# GEOGRAPHICA 2017 Spring Newsletter University of Colorado, Boulder

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Opportunities for giving: Our donors have made a big impact and we can't do it without you. We thank you!



#### Chelsea Nagy: Project Fire Publishes Paper

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#### Hamid Zoraghein Reflects on His Time at CU and His Work PhD candidate Hamid Zoraghein discusses his dissertation research, his work at the National Center for Atmospheric Research, and why he chose CU Geography over other universities. pg 5.

#### Emily Yeb, Department Chair

In these unsettling times, geographical inquiry is more important than ever. Yet, in the United States, we are witnessing a broad attack on the value of research and the production of knowledge, whether on global climate change, international development, transnational migration, demography, public health, or economic and social inequality. International cooperation, key to scientific advances, peace building, and cross-cultural understanding, is being curtailed and federal scientists are facing severe limitations on their ability to contribute to the public good. One recently proposed piece of legislation regarding the Department of Housing and Urban Development would stipulate that "no Federal funds may be used to design, build, maintain, utilize, or provide access to a Federal database of geospatial information



Emily at Chaktsalgang, the first of four major prostration sites along the circumambulation route of Mount Kailash, Tibet, July 2016

on community racial disparities or disparities in access to affordable housing." As the American Association of Geographers has stated, many geographers conduct research or provide services – including some based on federal funding – that use geospatial information related to racial, economic, and other disparities. If passed, this bill could have a damaging effect on the lives and livelihoods of many Americans.

In this context, we reinvigorate our commitment to evidence-based inquiry, social and environmental justice, academic freedom, and mutual respect. The CU Boulder Department of Geography is a leader in international engagement. We are proud this year to have not one, but two winners of the Fulbright scholarship. Professor Mara Goldman and MA graduate Sierra Gladfelter will both spend the next year in India supported by Fulbright. Mara will work with a local organization to teach and research on community-based conservation, and Sierra will collaborate with two universities in India to investigate and improve collaborative community adaptation to climate changeinduced disaster. Shifting to another continent, Professor Tom Veblen was recently recognized with the CU Boulder Distinguished Research Lectureship not only for his decades-long pioneering research on temperate forests in Chile and southern Argentina, but also because he has virtually single-handedly created a thriving community of scholars across the region, through his mentorship and training of many students from South America who have become prominent scholars in their own right. Our faculty and students continue to engage with pressing issues ranging from Professor Fernando Riosmena's studies of US-Mexico migration to Professor Jennifer Fluri's recently published book about the everyday geopolitics of American aid in Afghanistan. For a more comprehensive view of some of the many places around the world where we work, take a look at this new map: http://geography.colorado.edu/ research.

Congratulations to all of the graduating BA, MA, and PhD students this year, and in particular to new members of Phi Beta Kappa. Congratulations as well to our Geography majors receiving Latin Honors, including **Emily Eley, Brooke Long**, and **Gabi Murillo**. We hope to encourage and support more future majors to undertake independent research, as one of many ways to navigate and enrich our sense of responsibility and accountability to society as geographers.

#### Human-started Wildfires Expand the Fire Niche across the United States by Chelsea Nagy

As part of a NASA grant awarded to **Dr. Jennifer Balch** and colleagues at the University of Massachusetts Amherst and the University of Idaho to study climate and land use drivers of invasive-grass fueled fires across the western U.S., Jennifer Balch



The human-caused Waldo Canyon fire started 4 miles northwest of Colorado Springs, CO on June 23, 2012 and was fully contained 2 1/2 weeks later. The fire left two people dead, destroyed 346 homes and burned 18,247 acres. (uncredited photo)

and her team just published a paper in *Proceedings of the National Academy of Sciences* (PNAS) entitled "Human-started wildfires expand the fire niche across the United States": <u>http://www.pnas.org/</u> <u>content/114/11/2946.full</u>.

The costs of wildfire in the United States have risen substantially in recent decades, but the direct role of people in increasing wildfire activity has been largely overlooked. This study provides the most comprehensive assessment of the role of

human-started wildfires, compared with lightning-started fires, across the United States from 1992-2012. It combined over 1.5 million government wildfire records with fuel data from the MODIS satellite, climate data from meteorological stations, and lightning strike

data. Results showed that over two decades across the U.S, people started 84% of all wildfires, tripled the length of the fire season, including burning during moister conditions, dominated an area seven times greater than that affected by lightning fires, and were responsible for nearly half of all areas burned. The authors suggest that policy efforts to mitigate wildfire-related hazards would benefit from focusing on reducing the human expansion of the fire niche.

