give many thanks to the Geography and Environmental Studies (GES) students and faculty that helped to keep the event running smoothly, as well as all the staff of SUB Event Planning! The scale of this event really put Geography on the map and made people across campus well aware of our Department and student organization.



GES students and faculty who helped organize GIS Day

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The symposium began with the arrival of over 80 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 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, ate lunch in the GES Department, and went on a campus tour. The students showed high interest, and I hope this event inspired some to join the next generation of geographers!



Lightning Talk

With the RGHS students in attendance, GES's **Dr. Maria Lane**, the director of the **R.H. Mallory Center for Community Geography**, **Dr. Yan Lin** from GES, and I gave initial opening remarks that stressed the importance of geography, and the history of GIS Day and GAW. After the remarks the Lightning Talks began. These short 5-7 minute talks were given on various geographic topics, and included invited guest speakers as well as GES faculty and PhD students from GES and Earth and Planetary Sciences (EPS). I want to give special thanks to **Dr. Benjamin Warner** for moderating the talks and keeping us on schedule!

In the Atrium there were several booths set up from our external partners. Attending institutions included: Centennial Science and Engineering Library, Simtable, National Resources Conservation Service (NRCS) and New Mexico Geographic Information Council (NMGIC), Earth Data Analysis Center (EDAC), Souder, Miller and Associates, Central New Mexico Community College (CNM), Mid-Region Council of Governments (MRCOG), Albuquerque Bernalillo County Water Utility Authority, and Village of Los Lunas. SAGES and GES set up a booth 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 Centennial Science and Engineering Library, and an augmented reality (AR) interactive sand table set up by Simtable. These interactive exhibits attracted much attention from students passing by in the SUB.



Booths and exhibits in SUB Atrium

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 Google Earth VR using an HTC Vive 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 any location on earth using Google Earth.



Interactive VR exhibit

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The AR exhibit featured a sand table that displayed geographic information in real time. For example, attendees could manipulate the sand and topographic lines would be projected onto the sand in real time. Hydrological floodplains could be projected and mapped based on the topography of the sand. This was an excellent hands-on example of combining geographic principles with technology!

Poster Competition

As part of the symposium event, students presented posters in the Ballroom and competed for prizes judged by GES faculty and students, as well as staff from EDAC. Posters covered a range of various topics and featured research from both undergraduate and graduate students. Along with official judging, there was a People's Choice award, in which the public was invited to rank posters. The RGHS students participated in this judging, and I believe the posters were a very educational experience for them.

The top prize went to my own poster titled Geospatial modeling of potential exposure to contaminants from abandoned or inactive mines in Crow Nation that detailed some of my environmental exposure modeling work. The People's Choice award went to **Cassandra Huneau** for her poster titled Sustainable Water Resources Grad Challenge Research Communication Schooling that detailed methods of sustainable water resource utilization. Prizes for the posters, which included gift cards and ASPIRE branded mugs, were handed out by the College of Science Associate Dean and GES Professor **Dr. Christopher Lippitt** as part of the ASPIRE open house events.

Open House

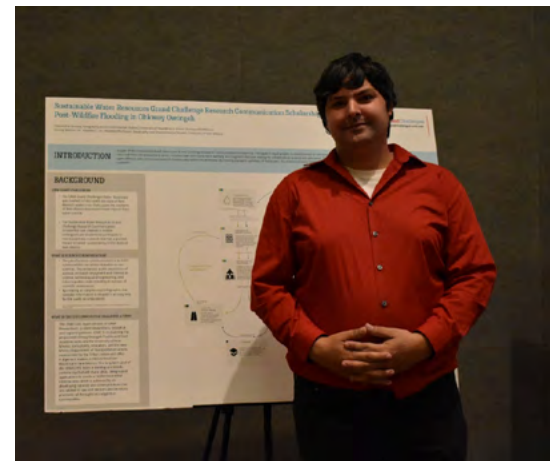
The ASPIRE open house (long delayed due to the Pandemic!) closed out the day, which included tours of the research facility and networking events. ASPIRE fosters integrative Geographic Information Science (GIScience) research and education and the application of cutting-edge geographic information technologies (GIT) at the University of New Mexico through cooperative research and education, the development of novel GITs, and expert data collection



