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GEOGRAPHY CONNECTION

UNIVERSITY OF UTAH DEPARTMENT OF GEOGRAPHY



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LETTER FROM THE CHAIR

Reflections on Our Geography Community

Our department has been watching the coronavirus pandemic unfold during the course of spring semester, and over spring break the impacts of the outbreak really began to hit home. We're preparing to move all of our classes online, and the U has canceled all travel for faculty and students. The pandemic is a reminder of how connected the modern world is, but also of the importance of geography in studying those connections. It's in uncertain times that I'm especially grateful for the strong sense of community our department has. I want to share with you just a few observations I've made of our Geography community since I started as Chair last July. I've witnessed our staff go the extra mile to help students and faculty. I've seen our faculty put in extra time preparing their classes, mentoring students, and doing outreach. The department's leadership has really come together this year, with a new leadership committee helping to guide department decisions and undergraduate and graduate directors improving their programs. All of these efforts make our department stronger and improve experiences for our students.



I've seen that this sense of community continues past graduation, and I've been so impressed by what our alumni contribute to the department. Our alumni give their time to discuss their career experiences in Geography Week career panels, provide mentoring and capstone projects, and make internships available for our students. I recently challenged our alumni and faculty to make donations to support graduate student scholarships under a university program that triples their contribution. Donations came in all sizes, and we met our goal in just a few short weeks thanks to their generosity. These donations will go directly to support graduate students this fall.

I've had a chance to chat with many of our alumni, and I'm continually inspired by their accomplishments. I'm more convinced than ever that our students really do go on to make a difference in the world. Speaking of alumni making a difference, Brian and Michelle Haslam have been big supporters of the department over the past many years. They recently made the largest donation in the history of the department. The Haslams generously set up their donation as an endowment to fund undergraduate and graduate scholarships in perpetuity, ensuring that they'll have an enduring impact for decades to come. This gift is going to make an enormous difference in the lives of our students, and I can't thank the Haslams enough for the positive impact they're having on our department.

Your contributions, and the contributions of our entire community of Geography students, staff, alumni and faculty, make our community a strong one. I'm grateful to be part of a group with such a bright future. Our department and the U will weather the current turmoil, and with amazingly productive faculty and students, supportive alumni, and a new building, Geography is going to continue to grow and thrive. Thank you to all of the members of our community for your part in making us a success!

DEPARTMENT NEWS

Spring Reception Canceled

Due to the coronavirus pandemic, we have unfortunately had to cancel our spring reception. We're sorry we won't get to celebrate with everyone at the end of the semester.



The Geography Department in the Community

RESEARCH QUEST

In October of 2019, the Natural History Museum launched its latest citizen science project designed to get local middle school teachers and their students involved in hands-on research investigations. Mitchell Power, Professor of Geography and Curator of Botany at the museum, was involved in putting together the latest Research Quest module, "Change in the Uinta Mountains, Normal or Not?". The free, online learning module consists of four new scientific investigations that explore the broad scale changes in and stability of the lodgepole pine forests found in the Uinta Mountains.

The museum initiative is designed to engage students in critical thinking, communication, and collaboration skills while also getting middle school students involved in local scientific research in non-traditional ways. In the words of Dr. Power, "This project created an opportunity for me to share my passion for research and education with one of my favorite ecosystems in Utah, the Uinta Mountains. Research Quest has taught me what really matters to kids and how their perspective can teach all of us about changes we are experiencing in our own backyard."

The learning modules are currently available in Utah and classrooms around the country, and several more are on their way. The Research Quest team is planning on completing seven additional investigation modules over the next year. Already 500 teachers and 50,000 students have accessed the existing modules, which offer educators easy to use instructional guides, student notebooks, scientific assessment tools, and online material that is designed

to align with Utah’s various statutory educational standards. Local Utah teacher Jennifer MacKay explained her experience using the online platform in the classroom, “Research Quest is a great tool when it comes to helping your students think and act like scientists. It is aligned with the new Utah SEEd standards. By completing Research Quest, students have the opportunity to be engaged with all the Cross-cutting Concepts. I would use it yearly in my teaching.”



