FOR ALUMNI & FRIENDS

SPRING 2024 ISSUE

Spartan Geographer



Department of Geography, Environment, and Spatial Sciences MICHIGAN STATE UNIVERSITY

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On the Cover

Through a collaborative research program, MSU Geography is quickly seeking to become the leader in understanding and addressing the multitude of future challenges facing our Great Lakes coastal environments, especially those brought about by human activity and climate change.

The ultimate goal of our Coastlines and People Thematic Area is to connect science to action and create a Center for Great Lakes Research that will promote the sustainability of



our shorelines and the communities that not only cherish but depend on them.

The image featured on the cover is a view of the southern end of Ludington State Park gathered from a drone survey during the summer of 2021. The sandy beach and dunes of the park are consistently shifting in response to waves, winds, and fluctuating lake levels.

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Message from the Chair



"Advancing knowledge and transforming lives is core to our mission. Our faculty and students investigate vital issues around the world and right here in Michigan, securing millions of dollars in grants to support these investigations, publishing many articles, and presenting work at national and international conferences."

ASHTON SHORTRIDGE

PROFESSOR AND CHAIR

Dear Spartan Geographers,

Welcome to your 2024 Spartan Geographer! It's been quite a year, and for a range of reasons, our newsletter turned out to be fashionably late. The spring semester has just ended, as I write this, and campus is full of flowers and construction but light on students. We're in my favorite stage of spring – "warm but pre-bug" – an appropriate time to reflect on the past year.

2023 was marked by tragedy on campus: the February 13th mass shooting left three students dead and five others injured and impacted the entire community. In the aftermath, we mourned these losses and found ways to support one another. The memorial rally at the Rock on campus drew thousands, and many of us were uplifted by the solidarity of all Spartans. I've committed to finding creative ways to bring our community closer together – in divided times it is more important than ever to work to connect.

Advancing knowledge and transforming lives is core to our mission. Our faculty and students investigate vital issues around the world and right here in Michigan, securing millions of dollars in grants to support these investigations, publishing many articles, and presenting work at national and international conferences. You can learn more about some of these advancements in this newsletter.

Our faculty's research success is made possible through the efforts of our graduate students, academic staff, and support staff, who contribute in scholarship and in keeping our research programs humming along. We rank in the top three of all Geography departments nationwide.

Our undergraduate student majors continue to excel, with many, many more who discover Geography and choose to minor in our various offerings. We entered the Homecoming Parade with a departmental float, and thanks to the group efforts of our undergrads, grads, staff, and faculty, our float won first place in our division! It was a fun experience that got the word out about Geography to thousands of spectators. Our spring awards ceremony was an inspiring opportunity to learn what our talented students have been up to and to meet their families and friends. Current students and alumni are always welcome at this event: please consider coming next April to cheer on our students! Geography majors enjoy great professional opportunities in business, government, and academia: help get the word out to high schoolers and young adults about what Geography can offer! Geography is more rewarding for undergrads than ever: in 2023, thanks to donations from our alumni, we were able to double the number and award amount of our de Blij Scholars program!

MSU Geography's online certificate program is another integral part of the Department. In 2023, we piloted a number of new, exciting online courses, and just in the past few months, we launched a new certificate program in Geospatial Analytics. Geospatial technology is advancing rapidly with the growth of new visualization approaches, location-based services, and geoAl. I appreciate the opportunity MSU Geography has to help students across Michigan and around the world advance their careers through online geospatial education.

Several faculty reached career milestones this past year. Professor Julie Winkler retired after a 37-year career at MSU. A former President of the American Association of Geographers, Julie is well-known for her work in both climatology and women in academia. She frequently stops by the Department to work on ongoing research. Two faculty, Sue Grady and Liz Mack, were promoted to Full Professor in 2023. This promotion recognizes the significance of the contributions faculty make in the classroom, in research and scholarly impact, and in service to the university and community. Congratulations to both Sue and Liz! Finally, Erin Bunting and Stephen Przybylinski joined the tenure system. Neither are completely new to the Department: Erin had directed Remote Sensing & GIS since 2017, and Stephen joined us in 2022 as a fixed-term faculty member. We're excited that both are now Assistant Professors!

Geography Awareness Week (GAW) is one of our major opportunities to engage MSU and the public on geography. This past November, the keynote event featured community and environmental activist Jonathan Foret, a Louisiana Cajun with deep roots in that community. Life along the bayous has been getting much tougher due to the impact of frequent, violent hurricanes on a coastline that, due to rising seas and mismanagement, is increasingly unable to weather them. These communities, on the front lines of climate change, are now grappling with what resilience should look like. While the core message of his talk was sobering, Jonathan was a truly engaging speaker who gave us a sense of the unique cultural and physical landscapes of his region. Our students, faculty, and alumni had a wonderful day meeting with him. I hope that you can participate in the next GAW, which is coming up this November!

This brief introduction can only hint at MSU Geography's achievements in 2023 - read on to learn much more! I appreciate the work that Diane Huhn, our communications specialist, has done to produce this newsletter, and I also wish to thank Becky Menzel for her editorial work as well as all of our contributors. Go Green, and Go Geography!

Sincerely,

Ashton Shortridge

Share Your Updates With Us

We hope you find this newsletter informative and interesting. One way you can help keep it that way is to send us news about yourself. Share news about your career, family, or other things with your fellow alumni. Send an email to geo@msu.edu or a letter and we will insert it into the next issue of the newsletter. Thanks for helping make the newsletter even better.

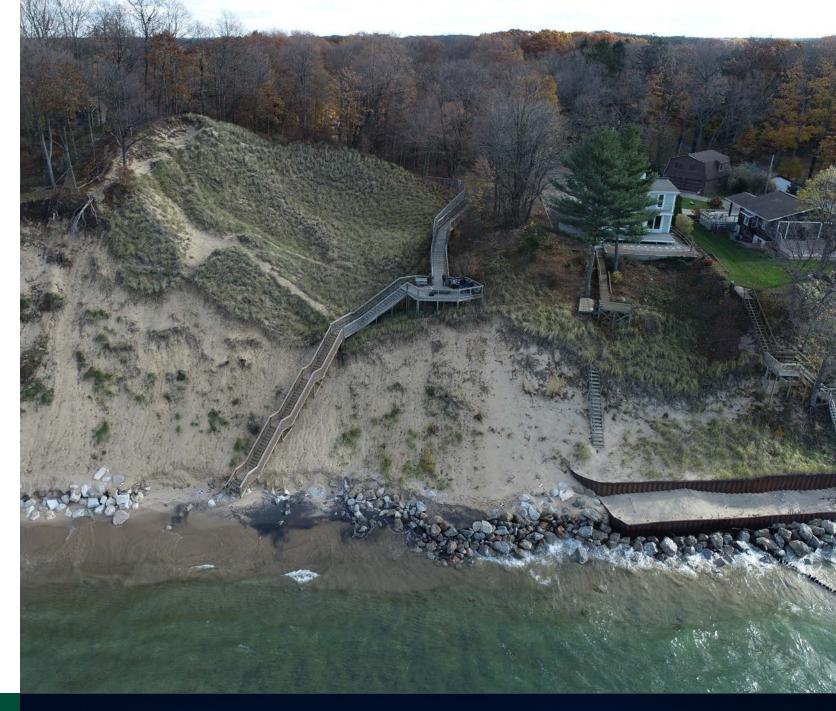






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Faculty Focus

GEOFFREY HENEBRY

PROFESSOR



Geoff Henebry,, Igor Sirodoev., and Monika Tomaszewska on a windy day in Cerchezu, Romania, July, 8. 2023. Photo: G.M. Henebry, 2023.

It has been a busy five years since I joined the department as a regular faculty member and six since I arrived at MSU as a Hannah Distinguished Visiting Professor! In January 2021, Professor Liz Mack and I established the Remittance Dynamics and Land Change Working Group within the Global Land Programme (GLP).

Remittances are funds sent by labor migrants to family and friends back home. Remittances are a major component of international monetary flows. Recently, annual remittances exceeded the global sum of overseas development aid and foreign direct investment.

In 2023, two papers emerged from our working group and its interactions with other GLP working groups. The first is a systematic literature review on remittances and land change published in <u>World Development</u>. It features 15 co-authors and 14 institutional affiliations from four countries. The second is a perspective piece published in <u>Landscape Ecology</u> urging land scientists to use the global shock of the pandemic to understand better the local and regional dynamics of land systems. This article features 14 co-authors with 19 affiliations from ten countries. Both papers are remarkable in that they were conceived, researched, drafted, and revised entirely online. One of the few bright spots emerging from the COVID years has been to show scholars how to collaborate effectively across time zones.

Another recent research highpoint is a study published in <u>Nature Communications</u> that used weather radar and other geospatial data to evaluate how lighting in urban areas has been



Monika Tomaszewska and Igor Sirodoev. survey a sunflower field in Bucinisu, Romania July 1, 2023. Photo: G.M. Henebry

affecting bird migration across the US. This NASA-funded research effort is led by a gifted assistant professor at Colorado State University.

In the summer of 2023, Professor Liz Mack, Dr. Monika Tomaszewska—a post-doc in the Center for Global Change and Earth Observations (CGCEO) at MSU—and I headed to southern Romania for the first field campaign to support a project funded by the NASA Land Cover Land Use Change program. It explores how institutional incentives in the European Union's Common Agricultural Policy have influenced agricultural land cover change in Romania. Romania is an interesting case: they decided to restitute land after the collapse of the socialist regime in 1989, which abruptly led to large fields on state farms and collectives being finely subdivided, resulting in lower yields and reduced incomes. Unlike the US, there is no annual geospatial cropland product for Europe or Romania. Our collaborators, from Ovidius University of Constanța and the University of Bucharest, include Professor Igor Sîrodoev, who was a Fulbright Fellow with my group for six months in 2021-2022. We return this summer to survey western Romania.



CARIN workshop in Issyk Kul, Kyrgyz Republic in September 2023.

Finally, at the conclusion of nearly a decade of research in montane Kyrgyzstan, I co-organized and co-hosted with Professor Sagynbek Orunbaev of the American University of Central Asia (AUCA), a workshop of the <u>Central Asia Regional Information Network</u> (CARIN) on the shores of Issyk Kul. The workshop was preceded by scientific, technical, and professional skills training for a select group of early career scientists from Kazakhstan, Kyrgyzstan, Mongolia, and Uzbekistan at AUCA in Bishkek.

Faculty Focus

DAVID ROY

PROFESSOR

Dr. David Roy, director of MSU's Center for Global Change and Earth Observations (CGCEO) and Professor of Geography, had a busy year catching up on delayed meetings due to the COVID pandemic, including those in Japan, Hawaii, Thailand, Canada, U.K., and the Democratic Republic of the Congo. He was awarded several new NASA-funded projects that are concerned with using satellite images and computational techniques to study the terrestrial surface.

Notably, he was named a new member of the NASA Global Ecosystem Dynamics Investigation (GEDI) science team. The NASA GEDI instrument is the first Light Detection and Ranging (LiDAR) sensor designed to measure vegetation height from space and provides data to address terrestrial carbon cycle science, biodiversity, and ecological science questions. His GEDI research builds on another project funded by a San Fransico-based company, Wildlife Works, who are leaders in the emerging marketplace for carbon offset accounting to provide sustainable funding mechanisms for biodiverse forest protection and community development.