This line of research focused on wildfires is one of the main themes explored by Earth Lab, a new



On May 1, 2016, a fire began southwest of Fort McMurray, Alberta, Canada. On May 3, it swept through the community, forcing the largest wildfire evacuation in Alberta's history. The fire is believed to be human-caused.(Getty Images)

initiative funded by the university's Grand Challenge, directed by Dr. Balch. Earth Lab's mission is to accelerate discovery to address major unanswered questions about the pace and pattern of global environmental change. Earth Lab aims to be a world class synthesis center, capitalizing on earth observations to answer timely questions about earth systems science, utilizing complex, heterogeneous data and novel datasets. Earth Lab has had over 20 faculty, 9 postdocs, 8 graduate students working on various science themes including fire, forest disturbance, permafrost, erosion, data harmonization, drought and risk assessment, mountain ecohydrology, societal impact of natural disasters, and data analytics. Additionally, over 15 undergraduate interns from Geography, Math, Engineering, and Geology are participating in cutting-edge research



Project Fire Team: Back row (L to R): Jeff Thompson, Carson Farmer, Jennifer Balch, Billy Armstrong, Greg Tucker, Adam Mahood, Oliver Wigmore, Travis Williams, Tim Dunn, Brian Johnson, Max Joseph. Front row (L to R): Trisha Shrum, Babs Buttenfield, Matt Rossi, Nate Mietkiewicz, Mariela Perignon, Leah Wasser, Sepideh Dadashi, Megan Cattau, Lise St. Denis, Chelsea Nagy, Mollie Buckland. Kneeling: Bill Travis

of the science and analytics teams. Earth Lab is comprised of science projects or themes, a state of the art analytics hub to facilitate research, and an education initiative to train the next generation of earth system scientists in data analytics.

**Chelsea Nagy** is Program Manager / Research Scientist for Earth Lab where she has worked since October 2015. Dr. Nagy has Earth Lab managerial duties for operations and assists Jennifer Balch, project director in setting the strategic direction for Earth Lab. As a research scientist, Dr. Nagy studies the influence of humans on the spatial and seasonal patterns and drivers of fire within the U.S. For the latest updates on their research projects, education, and the analytics hub, check out the Earth Lab website: <u>http://www.colorado.edu/earthlab</u>.



#### Hamid Zoraghein, PhD Candidate

First, a little about myself and how I ended up in Boulder, Colorado. I am from Tehran, Iran. Like in the U.S., students typically start college at age 18. However, in my country, a student's field of study is determined by a nationwide exam. Based on their ranking, students are placed in various universities around Iran. My field of interest is GIS, which in both Iran and the U.S. is a very marketable discipline. Fortunately, I completed my Bachelors and Masters degree at KATU University in Tehran in Surveying Engineering, where GIS is part of the curriculum. Before applying to CU Boulder Geography, I contacted Professor **Stefan Leyk** as I was already familiar with the nature of his work. Since the CU program is very prestigious in the U.S. and because I like Stefan's work, I applied here. Through my research, I discovered that CU



Hamid Zoraghein

Boulder ranks 2nd nationwide in placing its graduates as faculty, and that made a big impact on me at the time. While I was accepted to other universities, I chose CU over the others not just for its quality, but also because of Boulder's smaller size, weather, and politically-accepting atmosphere.

My dissertation, *Creating Temporally Consistent Small Area Census Units Using Advanced Combinations of Areal Interpolation and Spatial Refinement: Method Development and Assessment*, is about population distribution. I work with census data in a temporal context. My goal is to create a temporally consistent estimate of census data over time. Population-related data are sensitive and not reported by individuals, so we don't know age, race, or education level of individuals because the data is aggregated over boundaries. We know specifics of the data within a census tract, but we don't know the actual distribution within the boundaries. These areas are redefined every census year. For example, if we want to study the temporal pattern of age or race or how the total population has changed through time, we can't base our analysis on these units because they change over time. Thus, I am working to develop methods that enable the transfer of population data into consistent units and educe how demographic data have changed temporally within small areas. I am using census blocks within census tracts to validate the accuracy of my results. This will provide higher resolution in the study of demographics.

I also work for the National Center for Atmospheric Research (NCAR) in Boulder on the Community Demographic Model (CDM) research project. We are developing how demographic variables such as urbanization and population distribution can be projected for different regions of the world and assessing the relationship between demographic changes and climate change out to the year 2100. The components of the project include agricultural modeling, land use modeling, and demographic modeling which are integrated with climate change modeling variables. I work on population distribution models by country and their relationship to climate change, also projected out to 2100. NCAR has been awarded funding to undertake a similar project for just the U.S. I will join that project next year as a postdoctoral fellow.