“I want you to go outside the classroom,” Power told the students, “Go outside, walk around in the forest, then apply some of these ideas there.” Beyond traditional curriculum approaches, Research Quest investigations help students connect their learning activity in the classroom to the outside world, helping them develop the skills to think critically, make informed, evidence-based decisions, and communicate theories about the natural phenomena around them.

Geography Ranked 5th Nationally in Research

Academic Analytics recently ranked the University of Utah Department of Geography 5th among 102 US Geography departments for scholarly research activity. Their Scholarly Research Index takes into account publications, citations, grants, and awards. High rankings for our department in individual categories include 6th for number of publications per faculty and 7th for citations per faculty. Faculty, graduate, and undergraduate research have transformed Geography into a research powerhouse. Check out the news on the department website to see some of our latest high-profile research advances.

Haslams’ Gift Largest Donation in Department History

In late 2019, Brian and Michelle Haslam donated a new endowment for Geography undergraduate and graduate scholarships. Their donation is the largest received in the history of the department, and will ensure that Brian and Michelle have an enduring impact on students for decades to come. Brian founded the DIGIT Lab in 1987. He also started Azteca Systems, which has grown into Cityworks, provider of the leading GIS-centric system for public asset management. Thanks to the Haslams for their generous gift!

ALUMNI SPOTLIGHT



Laura Siebeneck

- Current Role: Associate Professor, Department of Emergency Management and Disaster Science, University of North Texas
- Time at UNT: 10 years
- Current Location: Denton, TX

Greetings from North Texas! I am honored to be included in the alumni spotlight. Looking back on my time as a graduate student in the Geography Department, I am forever grateful for the knowledge and experiences I gained learning from such great faculty. It was a wonderful 5 years, and I cannot help but smile when I recall the outstanding mentorship I received from Tom Cova, the friendships I made in graduate school, the department socials at Desert Edge, and of course playing on Team Awesome, the best geography department softball team that ever stepped foot on the field.

I currently work as an associate professor in the Department of Emergency Management and Disaster Science at UNT. My department includes a mix of hazard geographers, disaster sociologists, and planning scholars. This mix of backgrounds provides a unique multidisciplinary environment for studying various dimensions of hazards and disaster science. My research looks at challenges related to the return-entry process following disasters and how this process is undertaken at both the household and local community levels.

Over the past four years, I have had the opportunity to collaborate with several scholars from Purdue University on an NSF CRISP grant examining return-entry, recovery, and community resilience in New Jersey following Hurricane Sandy. Through this project, we are hoping to identify barriers and facilitators to disaster recovery and to look at the extent to which these factors influence the recovery trajectories of households and communities after disasters. In addition to research, I have really enjoyed my teaching responsibilities. In particular, leading study abroad courses examining topics such as hazards, emergency

management, vulnerability and crisis communication in Peru, Nicaragua, and Panama has been a very rewarding experience.

Several years ago, my husband Zeb and I became the proud parents of three boys (ages 13, 10, and 9). I am a little biased, but they are amazing kids and Zeb and I keep very busy juggling all the football, soccer, and basketball practices. Like many Texans, the kids enjoy watching football. Despite living so far away from Utah, we are raising them right and all three are becoming diehard Ute fans. In my free time, I enjoy playing on my softball team, going hiking with my family at LBJ Grasslands, and reading.



The Geography Department softball team, "Team Awesome," in 2010

GRADUATE STUDENT PROFILES



Aaron Flores

Second year Ph.D student Aaron Flores is a graduate assistant in the Center for Natural and Technological Hazards (CNTH). His research interests include social vulnerability to hazards/disasters, environmental justice, and health disparities. Since joining the Geography Department in 2018, he has led three projects focused on Hurricane Harvey, which struck the Texas Gulf Coast in August 2017.

Using survey data from Greater Houston residents, one study found that African American residents were significantly more likely than White residents to experience post-traumatic stress after Harvey. This study is currently awaiting editor decision at a peer-review journal.

A separate study utilizing the same survey data found that racial/ethnic minority households experienced significantly more unmet needs than White households did. Results also show that foreign-born non-citizen Hispanics were significantly more likely than foreign-born citizen Hispanics to experience specific unmet needs, such as going without electricity, adequate drinking water, and access to a bathroom. This result suggests that citizenship status is an important contextual indicator when assessing disaster victims' needs. This study has been published in the International Journal of Disaster Risk Reduction.