Dr. Roy and his MSU colleagues, former Ph.D. students of the Geography Department, Drs. Myung Sik Cho and Herve Kashongwe are using GEDI data to quantify tropical forest regrowth and the role that regrowing forests play in the global carbon cycle. The research is focused on a tropical forest site in the Democratic Republic of the Congo, where the team has undertaken challenging but rewarding fieldwork for the last several years.

The research is particularly relevant in a time when human activity and climate change are increasingly recognized as having local to global impacts. Nearly half of the world's tropical forests are regrowing after being disturbed, and if left to regrow, they provide a low-cost mechanism for carbon sequestration and an effective pathway to help mitigate climate change. More project details are provided at https://sites.google.com/view/msu-drc-forest/home.



Dr.s Roy, Sik Cho, and Kashongwe (left to right foreground), with Wildlife Works forest officers (background), crossing Lake Mai Ndombe to access the project site.



Musanga cecropioides pioneer tree species, and cleared land covered by weeds, shrubs, and cassava in the foreground, Mai Ndombe project site, Democratic Republic of the Congo.

NATHAN MOORE

ASSOCIATE PROFESSOR

It's been an exciting few years since last I wrote for the newsletter. I resumed Graduate Program Director duties for one more year and I'm glad we have such a strong program. This year we graduated several students and I am continually impressed by all the good work underway. Grad students truly are the engines of discovery.

I continue to work in east Africa, focusing on assessing land use change and its impacts on regional climate. I have been fortunate to join Emilio Moran again on a grant to model and test out new climate-smart land use strategies in Amazonia, and I am excited to get back to visualizing climate alternatives.





Closer to home, I am getting obsessed with waste. I have been working with Bill McConnell and some undergrad researchers on boosting pizza box recycling on campus (photo: Jerome Hamilton with our sign). I grew up thinking that any grease in a pizza box makes it trash. The cardboard recyclers tell me I'm wrong—just dump the chunks! So we are testing out messaging and figuring out where to place bins for maximum capture. Along those lines I am also measuring how to reduce dorm shower use with the Clean Conscience Initiative—hot water has a big carbon footprint and I am working with faculty and Social Science Scholar undergrads to test what messaging will change shower time behaviors.

On the personal side, I will have an empty nest for the first time in 23 years. It's almost too much free time!

Faculty Focus

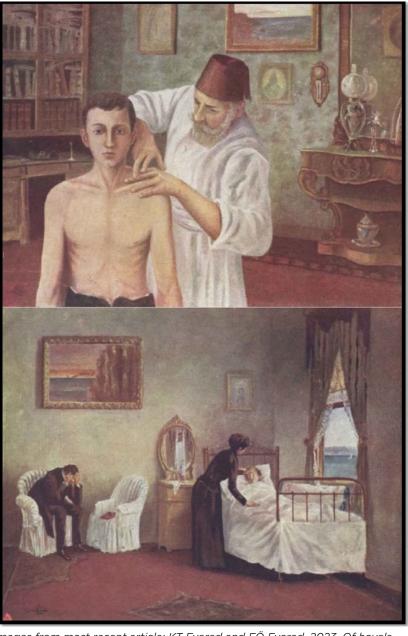
KYLE EVERED

ASSOCIATE PROFESSOR

In the spring 2023 semester, Kyle Evered taught GEO-151 Introduction to Human Geography for a class of 105 students. He always enjoys teaching this lecture course because of all the students who may have not yet taken a geography course or who think of geography as anything beyond a K-12 map guiz or a category in barstool trivia. In the same semester, he also taught his GEO-339 Geographies of the Middle East and North Africa course for a class of over 60 students. Offered every other spring, it is one of his favorites because it allows him to ground his coverage in the region's historical geographies—thus encouraging students to look beyond the headlines, on the one hand, and because it always feels like new class due to shifting ways in which geographies of the past continue to resonate amid today's regional dynamics of both cooperation and conflict. Additionally, he supervised graduate students' independent studies and—with the much-appreciated help of Ph.D. student Mehmet Eroğlu—hosted political geographer Natalie Koch of Syracuse University, who delivered two talks on her research in Central Asia and her current book on Arizona-Saudi connections involving water in arid lands.

Just as the semester ended, he and his collaborator/co-conspirator/spouse Emine Ö. Evered (Associate Professor of History at MSU) attended the May 2023 meeting of the American Association for the History of Medicine (AAHM) to present a paper in a session titled "Medicalizing Deviance". Their paper, titled "Medicalized Alcoholism and the Making of Turkish Prohibition," examined the role of physicians in the country's short-lived prohibition as the republic began to establish itself amid the Ottoman Empire's collapse. Though religionists and traditionalist MPs of the nascent state's parliament initiated the

push for the ban, it would not have passed without support from a progressive medical community. If you're interested in learning about another instance of temperance pushed too far—beyond the case of America's Prohibition, check for Emine's forthcoming book on alcohol, prohibition, and identity in Turkey, which should be available by October 2024.



Images from most recent article: KT Evered and EÖ Evered, 2023, Of hovels and homes: consumption, class, and domestic space in early republican Turkey, Middle Eastern Studies, https://doi.org/10.1080/00263206.2023.2294775

As the summer progressed, Kyle, Mehmet, and Katie Brown attended a very special political geography conference at the University of Oregon in Eugene, OR, where he was to present the paper "Surveying people, places, and consumption: initiatives of nation-building and territoriality in the early republican Turkey." The paper drew on his collaborative work with Emine and analyzed historical geographies of disease and public health in late Ottoman and republican Turkey. Beyond featuring many distinguished geographers, the conference was also a wonderful celebration of Kyle's Ph.D. Co-Advisor, Alexander B. Murphy and his career as he contemplates retirement.

In the fall 2023 semester, Kyle taught an almost 50-student section of GEO-335 Geography of Latin America and the



Kyle and Mehmet in Alec Murphy's backyard, Eugene, OR (Photo courtesy of Katie Brown)

Caribbean. It's a course he always enjoys as it allows him to re-engage with the region he first studied as an undergraduate and early graduate student at UW-Madison. Later in the semester, Kyle was slated to attend the Middle East Studies Association (MESA) annual meeting in Montréal, Québec to present the paper "Narrating the nation, panel-by-panel: a popular geopolitics of identity construction in Turkey's Cold War comic books" and participate in a panel. As 2023 drew to a close, he then turned to preparing a comics-related poster and a paper for the American Historical Association (AHA) annual meeting in San Francisco, California, scheduled just after New Year's Day, 2024.

Research In Action: Building Inclusive Leaders

DAHLIN LAUNCHES SPECTRAL ECOLOGY FIELD SCHOOL



The 2023 SPEC School Cohort on the steps of Lewis Hall at the Mountain Lake Biological Station.

As Natalia L. Quinteros Casaverde was scrolling through messages last fall on the social media platform formerly known as Twitter, a post from Kyla Dahlin immediately set her heart aflutter. Dahlin, an associate professor with the Department of Geography, Environment and Spatial Sciences at Michigan State University, was using the platform to introduce the Spectral Ecology Summer School (SPEC School), a brand new initiative she was spearheading aimed primarily at graduate students and early postdoctoral researchers interested in not only incorporating remote sensing tools into their ecological research but also gaining valuable training in inclusive leadership.

"I knew right away that SPEC School was just the opportunity I had been looking for to better incorporate remote sensing data into my research. I am especially interested in the spectral taxonomy and ecology of plants, and I felt this kind of data could add so many new and important layers to my research," said Quinteros Casaverde, a researcher at the New York Botanical Garden who recently earned her Ph.D. from the Graduate Center at the City University of New York and the New York Botanical Garden. "As a member of the Latinx community. I also felt that the focus on diversity, equity, and inclusion would really give me an opportunity to talk to people about things I'm not always able to in my everyday work and research activities. And, I was happy that those discussions enriched my experience. helped me feel part of an extended community, and gave me hope for the future."

Inspired by other ecologically-focused summer courses such as FluxCourse, IsoCamp, and



Natalia L. Quinteros Casaverde and SPEC School participants brave the rain to collect field samples. (Photo courtesy: Natalia L. Quinteros Casaverde)

the Complex Systems Summer School, Dahlin knew she wanted SPEC School to provide participants with hands-on experience in field and imaging spectroscopy, lidar and other airborne remote sensing products available from the National Ecological Observatory Network's Airborne Observation Platform (NEON AOP), "Across the sciences, however, I've found that early career researchers are not always prepared well for the leadership roles they are expected to take on as researchers. professors, or wherever their paths may lead," said Dahlin. "That's one of the reasons I wanted another core goal of SPEC School to be about building a leadership toolbox to enable an inclusive 21st-century environmental data science workforce."

For participants like Jocelyn Navarro, a Ph.D. candidate at the University of Arizona, Dahlin's

vision of combining leadership training with highly technical scientific research was a welcome addition. "This experience was lifechanging and provided me with skills and confidence to apply remote-sensing techniques to my dissertation work," said Navarro. "I also learned other skills that will allow me to become a faculty member that truly cares and takes intentional steps to make Ecology a more equitable and diverse science."

Ny Aina Rakotoarivony, a Ph.D. student in Geography at Oklahoma State University, found that SPEC School was an excellent opportunity to learn more about using geospatial technologies to answer complex ecological questions such as the impact of plant invasions. While applying to SPEC School, Rakotoarivony was excited by the activity descriptions. "But the experience was much

more than I had expected," said Rakotoarivony. "I learned a lot about remote sensing data analysis, collecting leaf-level spectroscopy data, and how to conduct fieldwork in forest ecosystems. Beyond the academic part, however, I also learned a lot about leadership, data science, teamwork, and just myself as a researcher."

SPEC School is currently funded primarily through a National Science Foundation (NSF) CAREER award that Dahlin received in 2021 from the Division of Environmental Biology Ecosystems Science Program. Among NSF's most prestigious, such CAREER awards support early-career faculty who have the potential to serve as academic role models in research and education and to lead advances in the mission of their department or organization.

"I am grateful for the funding from NSF and additional sponsors such as Spectra Vista Corporation (SVC) and our generous individual donors. With these dollars, we were able to fully fund 15 participants this past summer and believe we can continue to do so for at least two more years," said Dahlin. "Of course, our goal is to continue SPEC School well into the future, and we hope to find new ways to offset costs for participants as much as possible when our current funding runs out."

The NSF grant pays for supplies, equipment, instructors, housing, meals, and travel to the University of Virginia's Mountain Lake Biological Station (MLBS), where the weeklong in-person experiences take place. "We chose MLBS because it's a remote, but still accessible, field site," explained Dr. Adriana Uscanga, a postdoc with MSU Geography and MSU's Institute for Biodiversity, Ecology, Evolution, and Macrosystems (IBEEM) and the assistant director for SPEC School.

The station is located in the Appalachian Mountain Chain in southwestern Virginia and is situated on the elevated divide between



SPEC School participants Kathryn Wheeler, Isamar Cortès, and Yetunde Rotimi work to remotely access NEON data from the Lewis Hall library at MLBS.