Dr. Christopher Lippitt (left) giving remarks at ASPIRE Open House



AR Sand Table



Undergraduate student Cassandra Huneau with her poster

and analysis services. At ASPIRE, faculty and students with a diverse range of expertise and backgrounds in cutting edge research are brought together. Sub-fields include spatial modeling, geo-visualization, remote sensing, and spatial statistics. Collaboration is promoted both within ASPIRE and between ASPIRE and other research enterprises at UNM, allowing for the efficient acquisition and maintenance of shared resources to UNM and the greater Albuquerque and New Mexico community.

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As part of the Open House, students were invited to submit photographs to a photo competition hosted by the UNM Chapter of the American Society for Photogrammetry and Remote Sensing (ASPRS). Catering from Mazaya Café was provided. To close out the open house, College of Science Associate Dean and GES Professor Dr. Christopher Lippitt gave remarks on the development, importance, and impact of ASPIRE, and announced the winners of the Poster Competition. The Open House was a great showcase of the ASPIRE facilities and remote sensing equipment that GES has to offer! This was also a great networking opportunity, giving students, faculty, alumni, and field experts time to converse and get to know each other.

GIS Day was a major undertaking by the Student Association of Geography and Environmental Studies (SAGES), The Department of Geography and Environmental Studies (GES), The Center for the Advancement of Spatial Informatics and Research Education (ASPIRE), the R.H. Mallory Center for Community Geography, the Geography Alumni Chapter, the Earth Data Analysis Center (EDAC), University Libraries, and the Global Education Office. I give many thanks to all the guest speakers and external partners who made GIS Day possible.

Geography Awareness Week - Film Screening *Soil, Struggle, and Justice: Agroecology in the Brazilian Landless Movement*

Theodros M. Woldeyohannes

President of the Student Association of Geography and Environmental Studies (SAGES)

The fourth day of Geography Awareness Week was a film screening by Geography and Environmental Studies (GES) very own **Dr. Andreas Hernandez** in the Student Union Building (SUB) Theater. SUB Event Planning informed the Student Association of Geography and Environmental Studies the theater was under-utilized by student organizations; therefore, geography took advantage of that! The film, titled ***Soil, Struggle, and Justice: Agroecology in the Brazilian Landless Movement***, examines a cooperative of the Brazilian Landless Movement (MST) in the South of Brazil, which



*Dr. Andreas Hernandez answering questions
after the film screening*

struggled for access to land and then transitioned to ecological agriculture, or agroecology. After the screening, director Dr. Hernandez hosted a Q & A session with the audience. There was high attendance by GES students and people of various disciplines. We thank Dr. Hernandez for allowing us to screen his film and hosting a Q & A! This event was a great showcase of geography, its interdisciplinarity, and our renowned faculty!

Geography Awareness Week - Murphy Lecture

Theodros M. Woldeyohannes

President of the Student Association of Geography and Environmental Studies (SAGES)

The final day of Geography Awareness Week (GAW) 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 11th year of Murphy Lectures which started in 2011, representing the continuation of a proud legacy.

This year's lecture was given by [Dr. Juanita Sundberg](#) to a packed lecture hall in Mitchell Hall. The lecture, titled Unstable grounds: Desert soils and [boundary enforcement at the United States-México border](#) delved into how border patrol agents in the Sonoran Desert, driving over organism-rich soils while pursuing their missions, damage the convivial fabric of desert soil generating a powdery substance called moon dust.