Another study utilizes data on accidental petrochemical releases in the Texas Gulf Coast region after Harvey. Results indicate that neighborhoods with higher proportions of residents who were Hispanic, Black, in poverty, disabled, or under 15 years of age had greater exposures to petrochemical releases due to Harvey. This study is currently under review at a peer-review journal.

Shawna Nadybal

Shawna Nadybal is a 2nd year master's student working with Dr. Timothy Collins and Dr. Sara Grineski (Sociology) at the Center for Natural and Technological Hazards (CNTH). She is mainly interested in studying the unique interactions between social positioning and vulnerability to hazards or health disparities in the contiguous United States.

Over the last academic year, Shawna has been primarily focused on moving her thesis research forward by analyzing the social predictors of exposure to light pollution at the census tract level. She is interested in identifying potential disparities in exposure to artificial lighting based on race, ethnicity, or economic status, and hopes that this research will help to expand current understandings of environmental injustices in the United States.

As an affiliate of the CNTH, Shawna has also had the opportunity to work on several other recent projects with her research team. This includes a lead-author book chapter on environmental justice, published in *Geographies of Behavioural Health, Crime, and Disorder: The Intersection of Social Problems and Place*, as well as two separate analyses of noise pollution in the United States, published in *Environmental Research* and the *Journal of Transport Geography* respectively. Shawna plans on graduating with her degree at the end of this semester, and hopes to either continue on for a Ph.D, or pursue policy-oriented work in the public sector.



GEOGRAPHY RESEARCH PARTNERSHIPS

UofU Geography and the Global Change and Sustainability Center

Susana Velásquez-Franco, a Ph.D. student in the Geography Department, and her advisor Dr. Mitchell Power recently returned from fieldwork in Colombia where they collected sedimentary records from a remote lagoon in the equatorial mountains. Susana's dissertation research is being funded by the U's Global Change and Sustainability Center (GCSC) with additional travel funding assistance for the research team being provided by the Center for Latin American Studies.

The cultural and biophysical settings of the San Diego Lagoon, a volcanic "maar" in the Central Cordillera of the Colombian Andes, formed some 20 thousand years ago, make it unique among Andean Equatorial lakes. Numerous indigenous groups inhabited the region around the time of first European contact and identified San Diego Lagoon as a sacred place they called Bocanem. The tribes resisted colonization efforts for decades before the area was abandoned by indigenous and colonizers alike for 300 years. Eventually, gold and other minerals were re-discovered in the region by Criollos prospectors in the 1800s. The area would later become the setting of a 50-year conflict between ex-FARC guerrillas and paramilitary forces.

Colombia is second only to Indonesia in having the highest National Biodiversity Index and contains up to 10% of the world's biodiversity (CDB-Convention of Biological Diversity, 2001). In 2011, acknowledging the important link between biodiversity and national well-being, the Colombian government designated for protection the 100 hectares that surround San Diego Lagoon and included it as part of the country's Ecological Main Structures (EMS), "an ensemble of biophysical elements that support essential ecological processes in the territory, with the purpose of preservation, conservation, restoration and sustainable use of natural renewable resources, that sustain social and economic development of human populations" (National Government of Colombia Decree 3600, 2007). These EMS networks have become legally-constituted management tools utilized by the government of Colombia to optimize biodiversity conservation and ecosystem services. They have also transcended

into rural-use planning initiatives at these biophysical units that contribute to both biodiversity conservation and conflict amelioration.

Using two lake sediment corers, including a freeze corer that has never been used in previous fieldwork in Latin America, a goal of the research team is to provide new insights from biogeography and paleoecology tools. They also aim to inform more specific management strategies and decision making related to EMS. Susana's dissertation research hopes to provide a long-term perspective into human-environment interactions and empower local communities in a post-conflict era.



Susanna Velásquez-Franco and Mitch Power

STORIES FROM THE FIELD

SnowEx 2020

by Jewell Lund, PhD student, Department of Geography



Over a billion people rely on snowmelt for their drinking water and agriculture; it is also critical to the earth's surface energy budget as well as ecosystem services. But, snow is highly variable in both space and time, which provides a challenge for accurately measuring (and planning for) the amount of water that the snowpack holds.