SPEC School participant Okikiola Michael Alegbeleye collects a leaf reflectance spectrum from a striped maple (Acer pensylvanicum) leaf using a Spectra Vista Corporation (SVC) spectrometer and leaf clip. (Image courtesy: Okikiola Michael Alegbeleye)

the Atlantic and Mississippi drainage basins. "It's also characterized by abrupt changes in environmental gradients and fine-scale variances in ecological niches, making it an excellent research location. But, probably most importantly, MLBS is part of the National Ecological Observatory Network, or NEON for short."

NEON is a network of sites that collect massive amounts of long-term, open-access ecological data. Such data is invaluable to ecologists working to better understand how ecosystems are changing across the U.S. to address some of the most pressing issues we are facing on our ever-changing planet.

"We are looking forward to welcoming a new SPEC School cohort at this unique and special research site next summer," said Dahlin. "We are also hoping for better weather. Unfortunately, it rained the entire time we were there, which definitely impacted our planned field activities. But I was so pleased



Dr. Adriana Uscanga demonstrates proper use of the Air Powered Tree Access (APTA) line launcher for collecting upper canopy foliage while Dr. Kyla Dahlin and SPEC School participant Jocelyn Navarro watch.

how everyone was willing to be flexible and dedicated to pressing on to conduct valuable research indoors."

Applications for the 2024 SPEC School closed at the end of 2023. The in-person session of SPEC School is scheduled for June 16-22, 2024.

While SPEC school is aimed at researchers interested in utilizing remote sensing tools, prior experience with remote sensing is not required. There are also no citizenship restrictions, but international participants will need to fund their travel into the U.S. For more information and application details for future sessions, visit www.specschool.org.



Within the MSU College of Social Science, a team of researchers led by GEO's Dr. Ethan Theuerkauf and his Coastal Processes and Geomorphology Lab are working to address some of the Great Lakes region's most pressing coastal hazards. This thematic research area. entitled Coastlines and People, is led by Dr. Theuerkauf, and is focused on conducting fundamental coastal change research with direct management and decision-making application. Along the shores of the Great Lakes, changing lake levels and storm events combined with ever-increasing human impacts lead to hazards such as beach and dune erosion, flooding, and bluff failure. While these sorts of coastal geomorphology issues are well-studied along ocean coasts, they are far less understood in the Great Lakes. That is where Dr. Theuerkauf's lab comes in. Using state-of-the-art technology such as drones. remote-controlled boats with sonar, and even iPads with lasers, Theuerkauf's lab documents how the coast is changing in response to these processes and then works with coastal decision-makers to explore solutions.

One of the biggest issues that the team is working on right now is predicting whether Michigan's beaches will come back after the high lake levels that were experienced over the past decade. During this time, sand from the beaches and dunes was eroded by waves during storms and carried out into the lakes, where it can either be deposited close to the shore, in bars further offshore or even carried down the shore to another area. Theuerkauf's team has been out along Michigan's coast with drones and boats mapping the pathways of this sand and using that information to better understand what might happen to that sand in the future. By inputting these field data into computer models, his team can predict whether the conditions that would move sand back on the beach are likely to occur or not, which is critical information for decisionmakers who need to determine what sort of shore protection strategy they should employ. Along some stretches of coast, the sand is already starting to come back, and along these areas, time and sustained lower lake levels will work together to rebuild the beaches. Other

areas, particularly where shore armoring such as sea walls and revetments occur, the eroded sand was pushed farther offshore and is either not able to return or is very slowly moving onshore. Theuerkauf's team then works with state agencies, such as Michigan's Office of Environment, Great Lakes, and Energy (EGLE), federal entities, such as the National Park Service, and local township and city officials to share these findings and help guide decisions that preserve our Great Lakes shorelands now and into the future.





In Memoriam

GARY MANSON

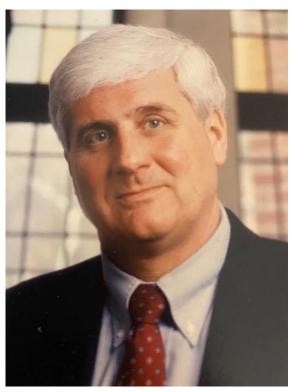
PROFESSOR EMERITUS

Gary Manson, age 86, of Haslett, Michigan passed away peacefully on Thursday, December 14, 2023 at the Hospice of Lansing Stoneleigh Residence after a short illness.

Gary was born on August 5, 1937 in Monona, Iowa, the son of Leslie E. Drallmeier and Betty J. Snyder. At the age of 19, Gary married his high school sweetheart, Patrosenia (Pat) Nonog and they were happily married for 62 years until her death in 2018. They enjoyed each other's company while traveling, fishing, cooking, entertaining friends, and loved MSU football and basketball. Gary had a knack for always winning Trivial Pursuit without help and loved to read and write. Gary received his undergraduate degrees from the University of Montana and his masters degree and PhD from the University of Washington in 1969. Upon graduation, Gary spent 36 years teaching and holding several academic leadership positions at Michigan State University concluding with his retirement in 2006 as the Acting Dean of the College of Social Science.

Gary is survived by his daughters, Valerie Hoag (Rob), Karen Manson (Scott), Barbara Schaibly (Kelvin); son, Paul Manson (Julie); brother and sister-in-law, Dwayne and Shirley Manson; six grandchildren; and six great-grandchildren.

Contributions in Gary's memory may be made to the Stoneleigh Residence & Hospice of Lansing, 3186 Pine Tree Rd., Lansing, Michigan 48911.



ELDOR C. QUANDT

PH.D., CLASS OF 1971

Eldor Clemens Quandt Jr. died Wednesday, April 26, 2023, at the age of 83 in Portage, Michigan. El was born to Eldor Sr. and Esther (Bartsch) Quandt on August 22, 1939, in Mayville, WI.

"Eldie" grew up in Mayville, WI on the Quandt farm, which still remains in the family today. He and his siblings knew hard work and learned early in life that chores had to be done every day. In attending Mayville High School, El played on multiple sports teams and lettered in football, baseball, and basketball. He talked often about remaining in touch with teammates and coaches and made all attempts at going back for every high school reunion.

Dr. Quandt received his B.S. in Geography from Valparaiso University in 1961. He then attended Kansas State University for his M.S. in Geography and graduated in 1963. He joined Western Michigan University's Geography Department as an instructor in 1967 and then as an assistant professor in 1969. El went on to obtain his Ph.D. from Michigan State University



in Geography in 1971. He became an associate professor in 1978 for WMU and then accepted the position of Chairperson in 1986 which he held for the next 14 years until his retirement in 2000. He had well over 15 different publications in his career and was credited with helping to develop the Travel and Tourism program at WMU. El also guided trips for the department to places such as the Dominican Republic, Haiti, and Brazil. After retirement, Eldor continued to stay active and involved in the domain of tourism and travel. El assisted with the feasibility study for the Kalamazoo Air Zoo, worked for 15 years with the Convention and Visitors Bureau on the "Yes there is a Kalamazoo" campaign, and had a part in so many other impact studies, reports, and presentations both for Kalamazoo and the state of Michigan. As if that was not enough, El decided to obtain employment on multiple cruise ships. He was the geography liaison for passengers, teaching them about the culture, economics, and geographical information on the areas they traveled. This included places such as Panama, Cuba, and Norway.



In Memoriam

Honors & Awards

ROBERT W. MCKAY

B.S., M.S., MSU GEOGRAPHY

Robert W. McKay died October 2, 2023. "Scotty" was a fixture in the MSU geography department throughout much of the 1970s. A cartographer by inclination and training, he earned both bachelor's and master's degrees in geography from MSU. His master's thesis was an innovative work involving the use of laser holography to produce three-dimensional maps. Scotty led the technical production of the Atlas of Michigan, a project undertaken by MSU to celebrate the nation's bicentennial.

Scotty was creative, original, highly accomplished, and always ahead of his time. He was an excellent conversationalist, a colorful raconteur, and a prankster par excellence. Many of his colleagues from grad school will recall confabs with Scotty in the TA offices on the fourth floor of the NatSci building, often going on through the wee hours. He had wide-ranging interests extending down unusual pathways, as with the completely electric vehicle he built and operated on the roads of the Lansing area in the mid-1970s. It would be difficult to forget his GUANOgram ("Geography Under a New Order) newsletter, the SHAM (Symbolic Heuristic Analog Model),



or his lampoon ("The Seven Traditions of Geography") of William Pattison's famous paper, all meticulously presented in the guise of publications from academic outlets.

McKay held multiple and diverse positions, including able seaman on Great Lakes and oceangoing freighters, a professor at Portland State University, work on New York State's legislative redistricting boundaries, and for more than two decades as a cartographer at the headquarters of the United Nations in New York. He traveled widely in the latter position, working on solutions to boundary disputes in Africa, Europe, and Asia. Some of the assignments were perilous, including riding elephants through mine fields left behind after the Cambodian civil war. After retirement in 2010 McKay returned to his hometown of Vassar, Michigan, where he held local high-level positions, including commissioner of the Vassar Parks and Recreation Department and the Vassar City Band. He often contributed reports to local newspapers, sponsored a Little League baseball team, and played trombone in several area bands.

Scotty McKay was brilliant and eccentric, and leaves an impactful legacy extending around much of the world. He will be sorely missed by those fortunate enough to have known him.

BY: FRITZ NELSON M.S., MSU GEOGRAPHY, 1979

DAVID ROY

HIGHLY CITED RESEARCHER

Congratulations to Dr. David Roy with the Geography Department and the Center for Global Change and Earth Observations on being listed as one of the most highly cited researchers in the world. This is the fifth year consecutive year that Dr. Roy has received this distinction. The Highly Cited Researchers List compiled by Clarivate Analytics identifies individuals from across the globe who have demonstrated significant and broad influence in their chosen field or fields of research over the past decade.

According to the report, this list is drawn from the highly cited papers that rank in the top 1% by citations for field and publication year in Clarivate's Web of Science citation index. Of the world's population of scientists and social scientists, highly cited researchers are 1 in 1000, with 6938 highly cited researchers worldwide in 2022.



CHEYENNE LEI

REED BIOENERGY SCIENCE AWARD

Congratulations to MSU Geography Alumnus Cheyenne Lei on being awarded the 2023 Jennifer L. Reed Bioenergy Science Award from the Great Lakes Bioenergy Research Center (GLBRC). This prestigious award is given annually to an early career woman who has shown immense leadership in their research and significantly expanded the Great Lakes Bioenergy Research Center's research portfolio. The award, in its sixth year, honors Jennifer Reed, a microbial scientist and GLBRC project lead who died in 2020.



Lei earned her doctoral degree from Michigan State University in 2022 studying how roots change as crops are rotated and root production in bioenergy crops, as well as surface light reflectance (also called albedo) from different agricultural activities and their effects on climate under Jiquan Chen. Still a GLBRC collaborator, Lei is a research fellow with the Institute of Global Change Biology at the University of Michigan, where she works to synthesize the research from her doctorate and better understand how it impacts Michigan and the contiguous United States.

GUO CHEN

PROFESSIONAL ACHIEVEMENT AWARD

Guo Chen, an associate professor received a professional achievement award from the MSU Center for Gender in Global Context and the MSU Women's Student Services. Individuals nominated for the Professional Achievement award demonstrate a unique drive and passion within their career and positively influences the culture of Michigan State University.