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



Tire Drags used by the Border Patrol in Cabeza Prieta National Wildlife Refuge



Vehicle Barrier in California Gulch, southern Arizona

SPRING 2023 COLLOQUIUM SERIES IN GEOGRAPHY

Hosted by
UNM Department of Geography & Environmental Studies



DEPARTMENT OF
GEOGRAPHY &
ENVIRONMENTAL STUDIES

***All events are free and open to the public, they will be held from 3:00-4:00pm MST
in Mitchell 101 except for where noted *****

Friday, February 3

Emily Jones, PhD - Associate Professor, Department of Anthropology, Director, Zooarchaeology Laboratory, University of New Mexico

"Horses and humans in the early historic North American West"

Friday, February 17

Jonathan London, PhD - Professor, Department of Human Ecology/Community and Regional Development, Director, Community Engagement Core, University of California Davis Environmental Health Science Center

"Informality and the struggle for water justice in disadvantaged unincorporated communities"

Friday, March 10

Curtis Munger, PhD - National Leader for Soil Survey Standards, USDA-NRCS, Natl Soil Survey Center

"The USDA Major land resource areas - concepts and uses"

Friday, March 31

David Rachal, PhD - Geomorphologist/Geoarchaeologist at Tierra Vieja Consulting LLC

"From The Old Poop To The Real Scoop: The Truth About Lake Balls"

Friday, April 14

David Loy - Professor of Buddhist and comparative philosophy and authorized teacher of Sanbo Zen lineage of Japanese Zen Buddhism

"Ecodharma: a Buddhist Perspective on the Ecological Crisis"

Friday, April 28

Sara McBride, PhD, MPA - Research social scientist, U.S. Geological Survey

"Social Science and the ShakeAlert Earthquake Early Warning System"

**** Will take place in Northrop 122**

Tuesday, May 2

William Moseley, PhD - DeWitt Wallace Professor, Geography Department, Director of Food, Agriculture & Society Program, Macalester College

"Decolonizing African Agriculture: Prioritizing Food Security and Agroecology in African Development"

**** Location TBA**

Indigenous Cartographies @UNM

The R.H. Mallory Center for Community Geography will be hosting **Indigenous Cartographies @UNM** this month. Five experts will visit UNM and bring a mix of technical and conceptual expertise, academic and applied interests, and Indigenous and ally perspectives. They also have a broad range of regional expertise and interests. Center Director Maria Lane said, "I am so excited to bring this diverse group to UNM to spur our thinking about mapping as storytelling, as activism, and as justice work."

Visit communitygeography.unm.edu for event-specific information with more details. Both events will provide opportunities to learn from and be inspired by projects and ideas in conceptual cartography, participatory mapping, countermapping, data sovereignty and more.

Indigenous Cartographies @UNM | [Public Panel](#)

Monday, February 27, 2-4pm, Mitchell Hall Rm 122

Five experts will share insights on cutting-edge projects and ideas in Indigenous cartography. Students, faculty, staff, and community members are invited to learn from panelists and ask questions. This event is free and open to the public.

A free reception will immediately follow the panel, at UNM's University Club

Critical Cartography Q&A | [Open Classroom](#)

Tuesday, February 28, 11am-12pm, Ortega 335

The students and professor of UNM's Critical Cartography class will hold an "open classroom" to discuss concepts and methods in Indigenous cartography. Students will lead a Q&A with five experts from across North America, so everyone can learn from their insights and experience. This event is free and open to the public, and we invite students and faculty from other classes/departments to join us.

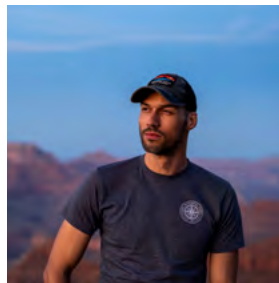
[Learn more about each panelist at our website:](#)



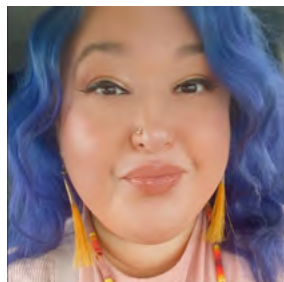
Christine Ami
Diné College



Deana Dartt
Live Oak Consulting



Rudo Kemper
TerraStories



Annita Lucchesi
University of Arizona



Reuben Rose-Redwood
University of Victoria

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 **R.H. MALLORY CENTER
FOR COMMUNITY GEOGRAPHY**

INDIGENOUS CARTOGRAPHIES

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FOR COMMUNITY GEOGRAPHY

**FEB
27**

PUBLIC PANEL



MITCHELL HALL 122



2 - 4PM

Five experts will share insights on cutting-edge projects and ideas in Indigenous cartography. Free and open to public engagement.

