

PANTHER GEOGRAPHY

LETTER FROM THE CHAIR

Life has never been so different since the pandemic arrived! From the spring break to the beginning of fall semester, we have been forced to adapt to a new lifestyle due to social distancing and other requirements. Moreover, it appears that the pandemic is not going to end soon, so we are busy planning for remote teaching and learning in Spring 2021. The pandemic also brings a campus-wide budget deficit, and we are again hearing the term “furlough,” a term we have not heard since the financial crisis of 2008.



Even though we are experiencing difficult circumstances, I am more than grateful to Geography faculty, staff, and graduate students for adapting to this new reality so swiftly, and working so hard in every aspect to fulfill our mission as well as planning for the future growth of our department. Thanks to the diligent work of Professor Anne Bonds, we have welcomed four new graduate students, Jonathan Adsit, Alex Hamilton, Paul Lee, and Colin Pitman, while two international students Jintian Cui and Xingmeng Lei could not join us due to travel restrictions imposed by Covid-19.

Professors Mark D. Schwartz and Alison Donnelly received a three-year National Science Foundation grant entitled “Quantifying phenological coherence and seasonal predictability across NEON and USA-NPN monitoring sites”. In addition, with the concerted efforts of Professor Zengwang Xu, the Lectures Committee organized our online colloquium series which takes place every Friday from 3:00 pm to 4:00 pm. Rebecca Lave, Professor and Chair of the Department of Geography at Indiana University of Bloomington, delivered the Fall 2020 Harold and Florence Mayer lecture entitled “Bridging the gap: Integrating critical human and physical geography in practice.”

Finally, I would like to express my sincere appreciation to the geography faculty, staff, and students for their hard work and dedication during this difficult time. As always, your continued support and interest are greatly appreciated! Most importantly, please keep in good health and high spirits!

Cheers,

A handwritten signature in black ink that reads "Changshan Wu". The signature is fluid and cursive.

Changshan Wu
Chair, Geography Department

Fall 2020 : Volume 16, Issue 2

Contents:

Letter from the Chair	p. 1
News and Updates	p. 2
Department Events	p. 2
Student News	p. 3-5
Alumni Updates	p. 6-7

Contact us:

Department of Geography
PO Box 413
Bolton Hall, Room 410
Milwaukee, WI 53201-0413
(414) 229-4866
npapakis@uwm.edu
Chair: Changshan Wu



College of Letters & Science

NEWS AND UPDATES

Faculty News

- **Hyejin Yoon** was appointed president of the Korean-American Association for Geospatial and Environmental Sciences.
- **Alison Donnelly** was nominated to the European Science Foundation’s College of Expert Reviewers.
- **Woonsup Choi** received a ‘Support for Undergraduate Research Fellows’ award for summer 2020, became an associate editor of the journal *Regional Environmental Change* and was quoted in a news article of Voice of America.
- **Mark Schwartz** and **Alison Donnelly** received a NSF Grant to Improve/Diversify Phenological Models and Implement New Spring Season Forecasts (\$982,043 total - \$532,202 to UWM).

Student News

- **Minji Kim** won the Percy Buchanan Prize from the Midwest Conference on Asian Affairs (MCAA) for the best graduate paper on Northeast Asia. The paper entitled “Rethinking Displacement: Gentrification and ‘Un-homing’ in a Disadvantaged Neighborhood in South Korea” was also the MCAA nomination for a special panel of prize-winning graduate student papers that will be shared at the upcoming Seattle 2021 Association for Asian Studies Annual Meeting.
- **So Hyung Lim** has been awarded a grant and an appointment as a Doctoral Research Fellow for the People’s Health Movement’s project “Access in the context of the COVID-19 Pandemic”

DEPARTMENT EVENTS



Harold and Florence Mayer Lecture Speaker

On Friday, September 18, Dr. Rebecca Lave, Professor and Chair of the Department of Geography at Indiana University at Bloomington, delivered the Fall 2020 Harold and Florence Mayor Lecture virtually, with a talk entitled “Bridging the Gap: Integrating Critical Human and Physical Geography in Practice.” In the lecture, Professor Lave discussed scholarship bringing together critical human and physical geography that she situates as part of an emerging subfield called critical physical geography. This work, she argues, treats “physical processes and unequal power relations with equal seriousness.”