Honors & Awards

MSU GEOGRAPHY BRINGS HOME BEST DEPARTMENT AWARD AT HOMECOMING



The Department of Geography, Environment and Spatial Sciences was thrilled to welcome our incredible MSU Alumni and Grand Marshall Molly Brennan back to campus for this fall's homecoming festivities during the week of September 18-23, 2023. Especially exciting was a win for our very first official participation in the MSU Homecoming Parade. A great mix of students, staff, faculty, family members, and alums donned our new department t-shirts and joined us as we wound our way through downtown East Lansing and the MSU campus on Friday evening.

With a theme of "From City to Sea, Geography is the Place to Be," we enjoyed promoting the discipline of Geography with a fun and unique "boat float." With Sparty at the helm, the research vessel used by Dr. Ethan Theuerkauf and the MSU Coastal Processes and Geomorphology Lab and the accompanying tow vehicle was adorned with cityscapes, banners, world flags, globes, and a host of geospatial equipment such as drones and weather stations, to name just a few. Our energetic parade crew participants walked, rode, rolled, and even flipped their way through the streets of East Lansing while thousands of spectators watched. We distributed goodies to the kids, including special squeezable globes complete with fun geography-related facts.

We were thrilled to learn that the judges voted us the Best Campus Department! Thank you to everyone who helped make this accomplishment a reality. We can't wait for next year and invite our friends, family, and all Spartan Geographers near and far to join us. We will share details as they become available, so please stay tuned.











2023 GEO-GTU Awards



The Department of Geography, Environment, and Spatial Sciences at Michigan State University offered congratulations to our 2023 GEO Award recipients recognizing student academic achievement.

College of Social Science - Outstanding Senior in GEO | Josh Pepper

The Department of Geography, Environment and Spatial Sciences at Michigan State University proudly announced that Josh Pepper was named the MSU College of Social Science Outstanding Senior in Geography. A native of Quincy, Michigan, Josh graduated last spring with two bachelor's degrees and two minors, a B.S. in Geographic Information Science, a B.S. in Environmental Geography, a minor in Health & Environment, and a minor in Social Science Quantitative Data Analytics. During his time at MSU, Josh also pursued opportunities to become more involved in the discipline of geography by becoming involved in Gamma Theta Upsilon (GTU), the international honor



society in geography, and also served on the Dean's Advisory Committee for the College of Social Science. Josh is currently pursuing a Master's degree in Geography at the University of Tennessee-Knoxville.

Marjorie and Lawrence Sommers Geography Graduate Fellowship for International Research & Travel | Xiumin Cai and Mehmet Eroğlu

Mehmet Eroğlu received the Sommers Travel Award, which significantly supported his summer research endeavors in 2023. Mehmet conducted his fieldwork in Zonguldak, Turkey, as part of his dissertation project examining the decline of the coal industry in the region. During his fieldwork, Mehmet explored sites with historical and cultural connections to the coal industry, interviewed local residents of Zonguldak, and conducted archival research to better understand the area's deindustrialization. Mehmet said he believed that this award was essential for the successful completion of his summer research.



Xiumin (Mia) Cai said she was honored to be given this award and opportunity. "As a f

be given this award and opportunity. "As a first-year student here, it meant so much to me, and I would like to extend my sincere thanks to Dr. and Mrs. Sommers and the members of the committee who took the time to review my application and trust me for this award," she said. Mia took this opportunity to conduct a field survey for her thesis research in Hainan, China, to better understand the implications of the land transition to the livelihood of minority-dominant farmers and communities.

Daniel Jacobson Memorial Scholarship in Cultural Geography | Christian Gordon

The Daniel Jacobson Scholarship is awarded to an outstanding student at the Junior level, majoring in Human Geography or Economic Geography and especially interested in the cultural geographies of Native Americans and other marginalized groups and geography education.

Christian Gordon said he was "incredibly grateful and honored to be the 2023 award recipient of the MSU Geography Departments' Jacobson Award. Moving forward with my career, he said he will do his very best to spread the message of Daniel Jacobson and hold our shared values as a compass for my actions, striving to make a positive impact in the field of geography and beyond."



2023 GEO-GTU Awards

James Potchen Awards in Geography for Graduate and Undergraduate Students (Undergraduate and Graduate Student of the Year) | Jessica Davis and Chris Baish

The E. James Potchen Award was established in 2008 by Harm de Blij to fund yearly cash awards for one outstanding graduate and one undergraduate student who has demonstrated exceptional leadership and service to the Department of Geography, Environment, and Spatial Sciences. The students will have shown remarkable professionalism and leadership skills in activities within both the department and the campus community.

Jessica Davis conveyed her overwhelming gratitude to be chosen as a recipient of the 2023 Dr. E. James Potchen Undergraduate of the Year Award. "It was an absolute honor to receive this award and be a part of such an amazing geography community here at Michigan State University," she said.

Chris Baish was honored to be named as the 2023 Potchen Graduate of the Year Award recipient. "Having been a member of the unit for five years, it was very rewarding to have my hard work and dedication recognized. I applied the associated funding toward my dissertation research," he said.



Owen Gregg Endowment for Global Climate Change Research | Clayton Sigmann and Vasily Tolmanov

The Owen Gregg Endowment was established in 2012 to support global climate change science

research in the MSU Department of Geography. Undergraduate majors or graduate students in Geography pursuing studies that make significant progress toward understanding climate change, its causes, and impacts are eligible to apply.

Clayton Sigmann, a master's student working on climate change issues in the tourism industries of northwestern Michigan, said he was "greatly appreciative to receive the Owen Gregg Climate Change Research Award. It represented a landmark not only in my education but also in my progress throughout the Geography department." Clayton used the award to support the presentation of his



results at the 66th Annual International Association of Great Lakes Research (IAGLR) Research

Conference in Toronto, Ontario, in early May, 2023. "Receiving this award further supported my educational process as a form of recognition. This left me encouraged to continue my educational journey and take on the diverse problems in Geography."

Vasily "Vasya" Tolmanov is a Ph.D. student specializing in physical geography with a special

interest in interest assessing the current state of permafrost and periglacial systems under various impacts, both natural and anthropogenic. He was honored to receive the Owen Gregg Climate Change Research Award and planned to use it to help support his research efforts. Vasya has studied permafrost for more than eight years, and he is fascinated by the complexity of permafrost-climate interactions. "Permafrost is a "product" of the climate and all the changes that are happening now, including warming the permafrost temperatures, and degradation of the permafrost systems directly related to the changes in the global and local climate,"



he explained. "It impacts human life too and threatens the objects of infrastructure and changes the way of life for the many native peoples living in the Arctic." Vasya used the funds from the Owen Gregg Climate Change Award to work on a study looking at the active permafrost layer and its spatial variability. "The award motivated me for future work and helped me to prepare for an extensive 2+ months of the field season. I am very grateful to our department for providing many opportunities for graduate students and to Owen Gregg for the continuous support of this award. I will keep working hard towards the completion of my degree and hope to contribute more to the advances of permafrost studies," he said.

The de Blij Geography Scholars | Corbin Paules and Dominic Vento

Instituted in 2013 by Harm de Blij and supported by other major donors, the de Blij Scholars awards scholarships to promising first-year students who choose to major in Geography at Michigan State University.

Corbin Paules transferred to MSU from Oakland Community College and was awarded the de Blij Geography Scholarship in the fall. Corbin hopes to earn a geography degree at MSU so that he may continue along his path to pursuing his passion. He planned to use the award to help cover part of his tuition.

Dominic Vento was awarded the de Blij scholarship in the spring of 2023. He was



thrilled to receive the award and said, "It was an incredible opportunity that helped me achieve my goals." He thanks the Department for investing in his future through the de Blij scholarship.

2023 GEO-GTU Awards

Harold A. "Duke" Winters Scholarship | Adam Subora

The Dr. Harold A. "Duke" Winters Memorial Fellowship is awarded to an outstanding student at the Junior level, majoring in Environmental Geography. Adam Subora was the 2023 recipient of the Winters Award. "I was very honored to receive this award; it is a true reflection of how great the department, faculty, and staff are. I will use this award to aid me through grad school," said Adam.





2023 Gamma Theta Upsilon Initiates

Congratulations to our 2023 Gamma Theta Upsilon members: William Romanyk, Marlena Olson, AvaMarie Mendoza and Ethan Kalchik. Gamma Theta Upsilon (GTU) is an international honor society in geography. Gamma Theta Upsilon was founded in 1928 and became a national organization in 1931. Members of GTU have met academic requirements and share a background and interest in geography. GTU chapter activities support geography knowledge and awareness.

Congratulations to all of our 2023 recipients and thank you to all who contributed to the various Geography Department funds and scholarships. Your support helps to enhance our programs and benefit our students. Please click here if you are interested in donating to a fund or scholarship to help support our current and future Spartan Geographers.













Graduate News

XIUMIN "MIA" CAI

I am a second-year master's student in our Spartan GEO community. I study land cover and land use change (LCLUC) patterns, drivers, socioeconomic implications, and associated Water-Energy-Food (WEF) Nexus. Over the past two years, I have selected Hainan Island of China as a case study to study the changes in tropical agricultural land cover and land use along with the process of urbanization. Currently, I'm working on a pre-proposal for my Straight-to-PhD application, which will be focusing on the LCLUC and WEF trajectories of Urban-Rural Continuum development across 19 major cities in 8 Southeast Asia (SEA) countries. The last time I conducted a field survey in SEA was eight years ago, so I'm really looking forward to going back there

again to meet with old friends and to see what has changed.





Fieldwork for ground truthing data collection on Hainan Island using UAV last summer.

Fieldwork, leaving all those grand research significances aside, is the most charming part to me. I still remember the excitement the first time I learned how to operate a drone and flew it across

rivers and mountains. That feeling was so much beyond words. I felt I was flying like a satellite, while all those satellite images were no longer static. They became alive, both in my eyes and in my brain. Besides, the most important thing is that you will meet people through all kinds of ground surveys. You will know their stories, feelings, and hopes, at the same time knowing that you may never be able to see this person again. Some people say the land is a book that records everything. I think that is why I'm obsessed with LCLUC and so proud to grow as a geographer. I believe we geographers can read this book better than anyone else can.



A farming couple heading to their farmland after sharing their concerns with us about the increasing farming costs and market fluctuations.



NIDHI KALANI

As I stand on the verge of completing my Master's journey in Geography at Michigan State University, I am filled with a mixture of excitement and anticipation for what the future holds. I am particularly thrilled to announce that I will be presenting my poster at the upcoming International Association for Landscape Ecology (IALE)-North America Annual Meeting 2024, a gathering that promises to be a hotbed of innovation and discussion on the theme of Data Science in Landscape Ecology.

My current research, guided by Dr. Igor Vojnovic, delves into the multifaceted world of gentrification, exploring its nuances through the lens of geography.

We've been examining different avenues of gentrification research in Chicago, seeking to understand its impacts and the mechanisms driving this complex process.

The focus of the IALE meeting on cutting-edge spatial research methods resonates deeply with my interests. These innovative approaches offer fresh perspectives and tools to unravel the intricate tapestry of our landscapes, bridging gaps between ecological processes and human activities. I see a future for myself immersed in these themes, pushing the boundaries of how we collect, analyze, and interpret data to address pressing societal issues.