Hamid splits his time between working on his dissertation in the Guggenheim Building and his job at the National Center for Atmospheric Research (NCAR) in Boulder, CO.

When I reflect on my time here, I know living in Boulder has molded me into a different person both personally and academically. Undertaking a PhD in a different language and learning a new field of study (Geography vs. Engineering) has been difficult yet very rewarding. Working on two projects simultaneously has enabled me to interrelate different concepts and learn the intellectual rigor and time management needed to meet the deadlines of both projects. Being far from family has made me a

stronger person since I must handle all of life's problems on my own. I returned home 2 1/2 years ago for a visit, but the risk of not being allowed to reenter the U.S. has been too great since.

I think back to my first class as a TA for GIS 1. It was frightening. I didn't know what to expect or if students would accept me. I soon discovered American college students are well behaved, follow the course work as instructed, and would never make fun of my accent. Teaching for 2 years helped me understand American students and culture. Everyone here has made the transition to American culture much easier for me. One of the greatest things about the Geography department's faculty and students is that they create a friendly, welcoming, and supportive atmosphere. Overall, CU Geography has been a great experience for me. I've become familiar with a different culture and different people and it has made me into a more well rounded person.

#### Galen Murton

In August 2017, I will join the Department of Integrated Science and Technology (ISAT) at James Madison University (JMU) as a tenure-track Assistant Professor with teaching responsibilities in the Geographic Science Program (<u>https://www.jmu.edu/gs/</u>). I was hired specifically as an instructor of human geography. My classroom training and teaching experiences at CU Geography were fundamental to achieving this professional goal. In Fall 2017 and Spring 2018, I will teach established classes and later develop new coursework based on my training at CU, including Political Geography, Critical Development Studies, Geographies of South Asia, and Infrastructure and Geopolitics. I will have the opportunity to design and direct study abroad programs at JMU to several



of my research sites in Nepal and the broader Himalaya region. Because study abroad experiences were tremendously formative to my career development, I am especially excited to bring my own undergraduate students into the field on collaborative research projects in the years ahead. In addition to my faculty position at JMU, I received a Marie S. Curie Action (MSCA) Individual

In addition to my faculty position at JMU, I received a Marie S. Curie Action (MSCA) Individual Fellowship from the European Commission Horizon 2020 program to conduct independent mobility research with the Department of Social and Cultural Anthropology at Ludwig Maximilian University Munich (LMU). I will take a leave of absence from JMU in my second year to pursue this unique opportunity as part of the ERC research group

Remoteness and Connectivity: Highland Asia and the World (http://highlandasia.net/ index.html). My MSCA research project at LMU Munich, Road Diplomacy: China in South Asia, builds directly upon and expands my dissertation studies at CU Boulder and aims to generate new knowledge about where, why, and to what extent roads are being built between China and South Asia and to untangle the interrelated geopolitical and social impacts of infrastructure development at village, national, and international scales.

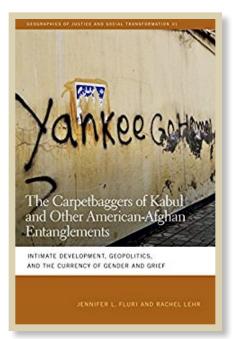
My new professional positions are academic extensions of graduate training at CU Geography and I intend to maintain connections with CU Boulder in the future. No matter the locations or institutions, my applied scholarship will continue to draw on the theoretical rigor, global perspectives, and classroom orientations gained through critical

training in Geography at CU Boulder. In fact, during my hiring interview at JMU, the dean mentioned the prestigious, worldrenowned stature of the CU Geography faculty. I believe this gave me a clear advantage during the hiring process. I feel incredibly fortunate to have a tenure track position at this stage of my career and am grateful to all of the CU Geography faculty and staff for the exceptional support along the way. And now I truly understand the old joke that one of the hardest parts of the CU Geography program is leaving Boulder when you're done!



Galen in Mustang, sitting above the upper valley and agricultural region of Nyechung, Mustang District. The northern reaches of the Annapurna-Dhaulagiri Himalaya mountains can be seen behind him.

Jennifer Fluri's new book, <u>The Carpetbaggers of Kabul and Other America-Afghan</u> <u>Entanglements: Intimate Development, Geopolitics and the Currency of Gender and Grief</u>, published by University of Georgia Press in January 2017.