To illustrate such an approach, Dr. Lave then presented details from her research, together with Martin Doyle (Duke University) and Morgan Robertson (University of Wisconsin-Madison), on market-based stream mitigation in the United States. Bringing together geomorphic fieldwork, natural science data, interviews, and document analysis, Lave and colleagues’ research reveals that market-based stream restoration varies little from that of non-profit, environmental stream restoration techniques, due in part to regulatory approaches and the common practices of restoration scientists and engineers. She argues that these findings would not have been possible without combining both physical geography with critical human geography. Following her presentation, Dr. Lave gathered with faculty and a graduate student for a virtual refreshment hour and casual discussion.

Graduate Students In-Person Gathering

Graduate students gathered at the Hubbard Park beer garden on Friday evening, September 18. Given the COVID situation, we wore masks and took extra precautions during our gathering. We enjoyed the last days of summer on the Milwaukee riverside, chatting about our experiences during the unexpectedly long summer vacation, and life with COVID-19. Special thanks to grad student representatives and to Trevor and his fiancé for the delicious homemade brownies. It was great to catch up after almost nine months apart!



STUDENT SPOTLIGHT

Amir Forati (Graduate Student)

I am Amir Masoud Forati, a third-year PhD student at the Department of Geography working under Professor Ghose's supervision. Professor Ghose and a team of faculty members received grant funding from the Northwestern Mutual Data Science Institute to address the public health crises in Milwaukee County, using GIS. I was hired as a data analyst and project assistant for this project and worked closely with Professor Ghose. This position provided me an opportunity to connect with faculty members with various backgrounds and experience cross-campus collaborations. I was part of a team of researchers from Marquette University and UWM from the departments of biomedical science, social work, statistics, and computer science, working on public health issues and epidemics.



One of Professor Ghose's aims was to analyze datasets in Geographic Information Systems to examine patterns, trends, clusters, and variabilities of epidemics across Milwaukee County. We paid special attention to the City of Milwaukee to understand how the public health crisis affects historically marginalized communities. Primarily, my duty was to collect related data (demographics, health, and socioeconomic), conduct spatial analysis, visualize datasets, and undertake spatial modeling. I had weekly meetings with Professor Ghose and group meetings with the team, where team members reported their work and provided feedback for others. During these meetings, I realized the value of teamwork and how having teams with diverse members with different backgrounds can lead to success. Besides receiving in-depth, insightful feedback from Professor Ghose, she encouraged other faculty members with different research interests and backgrounds to provide feedback, and that helped me improve my knowledge and skills, gain novel new insights on issues, and improve the project.

The main takeaway of the project for me was the fact that teamwork is the essence of GIS. After working with scientists from different backgrounds, I realized that GIS is underutilized in academia and how we can take advantage of neogeography and big data to address many issues. Our findings showed the extent of the public health crisis that is occurring among African American and Hispanic communities in Milwaukee city. The project findings will be published in scholarly journals and will be helpful in addressing the ongoing public health crisis in Milwaukee.



Chuchen Pan (Graduate Student)

I am Chuchen Pan, and I am a local of the San Gabriel Valley in Los Angeles. I received my Bachelor of Arts and Sciences in Social Sciences from Quest University which sits on the traditional, ancestral, and unceded territory of the Squamish peoples. This is the second and last year of my master's degree at UMM. My interests are in critical geographies of race and education, cultural geography, and political economy.

During the immediate aftermath of COVID-19 pandemic lockdowns, I wrote a commentary, "Octopus and Koala? Toward an Anti-racist Cultural Politics Against Yellow Perilism," in response to an essay that was published in Society and Space's online magazine. Similar to the frantic reporting of China's "wet markets" in the media during that time, the essay pointed to the eating habits of Chinese people as a threat to the rest of the world. Hence, Chinese people's tastes became something that needed to be researched due to its global threat. My main concern with the essay is that it perpetuates a history of yellow perilism in the U.S. and beyond where the Oriental and Asiatic Other and their culturally exotic practices are seen as uncivilized, irrational, and threatening to the Western world. These fears and anxieties in turn are used to justify racism against Asian people. Geographers have long been major contributors to understanding how imaginative geographies can maintain unequal power relations. Yet, we must also be conscious of our own writings and the imaginative geographies these writings can produce.

My master's research project is exploring the historical and urban geography of charter schools in the Milwaukee area. I am currently interviewing charter schools leaders and authorizers to understand how they narrate their journey within Milwaukee's charter movement and why they believe charter school is a necessary feature on Milwaukee's education landscape. I hope my research can contribute to this debate by bringing in a place perspective that emphasizes other important functions that charter schools can serve.