As I continue this journey, I am grateful for the support and fellowship of the MSU Geography community. This zeal and commitment of delving into the complexities of our world motivate me every day. Here's to the next chapter, where we continue to challenge the status quo and make meaningful contributions to the field!



ALANNA POST

I'm a second-year PhD student, and I'm also new to geography as most of my background is in ecology. I do most of my work in GIS and R. Recently, I've been brainstorming ideas for a time series analysis of forest dynamics in the eastern US. I had an interesting conversation with a human geographer recently and found many parallels in how human geography and ecologists analyze their respective systems. Last summer, I helped out at Kyla Dahlin's new Spec School program, which teaches various remote sensing methods to those who may find them useful. Right now, I'm focused on developing my dissertation.



Graduate News



YOUSEF KHAJAVIGODELLOU

Starting an enriching journey in environmental engineering, my work has focused on the important connection between water, food, and energy, thanks to my years of managing water in Iran's tough landscapes. This journey took a big turn in 2021 when I joined the Geography Department to look into water bankruptcy problems in river basins across borders, especially Lake Urmia's unique challenges. This research is more than just academic interest; it's a key mission to understand the social and economic effects, along with the complicated roles of politics and stakeholders in water scarcity, all under the shadow of climate change.

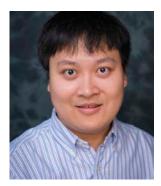
Since I began as a Spartan Geographer in the fall of 2021, I've grown a lot in understanding and tackling these environmental puzzles. Through intensive training and a mixed research approach, I've sharpened my skills in water management. This experience highlights geography's broad nature, mixing environmental engineering, social and economic studies, and policy analysis to solve worldwide environmental issues.

Now, in my third year, I'm about to publish key research on the social and economic impact of water bankruptcy in both the transboundary river basin and the Urmia Lake basin. This significant work aims to find real, lasting solutions to these urgent environmental problems. I aim to lessen the impact of water scarcity and climate change on communities at risk, leading policies and practices towards stronger and more sustainable water management globally.

Looking ahead, I plan to keep working in academia, focusing on these important environmental challenges. By offering my research and insights, I hope to create real changes, aiming for a future where our water resources are managed in a resilient and sustainable way.







XIN LAN

I am in my fourth year of pursuing a Ph.D. in geography at MSU. My world revolves around water, hydrology, to be exact. It's kind of like being a detective but for water mysteries. I've been researching how climate change impacts

water (e.g., streamflow, water temperatures), and I just discovered that Seneca

Lake is getting warmer because of it. I published this finding as a lead author in a peer-reviewed journal last year—super cool stuff! I'm on a fascinating journey now, working on developing machine learning models guided by real physical world processes. The goal? To accurately predict water temperature changes from the surface to the depths of lakes across the U.S. The processquide machine learning method aims to peel back the layers of mystery that typically surround the 'black box' nature of machine learning.



2023 AGU Annual Meeting in San Francisco, CA.

MADISON MOORE

I'm a newcomer to the department, and I've only been at Michigan State for a semester and a half now. As a master's student, I'll only be here for two years, so the first year has already flown by! While it was a challenge transitioning from undergrad to graduate student at first, I've had a great time learning all the different research interests my fellow grad students have been pursuing. I did not study geography as an undergrad, so it's been so cool to learn all the different avenues you can take with geography, from remote sensing to drones to flood mapping. Every time I meet someone in the department for the first time, it seems that they are always researching something new.

This summer, I'll be helping conduct research for my thesis in Detroit with the Early Start program. I am an aspiring health geographer since I wanted something that would follow my bachelor's degree in public health. I plan to intern at a health research institution after graduation and then pursue a career in community health research.



Madison (left) prepares to fly a drone at GEOCamp 2023.

Graduate News



YUEAN QUI

I am in my second year as a Spartan Geography Ph.D. student. Over the past two years, I've explored a variety of research topics, including gas flaring, data fusion with geostationary data, forest monitoring, and digital twin technology. Lately, my focus has been on monitoring forest cover loss with remote sensing data using deep learning. Sounds cool, right? I presented my progress at the 2023 American Geophysical Union (AGU) meeting, and the feedback from other researchers was encouraging. I also find the topic interesting from both the ecological and the technical sides, so I will probably keep exploring and turning it into part of my proposal in the following academic year. If you are also interested in forests, wildfire, or deep learning,

let's have coffee together someday!

Pursuing a Ph.D. is not just about interests but also comes with pressure, so having a break sometimes from daily research really matters. This academic year, I've seen more in-person events that brought our Spartan Geographers together, like the colloquiums and the social events, which I really enjoyed and appreciated. Shout out to the organizers and the participants, and hopefully, we will have more ideas exchanged via the department.



Snapshot from a recent Triple G Colloquium event featuring Dr. David Kaplan.



ANGIE SANCHEZ

The places and spaces that Geography has taken me! I consider myself a new geographer who is nearing the finish line. I came to this program with a problem that I wanted to solve, which was how to increase access to breastfeeding support resources in Indigenous communities. I had no idea how geography was going to help me make that happen, but the work that I have been able to accomplish has been nothing short of amazing. I have been invited to speak at universities and health entities all over the US & Canada, and this summer, I will be heading to Norway for a talk! I have been featured on podcasts, recorded webinars, built websites, and even formed a nonprofit organization that centers on Indigenous people and Indigenous

birth workers. But one of the most important impacts that this journey has had on me is the personal healing that I have been able to accomplish through the people I've been able to meet, the research I now have access to, and the learning that I am exposed to while on this educational pathway.

When I first started this program, I had no intentions of staying in the academy after I graduated. I honestly did not fully understand what Ph.D.'s do. I thought I would get my degree and then either go work for a health organization like the State of Michigan Department of Health and Human Services or the federal government's Indian Health Services. I thought Ph.D.'s just became faculty members that teach; I didn't realize that not only would also be able to do research that greatly impacts Indigenous communities. I have met so many Indigenous researchers along the way who inspire me because they get to do hands-on research and community work that impacts Indigenous people for generations to come. Now, I am interested in becoming a faculty member somewhere and continuing the work that I get to do in Indigenous communities.



Angie Sanchez (center) in the studio recording breastfeeding webinars with Indigenous guests and Indigenous International Board Certified Lactation Consultants.

Graduate Degrees Conferred

Undergraduate Commencement

Akanga, Donald, Ph.D., (Dr. Kyla Dahlin), "Interconnections between Land Cover Change, Climate Variability, and Livelihoods in the Greater Mau Forest Complex, Kenya."

Chen, Qianlin, M.S., (Dr. Guo Chen), "A Critical Analysis of Hainan's Urban Resilience in the Context of COVID-19."

Henderson, Kionna, Ph.D., (Drs. Ashton Shortridge & Richard Sadler), "Multi-Scale Impacts of the Flint Water Crisis on Maternal Health Disparities."

Kashongwe, Herve, Ph.D., (Dr. David Roy), "Remote Sensing Assessment of Tropical Forest Canopy Height, Aboveground Biomass, and Regrowth in Mai Ndombe Province, Democratic Republic of the Congo."

Penrod, Nathaniel, M.S., (Dr. Ethan Theuerkauf), "Multidecadal trends in nearshore sediment transport and morphodynamics along the eastern coast of Lake Michigan: Implications for beach recovery following high lake levels."

Rivera Rivera, Ana, Ph.D., (Dr. Sue Grady), "Urban Heat Islands in Santa Clara, California: A Human-Environment Interaction Study."

Sciusco, Pietro, Ph.D., (Dr. Jiquan Chen), "Global Warming Impacts of Landscape Mosaic in Southwestern Michigan: A Cross-Scale Assessment of Climate Regulations of Albedo and Net Ecosystem Exchange."

Shirkey, Gabriela, Dual Ph.D. in Geography and Environmental Science & Policy, (Dr. Jiquan Chen), "Spatiotemporal changes in carbon and anthropogenic contributions in an agricultural-forest watershed."

Sigmann, Clayton, M.S., (Dr. Leo Zulu), "Perceptions of Climate Risk and Efforts to Adapt to Climate Change: An Example for Tourism Industries in Northwest Michigan USA."

WELCOME OUR NEWEST SPARTAN GEOGRAPHY ALUMNI!

SPRING & SUMMER GRADUATES:

Collin Addicott | BS Economic Geography

Cade Armstrong | BS Environmental Geography+ Minor in Geographic Information Science +Concentration in Atmospheric & Climate Sciences

Mia Bender | BS Geographic Information Science and Environmental Geography

Jessica Blehinger | BA Human Geography

Jacob Bobzin | BS Economic Geography

Mykal Cooper | BS Economic Geography

Dustin Dembeck | BS Environmental Geography

Reese Dresch | BA Human Geography + Minor in Geographic Information Science

Everett Ebling | BA Human Geography

John Fogerty | BS Geographic Information Science

Gracyn Freund | BS Environmental Geography + Concentration in Atmospheric & Climate Sciences

Christian Gordon | BS Economic Geography

Joe Grim | Minor in Geography

Maggie Haite | Minor in Geographic Information Science

Trevor Hall | BS Economic Geography

Casey Heath | Minor in Geographic Information Science

Emmett Henry | Minor in Geography

Norah Johnson | BS Economic Geography

Ethan Kalchik | BS Economic Geography and Geographic Information Science

Kelli Kruczynski | Minor in Geographic Information Science

Derek Luecker | Minor Geographic Information Science

Nathan Mack | BS Environmental Geography

Adam Nave | Minor in Geographic Information Science

Lily Nguyen | Minor in Geographic Information Science

Chris Oviasu | BS Environmental Geography+ Concentration in Atmospheric & ClimateSciences

Josh Pepper | BS Environmental Geography and Geographic Information Science

Lucas Reath | BS Economic Geography

Jack Reidy | BA Human Geography + Minor in Geographic Information Science

Zeyu Su | BS Economic Geography + Minor in Geographic Information Science

Adam Subora | BS Geographic Information Science

Apichaya Thaneerat | BS Geographic Information Science

Rashane Thapa | BA Human Geography + Minor in Geographic Information Science

Alberto Villarreal | BS Economic Geography and BA Human Geography

Shangrui Zhu | BS Geographic Information Science

FALL GRADUATES:

Benjamin Blazen | BS Economic Geography

Taylor Dudley | Environmental Geography

Nicole Kaminski | Economic Geography

Henry Shaban | Economic Geography

onGEO Connection

onGEO-PROFESSIONAL

New Professional Certificate Launches by Yi Shi

OnGEO has launched our newest professional **Geospatial Data Analytics & Visualization** (GDAV) certificate. This certificate aims to advance the geospatial tools & technology skill set of professionals currently working in fields that use geospatial technologies. It is also an excellent opportunity for anyone looking to revamp their current career, earn continuing education credits, or simply learn new and marketable skills.

The online Geospatial Data Analytics & Visualization Certificate consists of four (core) fully online courses that are each delivered in 7-week sessions. This means that a professional certificate can easily be earned in two semesters (if courses are taken one at a time) or faster (if courses are taken concurrently).

- Cartography (CART)
- Geovisualization: Temporal and Interactive Mapping (GTIM)
- Python and ArcPy Geoprocessing (PAPG)
- Spatial Statistics (SPST)

These core courses cover topics ranging from map design, interactive and temporal mapping, geovisualization, spatial data analytics, spatial statistics, geoprocessing, geospatial analysis, and much more. In addition to content-based units, each course features a series of online labs designed to give students hands-on experience using geospatial technologies and improve technical competency.