The idea for writing this book began in 2007 when I was an assistant professor at Dartmouth College researching international assistance in Afghanistan. At that time, my co-author Rachel Lehr was executive director of Rubia, Inc., a U.S.-based nonprofit organization that worked in partnership with the Rubia Organization for the Development of Afghanistan, a local nongovernmental organization. This partnership grew from a long-term personal relationship Rachel had established with Afghans in the early 1980s. In 2007 Rubia, Inc. began the registration process for becoming a 501c3 non-profit with a board of directors. I became an active board member and met with and visited Rubia's programs and participants in Afghanistan. Over the course of these experiences Rachel and I began to work together on a number of different academic projects. One of our collaborative efforts included developing and presenting a series of lectures about everyday life in Afghanistan and the geopolitics of

conflict, aid, and development, titled *Rediscovering Afghanistan: Lessons from the Home*. We presented these lectures during 2007–12 throughout New Hampshire (NH), in partnership with the Arts Alliance of Northern New Hampshire and funded by the NH Humanities Council.

These lectures were developed from my research on geopolitics and international aid and development in Afghanistan, and Rachel's ethnographic research and experiences living and working with Afghans. My research included questionnaires and interviews with Afghans and international workers primarily living and working in Kabul, Afghanistan. Rachel's research was gathered while she was completing her doctoral dissertation in rural Afghanistan. Our lectures attempted to provide a complex and complicated view of both international geopolitics and daily life in Afghanistan, which included presenting images, short videos, and stories not seen in the mainstream media at the time.

Developed from these lectures, this book presents the complexities, complications, and contradictions of U.S.-Afghanistan relations and unravels them through analyses at the intersection of the personal and the geopolitical. In order to effectively disentangle these multifaceted stories and view them clearly and critically, we center our analyses of American-Afghan entanglements at an intimate scale. The case studies developed in the book exemplify the interlocking relationship between international geopolitics and everyday lives. Dominant development programs have fixated on changing the culture to liberate women and meet the demands of capitalistic and market-driven development paradigms. This book seeks to analyze the geopolitics and messiness of assistance and development by examining the ordinary untidiness of American-Afghan entanglements.

### Spotlight On Faculty

#### Barbara Buttenfield

**Barbara "babs" Buttenfield** is on sabbatical this year, working on several projects. She is on a team of scholars from six universities awarded a 3 year NSF grant to host workshops to support retention of women in academia and industry who work within geospatial STEM disciplines. She has begun a collaboration with professors in Environmental Engineering at CU Boulder and in Rural Sociology at Michigan Technical University to model the installation of industrial anaerobic digesters (very large composting facilities) in four states. Babs will lead the facility location/allocation modeling, and the team has just submitted a proposal to NSF's INFEWS program.



Barbara "babs" Buttenfield

A third project has been ongoing for the past year or so, to

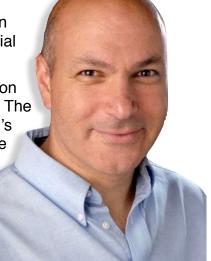
develop and validate new metrics for distance, area and volume that take into account terrain roughness and non-uniformity and that support models of flood inundation, landslides and earthquake damage, in collaboration with GEOG faculty **Stefan Leyk** and **Carson Farmer**, and GEOL faculty Kristy Tiampo and Greg Tucker. The team has submitted a proposal to form a USGS Powell Center national working group as part of the Earth Lab Grand Challenge Initiative on campus. Her recent post-doctoral researcher Yi Qiang accepted a tenure track faculty post at University of Hawaii-Manoa.

#### Waleed Abdalati

Waleed Abdalati has had a busy year engaging policy makers regarding CU research activities. He had dinner with Governor Hickenlooper and various research leaders in Colorado to discuss how research-oriented organizations can further collaborate to the betterment of Colorado's economy. The overall goal was to help elevate Colorado on the global innovation stage by connecting businesses, research labs, the entrepreneurial community, higher education and other research entities.

This year Professor Abdalati also participated in a group discussion with Senator Cory Gardner regarding U.S. space research goals. The February meeting discussed aspects of the Trump Administration's space program goals, and strategic priorities for Colorado's space industry as they relate to programs and missions that support U.S. national security, space exploration, human spaceflight, and earth science initiatives.

Professor Abdalati also engaged with a delegation of Colorado elected officials (Sen. Bennet, Sen. Gardner, Rep. Polis, and Rep. Perlmutter) regarding the importance of Federal funding for the Colorado economy. The meeting, held on Capitol Hill in



Waleed Abdalati

March, discussed research activities across Colorado in the context of the importance of federal investments to Colorado, both in terms of business and standing on the national

and international stage. Some useful facts from the Co-Labs report: the federal investment in Colorado is \$2.6B, which produces 17,000 jobs. Colorado is the #2 state in funding from the Departments of Commerce and Interior, #3 from NASA, #5 from EPA, and #6 from NSF.