**FEB
28**

OPEN CLASSROOM Q&A



ORTEGA HALL 335



11AM - 12PM

UNM's Critical Cartography class will hold an "open classroom" to discuss concepts and methods in Indigenous cartography. Students will lead a Q&A with five experts in the field. Free and open to the public.

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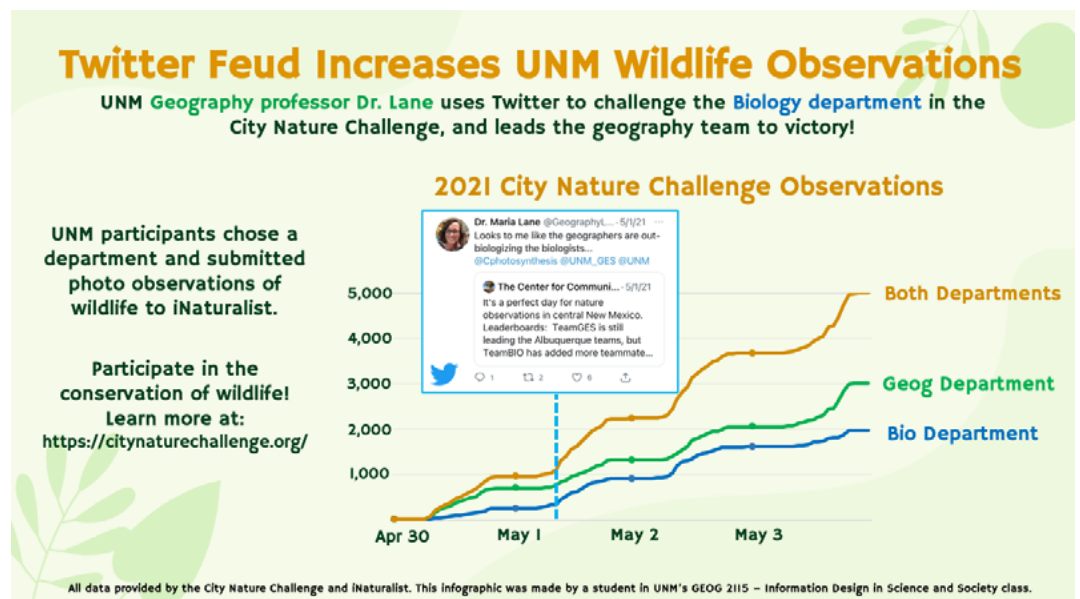
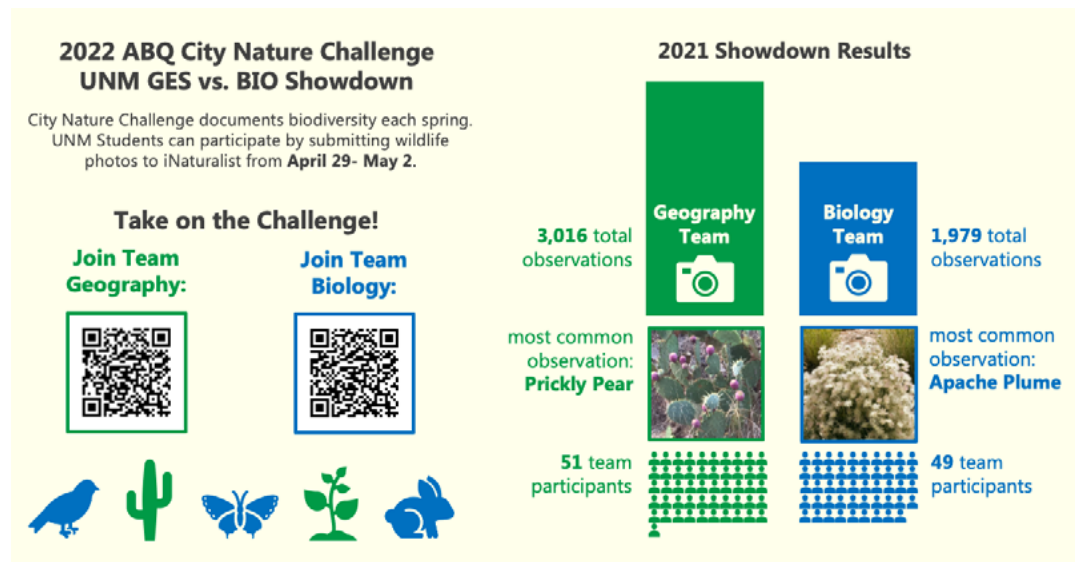
DEPARTMENT
OF HISTORY