For more information on the GDAV certificate, including the 2024 course schedule, please visit https://ongeo.msu.edu/certificates/.

New OnDemand Program Launches by Beth Weisenborn

OnGEO is pleased to announce that we, along with RS&GIS, have launched a new format of online course experience aimed at a broad audience, from professionals to neogeographers to people who are just plain curious. Our **OnDemand** courses are selfpaced, range from one to seven-plus weeks in length, and participants can sign up at any time. Each class created will cover a single topic, such as Interpreting Wetlands, Maps & Apps, StoryMaps, Using LiDAR Imagery, Google Earth Engine, GIS Field Data Collection, and more.

Our first OnDemand offering, Interpreting Wetlands & Deepwater Habitats from Aerial Imagery, launched in February and was written by Bob Goodwin, Dr. David P. Lusch, and the RS&GIS staff. This course aims to teach participants how to interpret and classify wetlands and deepwater habitats from georeferenced aerial or high-resolution satellite imagery. Registration is open for this course.

Please check our OnDemand offerings periodically through 2024, as new courses will be added and come online (https://ongeo.msu.edu/ondemand/).

New Elective Course in Development by Beth Weisenborn

Coming to our line-up of professional courses in 2024 is **Geoprocessing using Python & Open-source Tools, Part 1 (Vector Data Processing)**. MSU GEO's very own Ph.D. Candidate Nidhi Kalani created this course to complement our new **Python & ArcPy Geoprocessing** course (created by MSU-GEO Alumnus Paul McCord).

Geoprocessing using Python & Open-source Tools, Part 1, teaches the use of the Python programming language and Jupyter Notebook

environment for performing various geographic data processing tasks. Throughout this course, students acquire essential skills in setting up a development environment, managing various tabular and vector data structures, exploring Python basics for effective data management, and the specialized use of geospatial libraries for vector data operations. The course includes hands-on exercises and projects to give students practical experience with the tools and techniques taught in the course. This course is for anyone who wants to learn to work with vector geospatial data. Some basics of GIS concepts are also explained so that readers new to geospatial analysis will know why they're learning certain things, and the course starts simple enough so that people with a geospatial background—but not much coding experience—can also benefit. Registration for this course will open in late 2024. Also, be on the lookout for Part 2 (Raster Data Processing).

GROWING OUR UNDERGRADUATE COURSES

Sports Geography is onGEO's Newest Undergraduate Course by Beth Weisenborn

It is always a treat to create and develop a new onGEO course, but to have the opportunity to create a course with an MSU-GEO Alumnus and former onGEO Grad Instructor is especially sweet. While a Ph.D. Candidate in the Department, Kyle Redican, had the chance to teach Sports Geography (GEO 215) in lecture format, and he had a blast. In fact, he enjoyed the experience so much that he pitched an online version of the course, and onGEO didn't need to be asked twice.

This course aims to explore how sports can be used to learn geography and how geography can be used to learn sports through fun and engaging topics like (1) Culture, Cultural Geography, & Mascots; (2) Regulatory Landscapes (NCAA Sports); (3) Economic Landscapes (Professional Sports); (4) Geopolitics & the Diffusion of Sports; (5) Racial Segregation and Sports; (6) Geospatial & Sports Analytics; (7) Diffusion and Culture of North American Professional Sports; (8) Sports & Physical Geography; and more.

Traditionally, this course has been one of the most popular courses for undergraduate students, so we hope the online version will help draw even more students to geography!

Rewrite of ISS 310 by Juliegh Bookout

At the start of the Spring Semester 2023, Beth Weisenborn, Dr. Ryan Shadbolt, and I had a conversation about the Department's ISS310 course, People & the Environment, and the potential for developing a new 200-level ISS course. ISS310 was one of the first courses developed by onGEO (before onGEO was onGEO!) and has now been taught online by the Department for over two decades. While conversing about ISS courses with Beth and Ryan, it dawned on me that students today have more knowledge about the environment than ever before, and this should change the way we approach a course called *People &* the Environment. The topics and material in a nature-society studies course, more specifically, the way that we should be covering those topics, have evolved alongside our planet, our societies, and our knowledge.

As I came to realize (and tell students as much in the video introduction to the first unit, Human-Environment Interactions in Context: Nature, Power, and Society), over the two decades since this course was created online, it has been truly remarkable to witness the growth of students' awareness and understanding of the natural world. Many students who enroll in the course today have grown up in a world that inherently teaches them about environmental issues, which fosters a familiarity with these topics that

far surpasses that of previous generations, and they have a heightened environmental consciousness. Unlike before, where I would spend a significant chunk of time explaining what deforestation is or the fundamentals of climate change, students are arriving with a profound grasp of the more complex interdependencies and relationships in nature-society studies.

Students who enroll in ISS310 online will watch lectures on topics like "The Privilege of Nature, Natural Resources: Commodity or Human Right?," "The Disconnect between Capitalism, our Energy Economy, and the Realities of Climate Change," "The Human Diet, and Decentralization, Suburbanization, & Racial Inequities." Woven throughout the course are themes like globalization, inequality, and uneven development, and once standalone lessons like natural disasters and climate change are present in not one or two but many lectures. The first offering of the updated course rolled out in Spring 2024 with a record 300 students enrolled, and onGEO staff and the two graduate instructors appointed to the course, Nicole Dear and Nidhi Kalani, are highly anticipating its reception.

AT&T Award for GEO 331 by Juliegh Bookout

Since the Department of Geography launched its first online course in Widgets more than two decades ago, online teaching and learning have experienced an evolution and more people than ever are developing, teaching, and taking online courses. The onGEO model for course development has always involved a strong degree of collaboration with onGEO staff and faculty partners working together to create high-quality online learning experiences for onGEO students, and traditionally this meant a lot of text. Documents full of words that could be easily uploaded, downloaded, transferred, edited, updated, and so on. However, starting with the creation of *GEO331: The Geography of Canada (2022)*, a new model was developed that could allow for this same flexibility with video lectures.

Using several software packages, including Google for Education, Keynote, Camtasia, and Kaltura MediaSpace, I came up with a new, more flexible approach to video creation that allows me to edit and revise single slides or single recordings or request a single-slide rerecord from a content matter expert, without having to recreate an entire video lecture. Again, collaboration is a key part of our course development. Not only does this method work for onGEO to create these new lecture videos, but it also allows multiple people working on various platforms and at a wide range of skill levels to be able to contribute to the process and repeat it.

In the fall of 2023, I nominated this approach for a 2024 AT&T Excellence in Teaching with Technology award, with the hope that this innovative method of content creation would be recognized for the value that it can bring to our courses, faculty, and students. In the nomination, I state that "with developing the new, fully online, asynchronous version of GEO331, I desired not only to increase student learning and satisfaction but also to create a course that was both sustainable and maintainable. My goal then became to offer students course content delivered in multiple formats (video and text) to fit the various needs and learning styles of our students and design a course that is long-lasting, even timeless, with video content that is easily updated, improved, or removed. I wanted both a model that onGEO, as a group offering many fully online courses, could then apply to our other courses, as well as a polished and effective end product for our students."

No matter the outcome of the award, the model has already proven to be successful in the creation of new lectures for onGEO's ISS310: People & the Environment course and GEO204: World Regional Geography, the latter being a collaboration with Dr. Kyle Evered. The onGEO staff looks forward to even more collaboration and video content creation in the years to come.

Al in the Classroom by Juliegh Bookout

A few weeks ago, my husband and I sat down to begin the next episode of a show we were watching when, after fifteen minutes or so, one of the attendees shocked the entire group by revealing that artificial intelligence assisted him in writing a screenplay. This august group of about twenty or so individuals had been brought together by an uber-wealthy tech entrepreneur to solve the climate change crisis, and yet they were surprised, even shocked, by this information. I already had some misgivings about this show, and now they want me to believe that a room full of super-geniuses has iust discovered that artificial intelligence can serve as a writing tool. While generative AI has come a long way in the past decade, Al has been around and in use for many (many!) decades. I guess the surprise is that only more recently has it been put into the hands of ordinary people with the proliferation of

chatbots, like ChatGPT, and art generators, like Midjourney.

The question for us is: what does this mean for people who write? Students who write essays, faculty who write grants, software engineers who spend their days writing code, and so on. Will artificial intelligence replace us all, rob us of all critical thought and creativity, and steal our jobs? Not hardly, at least not yet, but there are still considerations for educators and students alike. During the Fall Semester of 2023, I copied paragraphs of material from a lesson transcript into a chatbot and then waited while it pulled a list of key terms and wrote definitions. I had done the legwork, those were my terms, and the definitions would need some hefty editing, but I had a start. That same semester, I also fought with it when it could not comprehend that abolitionists and climate change activists were not the same and submitted two Academic Dishonesty Reports for students who had committed plagiarism, using AI to write their papers. These Al-assisted essays lacked data and details, there was a mismatch between the references and the information in the paper, and I recognized words that I knew were some of ChatGPT's favorites. I was familiar with that writer's work, and that writer was not human.

What does that leave us with? Honestly, I am not sure. Much like when I first began my career in online teaching and learning almost twenty years ago, there were concerns, and a lot of my colleagues raised red flags. Online education, however, had advantages that could not be overlooked and was here to stay. What, then, would a chatbot have to say about that? Perplexty.ai suggests that we start by "preparing educators and students to leverage AI as a valuable tool while addressing potential challenges such as academic integrity and bias" (2023). Moreover, it says we should "encourage ongoing dialogue and proactive measures to harness the potential of AI in writing and learning while also preserving the essence of human creativity and critical thinking" (2023). As for me, I would say those are just a few ideas on which the chatbot and I can agree. Perplexity Al. 2023. "Perplexity [Large language model]." Accessed January 17, 2023. https://www.perplexity.ai.

Videos Keynote / Kaltura Google Slides Camtasia **PowerPoint** MediaSpace Benefits: Benefits: Benefits: Benefits: Extensive Storage Record audio by Collaboration with a audio/visual editing Embedding (playlist slide group of editors or single video) > Export to movie capabilities Single storage Can add slide Captioning Export to slides or Editing capabilities animations slide notes/transcript Store individual slide Share with students audio Drawbacks: Drawbacks: Drawbacks: Cannot record audio Drawbacks: > Limited editing No machine Limited audio Cannot export as capabilities captioning editing capabilities movie No storage No collaboration Voice narration not

as user friendly



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Contact Info

Phone or Text: (517) 258-7991 E-mail: ongeo@msu.edu Web: ongeo.msu.edu

Address: Department of Geography,

Environment, and Spatial Sciences

Michigan State University Geography Building

673 Auditorium Rd, Room 116

East Lansing, MI 48824



Department of Geography, Environment, and Spatial Sciences MICHIGAN STATE UNIVERSITY

GEOCamp



Left to right; Dr. Nathan Moore, Richard Lloyd, Leo Baldiga, Vincent Ogweno, Phyllis Ang e Mwin Gyang, Madison Moore, Brennan Pascal Standel and Chris Baish.

GEOCamp 2023 inducted eight new Spartan Geographers and forged new friendships and connections. After checking in at Camp Wa Wa Sum, we had a wonderful drone demonstration by Erin Bunting and then we hit the Au Sable River for a little tubing followed by dinner and a delightful evening of socializing.