STUDENT RESEARCH



Max Rock (BA '20)

Hello! My name is Max Rock and I will be graduating in December 2020 with a degree in Geography, focusing on Geographic Information Systems (GIS). I am an outdoor enthusiast who loves to rock climb, bike, fly fish, and backpack. For the majority of the past 5 months, I have been living out of my converted pick-up truck and exploring the west, while continuing research and attending classes virtually. I plan to attend graduate school for GIS and Web Map Programming in the Spring of 2021 in order to aid in ecological restoration projects in the future. While we stare

into the eyes of a changing climate, I find that it is important to communicate science in a way that is accessible and understandable by the general public. While there are various ways of doing this, I find my niche through the construction of maps. Without navigating these problems spatially, we will often find it difficult to gain backing from the general public that is needed to suppress various effects of a changing climate.



Figure 1: Photo illustrating the stair like gradient, wetland, and pond formed by beaver dams - Fraser, Colorado.

wetlands and ponds, the watershed is stabilized by the structure and the river is more resilient during high water events (Figure 1).

I have been working in the field with Madeline Flanner, an Environmental Geography student, Leah Holloway, program director at Milwaukee Riverkeeper, and Robert Boucher, founder of the Milwaukee Riverkeeper. However, with the COVID-19 outbreak, we were restricted to individual field work. Our field work consisted of visiting sites throughout the Milwaukee River Basin and identifying areas that are most suitable for beaver habitat. The basin is divided into six watersheds, three of these contain the Milwaukee River from its start to finish (Figure 2).

Within these six watersheds, sits over 68,000 acres of wetlands, or 12% of the entire basin. In order to make our site visits as efficient as possible, I put together a web map through the ArcGIS Collector application that consists of a number of editable and non-editable feature classes: Suitability Rank, Vegetation ID, Observation Location, Watershed Boundaries/Sub-Boundaries, Wetlands, and Streams. This web map can be edited on-the-fly via mobile device during field visits, and is instantly shared across our team. The application also allows photo and note attachments to each feature class or site visit.

Milwaukee Beaver Project

Despite the actions of humans over a 300-year period that almost exterminated the rodent from North America, they have made a significant comeback.

Due to climate change in the Western Great Lakes, we are experiencing a significant increase in the number of severe thunderstorms occurring in the United States. Humans are left to quash the effects of a changing climate, but often, struggle to establish a viable framework for doing so. However, the work being done by the Milwaukee Metropolitan Sewer District (MMSD), the Milwaukee Riverkeeper, and UWM is blazing an overt path to repressing the effects of high rain events to reduce potential flooding in Milwaukee with the unprecedented aid of nature's chief engineer, the beaver. These rodents create dams that hold back water, which creates a wetland and a pond where fauna and flora prosper. When there are a series of these dams with corresponding

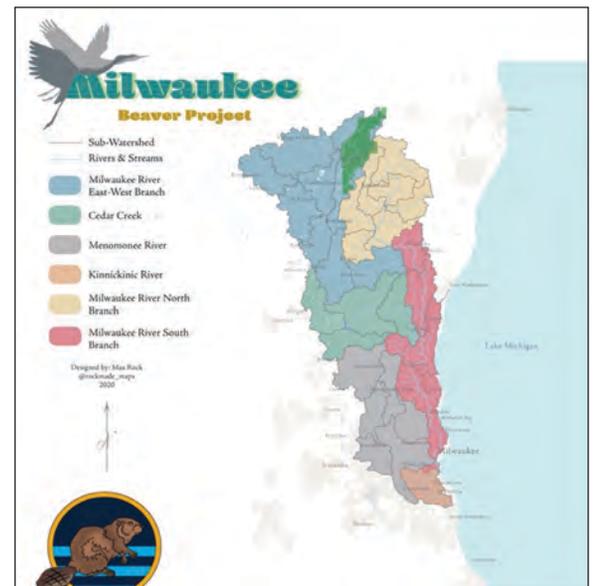


Figure 2: Milwaukee River Basin Divided into Watersheds and Sub-Watersheds

STUDENT RESEARCH (cont.)