SnowEx is a five-year NASA program aimed at finding the optimal integration of field-measurement, remote sensing, and modeling techniques in order to better understand the snowpack, and how it is changing with climate. It involves multiple seasons of in-field measurements in various snow environments, coincident with airborne observations utilizing sensors that operate at a variety of electromagnetic wavelengths.



SnowEx 2020 involves a collaborative and intensively coordinated effort. 13 study sites throughout the western US are being measured for important snowpack components weekly, while overflights with airborne sensors take place at these same sites. The first three weeks of February were an intensive campaign, focused on Grand Mesa, Colorado—a 500 square mile plateau that is over 10,000 feet in elevation. During these three weeks, about 30-40 snow scientists from around the nation came together to take field measurements, while a number of planes with differing sensors flew over us.



These three weeks were intensive: we dug over 150 snow pits for manual measurements of snow depth, temperature, density, hardness, liquid water content, and snow grain type and size. Simultaneously, several of the scientists operated on-the-ground instruments including radar, radiometers, spectrometers, micropenetrometers, specific surface area instruments, lidar, and structure from motion. Several planes with similar instruments flew overhead, so we can compare our point measurements to regional values.

Our time in the field was amazing: we were out on snowmobiles from about 7:30 to 5:30 every day, and the consistent energy for taking good

measurements was impressive. Beyond the inspiring amount of data collected (which will become publicly available through NSIDC), the snow science community—which can seem a bit disparate—came together, learning and drawing ideas from differing fields of expertise. As a PhD student, the opportunity to do fieldwork with some of the scientists that have truly shaped our field of research was inspiring, and I walked away with new friendships, ideas, and perspectives that will certainly inform my research moving forward. I feel lucky to be a part of this endeavor.



Jewell Lund

Incoming Graduate Students



L-R Emma Marshall, Morgan McDonnell, Luis Garcia, Savannah Bommarito, Stella Mosher, Troy Saltiel, Joel Palmer, Ahmad Riyadh, Doug Tharp, Ning Xiong, Kripa Thapa, Juying Han

GEOGRAPHY CLUB

Annual River Trip



The Geography Club kicked off its inaugural annual river trip this fall with a fantastic float down the Green River Daily with surprise guest and colloquium speaker Pam Nagler from the USGS. The Club camped at Swasey's Beach right on the river and enjoyed a roaring campfire where river runners and academics alike swapped tall tales about their endeavors and exploits. The next day, the group pushed off and began their waterborne adventure through tumultuous rapids and dramatic desert canyons. Laughs were had, memories were made, and not a single boat flipped. All in all, the trip was an absolute success.

Join the Club's Campus Connect page at
getinvolved.utah.edu/organization/geography-club
for the latest updates.

Making a Difference with Maps

By Troy Saltiel, MS Student, Department of Geography

At the Geography Club's second Mapping Party, volunteers made hundreds of edits to OpenStreetMap. Our efforts contribute to the larger Missing Maps campaign, which is supported by organizations such as the Red Cross and Doctors Without Borders. Missing Maps' main objective is to "map the most vulnerable places in the developing world, in order that international and local NGOs and individuals can use the maps and data to better respond to crises affecting the areas." All of the data created by volunteers is free and open to be used by anyone through OpenStreetMap.org, which not only helps in administering aid and improving disaster preparedness, but can even stimulate developing economies which may improve the standard of living. This is made possible by Missing Maps' commitment to ensure local access to this data and the technology needed to utilize it.



Missing Maps was founded because the American and British Red Cross and Doctors Without Borders realized that map data are vital for delivering humanitarian aid. The mapping process generally goes as follows: (1) vulnerable areas are identified, (2) NGOs submit mapping projects to an online project manager system and remote volunteers fulfill these mapping needs, (3) volunteers on the ground verify the map data with help from locals, and (4) the finalized data is utilized by humanitarian organizations. We, the volunteers at mapping events, are step 2 in this process.