Day 2 kicked off with a visit to Mackinaw City for some exploration of various economic geography themes and a visit to the Mackinaw Bridge for a discussion the geomorphic history of the area with Dr. Alan Arbogast.

From there, we headed to Castle Rock for a birds eye view of the scenic vistas that encompass the Straits region. We then headed to Brevort Lake within the Hiawatha National Forest and the coastal dunes along Highway 2 for a hands-on lesson about the coastal sand dunes along Lake Michigan from Dr. Arbogast and graduate student Chris Baish.

Our final day included a visit to the Civilian Conservation Corps (CCC) Camp at Houghton Lake, a discussion of Nature-Society interactions at Hartwick Pines State Park, and a little lunch along the shore of Higgins Lake before returning to East Lansing. All in all, GEOCamp always provides a great start to graduate life at MSU!



Clubs

SUPPORTING WOMEN IN GEOGRAPHY (SWIG) @ MSU

BY: SUE GRADY



Photo courtesy of SWIG

Supporting Women in Geography (SWIG) is a national organization that empowers women in the field of geography by creating academic and professional opportunities and support. SWIG in Geography at MSU is a community of undergraduate and graduate students and faculty who participate in a variety of supportive activities, including a writing club, a graduate-undergraduate mentorship program, invited guest speakers, supporting Girls' Math and Science Day, the MSU Science festival, and much more! SWIG welcomes new members and thanks, all for your support! Please contact Nidhi Kalani (kalanini@msu.edu) and/or Nicole Dear (dearnico@msu.edu) to learn more about SWIG in Geography at MSU.

GEOGRAPHY CLUB

BY: JESSICA DAVIS



The Geography Club (GEO Club) at Michigan State University seeks to connect undergraduate students with an aligned interest in geography. Students of all majors are welcome to join the club and a community of like-minded individuals. Our club prides itself on being an accepting space where members can learn, discuss, and socialize with one another. We strive to not only build a professional networking community, but to build personal connections with one another as well. During some of our past meetings we built connections through hosting trivia night, globe making, nature walks, geography based scavenger hunts, painting the rock, game nights (Including but not limited to Geoguessr), pumpkin painting, a potluck, movie nights, taking a field trip to the Michigan History Museum, and chalking the sidewalk with geography themes. Since being revived in the Fall of 2020 during the pandemic, the GEO Club continues to share our interests and knowledge of geography with the community. Going forward as a club we plan to collaborate with other student organizations, and local organizations. If you are interested in joining the GEO Club, or are a past alumni or local organization who are interested in GEO Club, please reach out to us through our email at: rso.geographyclub@msu.edu or follow us on Instagram @geoclubmsu.



Geography Awareness Week

Climate change, Cajun culture, and swamp monsters with Jonathan Foret



Cajun folklorist and environmental activist Jonathan Foret discusses the impacts his bayou community in southern Louisiana has experienced from hurricanes, climate change, subsidence, and oil spills. Photo: Jacqueline Hawthorne

The Department was excited to welcome Cajun folklorist, environmental activist, and Executive Director of the South Louisiana Wetlands Discovery Center Jonathan Foret for our annual celebration of Geography Awareness Week (GAW). Established by a presidential proclamation more than a quarter century ago, GAW is celebrated each third week of November. This public awareness program encourages citizens, young and old, to think and learn about the significance of place and how we affect and are affected by it.

Foret explored a variety of topics including what it means to remain resilient in the face of hurricanes, land loss, sea-level rise, and a host of other environmental challenges during a special presentation entitled "Rescuing the Rougarou: Preserving Culture in a Changing Climate." In addition to directing the day-to-day operations of a busy nonprofit, Foret is also the founder and guiding force behind the Rougarou Fest. Now heading into it's 13th year, this award-winning, family-friendly festival with a spooky flair celebrates the rich folklore that exists along the bayous of Southeast Louisiana. The festival is designed to increase awareness of the plight of Louisiana's wetlands so that this valuable resource may be preserved for future generations.

In addition, MSU Geography students and organizations, including the MSU Geography Club, the Geography Graduate Group, and Supporting Women in Geography, organized events around campus to shine a spotlight on the discipline. Department members also participated in various activities organized by the MSU GIS Users in celebration of GIS Day on November 15, 2023.











Diversity Spotlight

Women in Geography

BY: ERIN BUNTING

The presence and role of women in the Geographic discipline has seen a remarkable though skewed ascent over the last decade. In 2018, it was noted that there were more than twice as many men as women in tenure stream faculty positions in US geography programs (AAG 2019). However, this statistic does not properly highlight demographic trends by rank and subdiscipline. For instance, at the full professor level, on average, there are 2 full women-identifying professors for every seven males. Additionally, within a subdiscipline of geography, for example remote sensing, less than 30% of researchers are women. That said, in 2020, it was noted that 48% of graduate students identified as female.

Given these statistics this year's diversity spotlight focuses on the female faculty (8) and graduate students (22) of the MSU geography department. From former AAG presidents to two associate chairs the females of the geography department are leading the way in research, teaching, and service to the discipline.

Notable Highlights from 2022-2023:

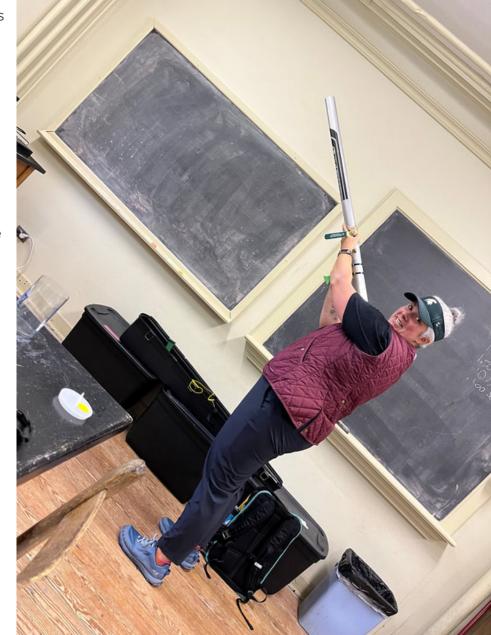
- Two faculty promoted to full professor (Drs. Sue Grady and Elizabeth Mack) and another obtaining tenure (Dr. Kyla Dahlin).
- Development of the Spectral Ecology Summer School (SPEC School), a new initiative spearheaded by Dr. Dahlin, aimed at graduate students a postdoctoral researchers interested in not only incorporating remote sensing tools into their research but also gaining leadership training.

- Numerous funded grants from groups like NSF, US Forest Service, and the Institute for Public Policy and Social Research at MSU.
- Release of a special issues in Frontiers in Remote Sensing focusing on Women in Remote Sensing. This special issue, edited by Dr. Bunting, features 15 papers led by womenidentifying researchers offers a panoramic view of the remarkable contributions of women across the spectrum of remote sensing research.
- Appointment to editorial positions with journals such as Frontiers in Remote Sensing and Professional Geographer.
- 35+ peer reviewed articles within high caliber journals.
- Two Geography students,
 Jessica Davis and Xiumin Cai,
 received awards at our annual
 spring Geography banquet.
 Jessica Davis was awarded
 the James Potchen Award
 (Undergraduate and Graduate
 Student of the Year). Xiumin
 Cai was awarded the Marjorie
 and Lawrence Sommers
 Geography Graduate
 Fellowship for International
 Research and Travel.

When highlighting women in Geography we would be remiss to not mentioned mention support networks available. Supporting Women in Geography (SWIG) is a national organization that empowers women in the field of geography by creating academic and professional opportunities and support. SWIG in Geography at MSU is a community of undergraduate and graduate students and faculty who participate in

a variety of supportive activities, including a writing club, a graduate-undergraduate mentorship program, invited guest speakers, supporting Girls' Math and Science Day and the MSU Science festival, and much more! To join and/or support SWIG, please contact Nidhi Kalani (kalanini@msu.edu) or Nicole Dear (dearnico@msu.edu).





Alumni News



HARRY COLESTOCK

As a retired Spartan Geographer, I have time to reflect on the long path I have taken since studying under Dr. Harm de Blij: military career; emergency management career, and now volunteer in environmental efforts. My wife and I are birders and since we live on a tidal river in Virginia, we see the changes wrought by environmental developments in climate, land subsidence, and habitats. Changes in bird behavior regarding food and shelter have been great signals for us. To that end, I have been on the county Floodplain Management Committee that oversees numerous regulations on land use, building, riparian rules, and flood prevention in this fluid environment. Our main goals are to protect life and property in the county, whether in a short-term weather event or in a longer term climate change.

DANIEL G. COLE ('79, MA)

After serving the last eight years on the board of the Cartography and Geographic Information Society (CaGIS), I am the immediate past president of the organization and will transition off the board this spring. At the Smithsonian, I currently administer over 600 user accounts for Story Maps, ArcGIS Online, and ArcGIS Pro. With Jack Dangermond of Esri on the National Museum of Natural History board, our museum administrators have become more involved in GIS. Meanwhile, my career is starting to wind down as I approach my 70th birthday, which is when I will retire next December. So, if you or anyone you know is interested in conducting GIS and cartographic research in an academic setting, stay tuned for the job announcement at that time.



DAVE JONES (MA '68, PH.D. '75) AND JULIE HIDEGKUTI JONES (MA '69)

Julie and I had a nice visit in the 'new' geography building with Professor Shortridge in June as we concluded our re-acquaintance driving trip around Michigan including Detroit, Mackinac Island, the UP, and Grand Rapids. We also maintain occasional contact with MSU grads Birdsall, Biechler, Kovacik, Alderman, and Charton.

(Photo: Dave & Julie Jones on porch of Grand Hotel, Mackinac Island, 2023)



R. MICHAEL COUSINS, GISP ('07, BA)

Hello Spartan Geographers! 2023 has been a great year, and looking forward to crushing it in 2024. Personally, my daughters, Olivia & Juliet are now 7 & 4 and love all things Sparty.

Professionally, I'm a Partner and the GIS Practice Leader at OHM Advisors, where I oversee all GIS operations and 13 GIS team members (with a few MSU Geo alums). This year, OHM GIS won an APWA Project of the Year Award for developing a highly customized ArcGIS Experience for advanced analytics for asset management. Kudos to fellow MSU Geo Alum Paul McCord for developing that epic application.



I am also very honored to be named to The Oakland County Executive's *Oakland Together 40 Under 40 Program*, which "recognizes and spotlights dynamic leaders under the age of 40 who are making a difference in Oakland County and beyond"!

If you are a student (kudos for reading this), get involved with the MSU Geography Club & GTU, any professional organization, and join your local user groups! Connections are key, and they make for easy points with your certifications, like the GISP! Upon graduation, please make sure to also stay connected with our Alumni Advisory Board.

P.S. - If you have any ideas or thoughts regarding how we, the MSU Geo Alumni Advisory Board, can get involved, assist you with advice/support, further advance our Alumni outreach, events we can hold throughout the year, etc., PLEASE contact me. Also, please make sure to join our MSU Geo Alumni & Friends groups on Facebook & LinkedIn, where you can stay connected with what we are doing.

Cheers & Go Green!