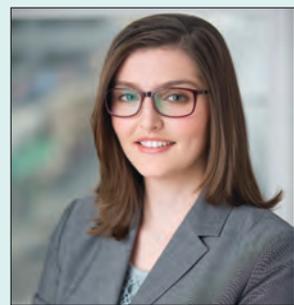
A tight knit community of practitioners, municipalities, and scientists have been on the move for over a decade to work with the beaver to solve a myriad of environmental issues such as wildfire suppression, water quality improvement, restoration of biodiversity, and flood reduction. I am thrilled to be a part of such a progressive movement. This past March, right before quarantine, I was offered the opportunity to speak in Baltimore, Maryland, regarding beaver re-establishment for flood reduction, water quality improvement, and increased biodiversity using nature based, low-tech processes (beaver dams) in Milwaukee. It was quite the experience to present in front of the most prominent authors and scientists that I have been reading from for the past four years.

I am incredibly appreciative for the opportunity that Dr. Qian Liao and Dr. Changshan Wu have given me to be a part of this project. I am also indebted to Robert Boucher, who has given me the opportunity to speak at an international conference, introduced me to various ambitious environmental projects, and has been a mentor to me for the past year. To all, thank you.

NEW GRADUATE STUDENTS

Jonathan Adsit

I am from East Troy, WI, where I grew up on a farm. I went to Wisconsin Lutheran College and double majored in English and Business. When I was there, much of my work had to do with economic geography and development, postcolonial studies, indigenous studies, and Uralic studies. In my free time, I like to read, garden, bike, play piano, and sing. For professional goals, I want to explore and bring attention to the field of Russian post-coloniality and indigenous people it has affected, a unique field not often considered. I recently moved to Wauwatosa, where I can often be found biking around town, studying in the library, or playing piano.



Alexandra Hamilton

Hello! My name is Alex Hamilton and I come to Milwaukee from Los Angeles. I am excited to start my PhD here at UWM after working as a GIS Analyst for some time. I received my undergraduate in Geography and Education Studies from Oxford Brookes University and my Master's in Geospatial Analysis from University College London. My research interests include GIS, PPGIS & Citizen Science, Critical GIS, Hazard and Disaster Management, and Geography Education. In my free time I love to read, practice yoga, learn new languages, and travel.

Paul Lee

I am a masters' student at UWM from La Crosse, Wisconsin. I obtained my undergraduate degree from the University of Wisconsin – La Crosse where I studied race, GIS, and Hmong access to mental health. My current research interests include critical race theory, race and inequality, impact of school resource officers, and GIS. I am thrilled and privileged to be able to study in higher education, I hope to narrow my research interests here at UWM and leave a positive impact on the world.



Colin Pitman

Originally from Madison, Wisconsin, I received my B.S. in Environmental Geography from the University of Wisconsin – Eau Claire. While in beautiful, tropical Eau Claire, my academic interests primarily centered on queerness as it manifests spatially, and queer placemaking as it responds to violence. During my time, I also competed with the University's Forensics (competitive speech) team, bringing geography into a world dominated by Communications scholarship.

ALUMNI UPDATES



Bailu Zhao (MS, 2019)

I was in the Department of Geography at UWM during 2017-2019 as a masters student. My advisor was Dr. Mark Schwartz, who is a specialist in phenology. During my master's study, in addition to my advisor, I also got a lot of help from Dr. Alison Donnelly and Dr. Changshan Wu, which still benefits me today. After graduation, I came to the Department of Earth, Atmospheric and Planetary Science at Purdue University for my PhD. However, sometimes I still think of Lake Michigan and the beautiful scenery in Milwaukee.

I'm working on two projects for my PhD research. In the past year, I've been working on estimating the carbon emission in North American boreal forests caused by wildfires. Our results suggest that the NA boreal region was a carbon source during 1986-2016, since fire emissions overrode the regional net ecosystem production. The manuscript of this work is currently under review.

From this summer, I've started working on another project related to peatlands. Peatland is a type of ecosystem with thick organic layers, with a large amount of carbon stocked in the soil. In the high-latitude region, peatland forms due to the low decomposition rate of litter. According to the peat cores, many peatlands have been accumulating carbon for thousands of years. However, with the climate in the arctic region becoming warmer, the progress of carbon accumulation could be interrupted. In addition, we don't know if the carbon in peat will be released into the atmosphere in the long-term. This project will also use ecosystem models including TEM and Holocene Peatland Model (HPM) to simulate the dynamics of peatlands at millennia scale. During the research, we'd like to determine: a) the similarities and differences between TEM and HPM in simulating peatland dynamics (i.e. site-level model comparison); b) the area of peatlands, and if they will switch to the other ecosystem types as the climate changes (regional level); c) the change in carbon budget of peatlands in the future (regional level). Currently, we are working on editing and comparing the models for a few sites, and we hope to get some interesting results.