GES is participating in the world-wide [City Nature Challenge](#) for the 5th year. The goal of this world-wide BioBlitz is to document urban nature. Laurel Ladwig (MS 20) is one of the co-organizers for CNC ABQ and GES has participated since 2019, Albuquerque's inaugural year.

We are once again challenging UNM's Biology department in the team competition. The goal of (small but mighty) [GES challenging Biology in 2021](#) was to engage the huge department in this community science project. Prior to 2021, GES was the only UNM department actively encouraging participation in the event. The Team GES victory in 2021 seemed to activate Biology's competitive spirit and they made a huge contribution to the 2022 effort, winning the [Team competition](#). GES placed 2nd place ahead of the Bernalillo County Master Naturalists and other groups.

Dr. Yolanda Lin received funding for community engagement from the Center for Community Geography to support CNC. Her *Information Design in Science and Society* class used CNC 2021 data to create infographics designed to recruit participants for the event. This year's class will be working with 2022 data from both the world-wide event and the Albuquerque team challenge.

[Join Team GES for CNC ABQ 2023!](#)



Info-graphics created for **CNC ABQ 2022** by Dr. Yolanda Lin's *Information Design in Science and Society*



The [ABQ Backyard Refuge Program](#) is one of the sponsors of City Nature Challenge ABQ and has a goal of working with the Center for Community Geography to create an urban biodiversity map.

Graduate students Daniel Beene (MS 19, current PhD student) and Laurel Ladwig (MS 20), made a [map](#) that shows that, as of 2019, most of the Bernalillo County observations were centered on open space areas and other public lands. We are encouraging participants to make observations in neighborhoods and urban areas to fill in the gaps in the map. **[Join the effort!](#)**

City Nature Challenge ABQ

City Nature Challenge is a friendly competition between urban areas across the world to see which communities can make the most nature observations!

Get outside and document wildlife in Bernalillo, Valencia and Sandoval Counties—help scientists collect important data and show the world how much biodiversity we have in the Middle Rio Grande valley around Albuquerque!



How to get involved

Create an account on [iNaturalist.org](https://www.inaturalist.org) or download the free the iNaturalist app. Join our project “City Nature Challenge 2023: ABQ”

[iNaturalist.org/projects/city-nature-challenge-2023-abq](https://www.inaturalist.org/projects/city-nature-challenge-2023-abq)

Check for event information here: [ABQcityNature.org](https://www.abqcitynature.org)



Instagram & Facebook: @abqcitynaturechallenge Twitter: @ABQcitynature

Observe! April 28 - May 1



Find Wildlife: It can be any plant, animal, fungi, slime mold, or any other evidence of life (scat, fur, tracks, shells, carcasses!) No humans or captive organisms.



Take Pictures of What You Find: Be sure to note the location of the critter or plant.



Share Your Observations: Create an iNaturalist account and upload your sightings on the iNaturalist app or website!



Identify! May 2 - 7: Help to identify what everyone found! Results are announced on May 8th!

CITY NATURE CHALLENGE IS ORGANIZED BY



CALIFORNIA
ACADEMY OF
SCIENCES



www.CityNatureChallenge.org

NM R.H. MALLORY CENTER
FOR COMMUNITY GEOGRAPHY

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 Diana.Martinez@unmfund.org.

[Please visit the UNM Foundation website.](#)



*Rio Grande at sunset, Montañito bridge
photograph by Laurel Ladwig*