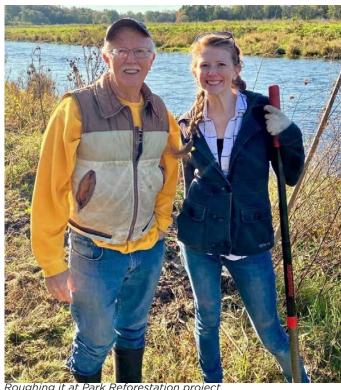
R. Michael Cousins, GISP | OHM Advisors | Michael.Cousins@ohm-advisors.com

Please link up with me on LinkedIn: https://www.linkedin.com/in/GIS-Mike/.

Alumni News

PHIL HATHAWAY ('70, MA)

About a busy 2023: Many efforts relate to the Shiawassee River. For access upgrades, I am a project manager for the construction of two launches on the YMCA natural site near Bancroft. Downstream. I am tasked to work with a wetland consultant to evaluate a one-mile trail before any construction takes place. The right trail material has been found and will offer barrier-free passage on a granular surface. Further downstream, I lead the removal of a river obstruction contrary to benthic organisms, connectivity, and safety. Moving on, I am a critic of local solar energy ordinances that are confiscatory yet agree with deficiencies in field testing sound levels. With my electrical engineer son, we will take decibel readings at several locations and distances to confirm any nuisance levels by reporting them to a UofM specialist and urban planner. Lastly, a landowner asked for assistance in highway design in front of his building to preserve street parking. Field research and drafting cross sections



Roughing it at Park Reforestation project.

for a multi-use highway profile is a process with MDOT engineers. For enjoyment, I am now a geographer instructor to my home-schooled grandchild. I am mostly retired, but these distractions pack up the days.

DAVE E. KROMM ('64 MS, '67 PH.D.)

In August, our granddaughter, Emma Kromm, and her fiancée Jamie were married in Vermont. My wife Bobbie and I were the honored grandparents. In September, we both turned 85. On Dave's 85 birthday, we ascended Mt. Sunflower, the highest point in Kansas at 4,019 feet.



DEE JORDAN ('20, PH.D.)

2023 was an outstanding year for Geography Alum Dee Jordan. In May, she transitioned from her postdoctoral appointment to Instructor at Harvard Medical School in the Department of Global Health and Social Medicine. The same month that she graduated from the Harvard T. H. Chan School of Public Health with a Master of Public Health in Global Health and a graduate certificate in Global Health Infectious Diseases, Dee was awarded a Burke Global Health Institute.

Dee is an active member of the Harvard community, serving on her department's diversity equity and inclusion (DEI) committee, facilitating community discussions for Harvard's Legacy of Slavery student sessions, reading applications for the Harvard College Research Program, and co-instructing the Responsible Conduct of Research curriculum she co-created for Harvard Medical School Postdocs and affiliates titled: Resilience and Inclusion in Academic Research. Dee is also developing two webinars on mentoring for the Collaborative Institutional Training Initiative (CITI) program platforms.









For Dee, September would not be complete without an annual trip to MSU for the Spartan football home opener. In September, she was appointed to the Scientific Advisory Committee for the Geospatial Science and Human Security Division at Oak Ridge National Laboratory. She also received an Equity, Social Justice, and Advocacy award from Harvard Medical School's Office of Diversity Inclusion and Community Partnerships for her sustained contributions to the Advancing Geography Through Diversity Program in the Department of Geography, Environment and Spatial Science at Michigan State.

In October, Dee co-taught a course at the University of Botswana with Spartan Geo Alum Dr. Mattie Kelepile. Dee believes that as a Spartan, she will have community wherever she goes. Well, that couldn't have been truer than her time in Botswana, where a delegation from MSU, including Geo Professor Dr. Leo Zulu, arrived during her visit. Under a fall night sky in the Kalahari Desert, three Spartan Geographers representing three countries, two states, and one university would enjoy a night of food, culture, and conversations.

Alumni News

ZIHAN LIN

Greetings from Cleveland! Last fall, I started a new chapter as an assistant professor at Cleveland State University. Moving and settling into a new city is not easy, but my family, husband Weichao, our son Marcus, and I have been enjoying this experience. We've taken full advantage of the Cleveland Metropark system and natural attractions, spending almost every weekend exploring different outdoor recreational spaces and museums. Marcus, our energetic two-year-old, particularly enjoys beach outings along Lake Erie.

As one of the few with expertise in geospatial science at CSU, I've found myself involved in a variety of research activities with professors and students campus-wide. While my previous research focused on how hydropower dams influenced the land use change and hydrology changes in Southeast Asia, my interests have shifted to the relationship between urban green space and human health using geospatial statistics and deep learning. This shift stems not only from my research



experience at Boston University as a postdoc but also from a genuine personal curiosity.

I must extend my gratitude to Dr. Amber Pearson for inviting me to a workshop at MSU last December. It was a great experience revisiting the campus and seeing the remarkable changes. I'm already making plans for another visit with my family this fall!

JASON PIWARSKI

Hello everyone! I've had a unique journey in my years since graduating from MSU in 2014. After graduation, I started working at the Institute of Water Research at MSU, creating GIS web applications; later, I worked in the MSU Department of Biosystems and Agricultural Engineering, performing farm drainage research in southeastern Michigan. In 2022, my experience at MSU led me to work with the USDA Agricultural Research Service in Columbus, Ohio, performing drainage research on a much larger scale. By chance, I became aware of a dream job with the Ohio Department of Natural Resources, and in June 2023, I started working there with the Ohio Division of Geological Survey as a GIS Database



Administrator. My day-to-day deals with efforts to better map surficial/bedrock topography, energy, groundwater, and mineral resources throughout Ohio. Despite being in the heart of Buckeye territory, though, I still proudly wear the green and white on every game day!

GARY SCHNAKENBERG ('13 PH.D.; FORMER UNDERGRAD ADVISOR/INSTRUCTOR)

Greetings, Spartan Geographers! I miss the great Department in which I was part, but I have been able to keep many connections dear to me. I correspond regularly with friends still there and was invited to be the interlocutor for the Department's 2022 Geography Awareness Week event featuring artist Julie Mehretu. This was both a great honor and great fun!

I have remained busy in New Hampshire in "retirement." I work with AP Human Geography students at the high school where I taught (who call me "Doc Schnak"). I represent my town on the Southern New Hampshire Regional Planning Commission and serve on its Executive Committee. I am President of the nonprofit that owns and maintains the Old Meeting House of Francestown, a magnificent structure built in 1801 at the entrance to the village that hosts community events. I have also resurrected the performer self I was a long time ago! I play bass with some friends and have played a handful of solo gigs as a singer/guitarist.

The greatest percentage of my time, however, is spent with our horse and pony. Unlike my wife, who grew up in rural northern NY state, I had no experience with equestrian stuff at all until a few years ago. She adopted a rescue horse upon retirement from Eastern Michigan University, along with a companion pony. I had my first riding lesson at 64 years old, but I mostly work



with the pony. Between those two, our three dogs and two cats, our lives are never dull!

Alumni Advisory Board Update

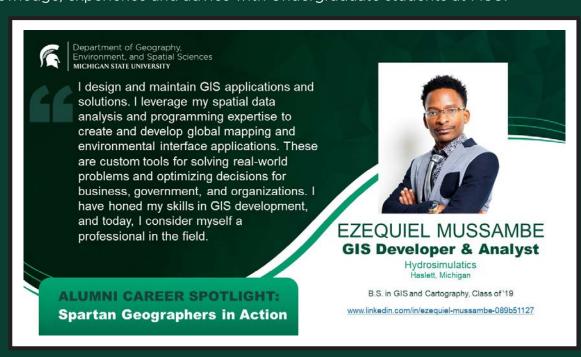
Contributions

MSU Students, Colleagues, and Alumni, the Alumni Advisory Board is here to help advise, mentor, and continue to support our students. If you are interested in joining our Advisory Board, speak at one of our meetings, or would like to know how you can continue to support MSU Geo, please reach out to Ashton Shortridge or Diane Huhn from the Department or the current Chair of the Advisory Board: Mike Cousins (cousinsrm@gmail.com).

This past year the Board held a few meetings, presented to students, participated in the MSU Geography Career Fair, assisted with our graduation ceremonies, and held a great Golf Outing! At our Annual Golf Outing, in-addition to the golf scramble, we auctioned away many great gifts, had a 50/50 raffle, enjoyed a networking lunch and raised funds that went directly to programs to support current students. Congrats to the OHM Advisors team on dominating the competition! Even if you don't golf, we'd love to have you out at this year's Golf Outing! GO MSU GEO & GO GREEN!

Submit Your Alumni Career Spotlight

Help the Department of Geography, Environment, and Spatial Sciences promote the discipline of Geography! By completing a brief questionnaire about your experiences at MSU and your current and past professional activities, you can make a difference in helping current and prospective students explore the vast number of career paths available to them with a degree in Geography. See the sample Alumni Career Spotlight below and use the link to connect with us so we can share your knowledge, experience and advice with Undergraduate students at MSU!



Click here to complete a brief MSU GEO Alumni Career

Spotlight Questionnaire!

THANK YOU

To all who contributed to the various Geography Department funds and scholarships. We are making continued efforts to increase our departmental contributions to enhance our programs and benefit students. Please consider donating to one of the funds listed below.

Please specify desired fund and make checks payable to *Michigan State University*.

Mail to:

Department of Geography,
Environment, and Spatial Sciences
Geography Building
673 Auditorium Rd, Rm 116
East Lansing, MI 48824

You may make a credit card donation online at: geo.msu.edu/about/donate.html

E. James Potchen Awards in Geography for Graduate and Undergraduate Students

Established in 2008 by Harm de Blij to fund yearly cash awards for outstanding graduate and undergraduate students based on GPA, progress towards degrees, and other quality indicators such as fieldwork and research.

Geography at MSU Fund

Established in 2001 to promote the MSU Department of Geography, including related advertising, fundraising, travel, and similar expenses.

Geographic Field Experience Fund

Established in 2001 to fund student field experiences, including field trips, primary data collection, course-related field experience, transportation, and lodging expenses.

Geographic Literacy Fund

Established by Harm de Blij, this fund promotes the field of geography to students.

GTU/Geography Endowment Fund

Established in 1999 by Robert and Dorothy Thomas to fund geography-related student activities.

Harold A. "Duke" Winters Scholarship

To support graduate study in geography at MSU.

Ian Matley Memorial Fund

Established to bring guest speakers to campus to enrich the geographic education of students and faculty.

Jay R. Harman Undergraduate Scholarship in Geography

To support undergraduate study in geography at MSU.

Marjorie & Lawrence Sommers Geography Graduate Fellowship for International Research and Travel

A graduate fellowship to be awarded yearly for masters or PhD students to support international research and travel.

Michael A. Graff Dissertation Completion Award

Established by Michael Graff to provide doctoral students with additional resources for travel, data collection, materials, supplies and equipment to complete research for dissertation projects.

Owen Gregg Endowment for Global Climate Change Research

Established in 2012 to support global climate change science research in the Department of Geography.

The de Blij Geography Scholars Endowment

Established in 2013 as a scholarship to be awarded to incoming freshmen who choose to major in geography.







OUR SCIENCE TRANSFORMS THE HUMAN EXPERIENCE AND INSPIRES LEADERS