Haijian Liu (PhD, 2017)

I graduated from the Geography Department in May 2017, and then I came back to China to reunite with my family. After some interviews, I received an offer to join the Institute of Remote Sensing and Earth Science at Hangzhou Normal University (HZNU) as an assistant professor, so I moved to Hangzhou in the Spring of 2018, a city in the south part of China which is much warmer than Milwaukee,

I have spent four wonderful years in UWM, where I met the amazing faculty in the department of Geography, especially my super advisor Changshan Wu, who gives me very helpful academic guidance to help me keep improving. I miss those days I spent at UMW, including the interesting colloquium series, the annual GIS day and the annual picnic. I will not forget the heavy snow that lasted almost the entire winter, as well as the cool summer in Milwaukee.

After graduation, I still focus on forestry ecological research. While I continue my study on vegetation modeling and species identification, I have also been studying forestry changes with urban development, forestry impacts on the economy, and forestry protection. In addition, I have participated in some international conference to share my research results, such as the first edition of World Congress on Geology and Earth Science in London in the summer and the 1st China Digital Earth conference in Beijing in the following fall semester in 2019.

I am currently teaching a number of courses at the HZNU campus including, theory and method in Geography, Introduction to Earth Science, and GIS Mapping.

I am grateful for the experiences I have had in the geography department of UWM, I miss all my great mentors and friends in Milwaukee. I hope everyone is healthy and happy.



ALUMNI UPDATES (cont.)

Yingbin Deng (PhD, 2018)

It is my honor to accept this invitation to share my experience after graduation. My name is Yingbin Deng, a PhD graduated student of Professor Changshan Wu. It has been two years since I graduated from UWM in August 2018. I currently work at Guangzhou Institute of Geography, Guangzhou, China as an assistant researcher. My current research extends the research I conducted during my dissertation focusing on remote sensing applications in urban environments.

I received the National Natural Science Foundation of China grant in 2019 for the improvement of the spectral mixture analysis model. I also received another foundation grant of Guangzhou which focuses on the relationship between land surface temperature and finer impervious surface classes. In

addition, I collaborated with my colleagues on the analysis of COVID-19. My colleagues and I joined the team in Guangdong Provincial Center for Disease Control and Prevention for about two months to help prevent the spread of COVID-19.

I now live in Guangzhou and can spent more time with my family. But I often miss the study life from when I lived in Milwaukee. I am really grateful to have had the chance to work with faculty and colleagues in the Geography Department. It is one of the most memorable moments in my life.



SELECTED PUBLICATIONS

Holifield, R., & Williams, K. C. (2020). Watershed or bank-to-bank? Scales of governance and the geographic definition of Great Lakes Areas of Concern. *Environment and Planning E: Nature and Space*, 2514848620943890.

Lim, S. H., & Sziarto, K. (2020). Resignifying occupation: territorialization, place and transgression in the anti-corporatization movement at Seoul National University. *Territory, Politics, Governance*, 1-19.

Donnelly, A., Yu, R., Rehberg, C., Meyer, G. and Young, E.B. (2020) Leaf chlorophyll estimates of temperate deciduous shrubs during autumn senescence using a SPAD-502 meter and calibration with extracted chlorophyll. *Annals of Forest Science* 77(2):1-12.



Congratulations to our Recent Graduates:

- » Minji Kim, PhD
- » Rebecca Wolfe, PhD
- » Chloe Rehberg, MS

**Please join us
on social media!**



@UWMilwaukeeGeography



College of Letters & Science
 Department of Geography
 P.O. Box 413
 Milwaukee, WI 53201-0413

Nonprofit Organization
 U.S. Postage
PAID
 MILWAUKEE, WI
 PERMIT NO. 864



YES, I WANT TO BECOME A FRIEND OF GEOGRAPHY

Name(s): _____

Amount \$ _____

Address: _____

Check payable to the **UWM Foundation**

City/State/Zip: _____

MasterCard Visa

Phone: _____

Account Number _____

Email: _____

Exp. Date _____

Signature _____

Your gift is tax deductible to the fullest extent of the law.

I wish my gift to be anonymous.

Mail to: UWM Office of Development

Please direct my gift to:

Attn: Leslie Horn

PO Box 413

Milwaukee, WI 53201-0413

Geography General Fund #3313

OR

Donate on-line at: <https://givetouwmm.uwmfdn.org/>

LNEWSL

In the drop-down menu, choose "College Letters & Science" and then "Geography."