Remote mapping volunteers need no prior experience with mapping, just a laptop that can power a web browser (there is no software, everything is run online). The goal of our Humanitarian Mapping Party events are to create a relaxed and friendly environment to get more people involved in remote mapping, and to provide on the spot help and training to remove the barrier of "I don't know how to map". Fortunately, the system we use to map is very easy to use (see: tasks.hotosm.org/contribute), and once new volunteers get started, they can easily continue to map on their own.

The Geography Club is also excited to announce official affiliation with the YouthMappers, which is a network of university organizations including more than 200 campuses and 48 countries worldwide. As a YouthMappers chapter, Geography Club members now have access to this international community and will be exclusively eligible to apply for future calls for participation for special support such as leadership opportunities, female mappers activities, and even student research fellowships.

GRADUATE FELLOWSHIPS

Brian and Michelle Haslam Graduate Fellowship

Chelsea Ackroyd, PhD student
Daniel Quintanilla, PhD student
Luis Garcia, MS student

Donald A. and Susan P. Lewon Graduate Fellowship

Thomas Brussel, PhD student

Foreign Language and Area Studies (FLAS) Fellowship

Jewell Lund, PhD student

Global Change and Sustainability Center Graduate Fellowship

Kripa Thapa, MS student
Ning Xiong, PhD student

Herbert W. Gustafson Endowed Graduate Fellowship

Aaron Flores, PhD student

University Graduate Research Fellowship

Durban Keeler, PhD student

SCHOLARSHIP AWARDS

Brian and Michelle Haslam Scholarship in Geography

Colby Child
Geoffrey Kroll
Haley Morris

Donald A. and Susan P. Lewon Scholarship

Emma McFee
Zachary Ray

Dorothy B. Watkiss Scholarship

Aaron Brown

Merrill K. Ridd Scholarship

Connor Peterson

Roger M. McCoy Student Assistance Endowment Award

Logan Hastings

Stephen S. and Cynthia Clinger Scholarship

Joshua Krahulec

T-53 Scholarships in Geography

Avery Durham

Natalie Fillerup

Kinley Millett

Codi Winn

Solutions Scholars Cohort 1 CSBS

Ryan McCulloch

Solutions Scholars Cohort 2 CSBS

Colby Child

Haley Segura

T-53 Scholarships in Environmental and Sustainability Studies

Helen Claire Baer

Logan Hastings

United States Geospatial Intelligence Foundation Scholarship

Brett Ruether

DONATIONS TO THE DEPARTMENT

We appreciate the generous support of the following donors over the past year

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Gary E. Christenson
David G. and Caryn L. Clark
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Yehua Dennis Wei
William S. and Daphne M. White
David and Margie Wilkins
Jarom T. Zenger

SUPPORTING THE DEPARTMENT

Invest in your degree for the future!

You can help make your degree worth more. Here are some ways you can take a more active role in supporting our department:

- If you have specific knowledge of employment or internship opportunities for our graduates;
- If you can use the department or DIGIT lab for funded research/service projects;
- If you have ideas and time to devote to improving our department;
- If you have a desire to support the department and the students financially;
- If you want to support financially and participate in our Fall picnic or Spring awards activities

Contact dennison@geog.utah.edu if you have any questions about Geography Donations

Alumni Info Update / Donations

Send us an update and let us know what's new! Also, please consider taking this opportunity to donate to our scholarship funds. Your donation will directly support undergraduate and graduate scholarships. Go to https://umarket.utah.edu/ugive/index.php?gift_id=143 to donate online, or use the form below.

Alumni Info Update

Name: _____

Home Address: _____

City: _____ State: _____ Zip: _____

Home Phone: _____

E-mail Address: _____

Year of Graduation (alumni): _____

What's New? Career? Family? _____

Scholarships and Funds

Department of Geography Development Fund (Unrestricted Gifts)	\$ _____
Chung-Myun Lee Scholarship for Undergraduates	\$ _____
Merrill Ridd Scholarship Fund for Undergraduates	\$ _____
Donald Currey Scholarship Fund for Graduate Students	\$ _____
Roger McCoy Student Assistance Endowment Fund	\$ _____
Other (please specify) _____	

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Department of Geography
260 S Central Campus Dr Rm 4625
Salt Lake City, UT 84112

Check payable to U of U Geography Department