#### Mara Goldman

**Mara Goldman** received a Fulbright fellowship for research/teaching in India next year. Dr. Goldman will work with the Ashoka Trust for Research in Ecology and the Environment (ATREE) to investigate the production and application of knowledge integral to Community Based Conservation. She will explore teaching, research, and practice, focusing in particular on a two-decade long project in the Biligiri Rangaswamy Temple Tiger Reserve, with the indigenous Soliga tribe. Dr. Goldman will explore how scholars and practitioners account for difference (in knowledge, beliefs, practices) in conservation practice, and how to build productively on difference for more inclusive conservation. She will also teach the political ecology of Community Based Conservation in a graduate seminar at ATREE.

#### Tim Oakes

**Tim Oakes** guest-edited two special issues published this spring. The first, "Mediating Asia," was recently published in the *International Journal of Communication*. This collection of articles by Asian media scholars and professional journalists explores the

changing relationships between Asian states and Asia-based media institutions and industries as the nature and role of media in Asian society undergoes profound change.

The second, in *The Journal of Asian Studies 76(2)* and titled "Catastrophic Asia", features a commentary by **Emily Yeh**, as well as a paper by CU geographers **Alāna Wilson** (current PhD student), **Sierra Gladfelter** (graduating MA student), **Mark Williams**, and **Adina Racoviteanu** (recent graduate) along with Sonika Shahi, Prashant Baral, and Richard Armstrong, titled "High Asia: The international dynamics of climate change and water security." Both of these collections came out of a symposium organized by Center for Asian Studies (CAS) and represent Dr. Oakes' efforts to link Asian area studies with fields such as media studies and environmental studies that have not traditionally been associated with area studies scholarship.

Tim Oakes

#### Student News

Seven Geography graduate students received research grants from the Graduate School: **Robert Andrus**, **Joel Correia**, **Angela Cunningham**, **Zhaxi Duojie**, **Mehran Ghandehari**, **Eric Lovell** and **Kyle Rodman** have each received a Beverly Sears Research Grant. These grants provide funds to assist the student with their PhD research.

**Eric Lovell** has been selected to receive a 2017-2018 Graduate School Dissertation Completion Fellowship. This fellowship provides one semester of full support during the 2017-18 academic year.

Three Geography Graduate Students received Spring 2017 department teaching awards. The Department of Geography Annual Awards for Excellence in Graduate Teaching have

been awarded to **Joel Correia** (GPTI award), **Robert Andrus** (TA award), and **Adam Mahood** (Mentoring Award).

**Rupak Shrestha** received the Association of American Geographers Asian Geography Specialty Group Graduate Student Paper Award (Runners Up), March 2017, for the paper "Gendered Geopolitics of the Everyday: Tibetan Nationalism, Placemaking, and Memory under Extraterritorial Sovereignty in Nepal".

Sierra Gladfelter received a Fulbright fellowship to spend next year in India doing research. Her research project will examine opportunities for local adaptive strategies and technocratic interventions led by the Indian government to collaboratively address the impacts of climateinduced disasters in Uttarakhand and Ladakh. Specifically, she is investigating how rural communities have historically coped with floods and droughts and mitigated their effects locally as well as what current barriers and opportunities exist for the continued use of these technologies alongside state-led interventions. Collaborating closely with Jawaharlal Nehru University's Disaster Research Programme and India's National Institute of Disaster Management, Sierra hopes her research will enable government-led efforts to combat climate-induced disasters to complement, rather than displace, local knowledge and practices.



#### Meredith DeBoom Dissertation

My research uses Namibia as a case study to advance our understanding of how national and subnational contexts shape resource politics, including perceptions of the distribution of mining-related harms and benefits. I use a mixed-methods approach to investigate how contextual factors such as local extractive histories shape tensions over mining in addition to national and individual-level factors. My dissertation project focuses on three sectors: diamonds, uranium, and marine phosphate. Using a postcolonial theoretical framework, I demonstrate how Namibian officials have employed a paradoxical rhetorical mix that combines resource nationalism with south-south solidarity with investors like China to frame both investment from foreign state-owned enterprises (SOEs) and a strengthened Namibian state role in mining as critical for inclusive development. Contrary to portrayals of Africans as passive recipients of foreign investments to maintain political legitimacy despite growing concerns about inequality, corruption, and environmental injustices.

#### Joel Correia Dissertation

The 2017 Graduate School Summer Fellowship I received will allow me to focus on completing and defending my dissertation, *State of emergency: Indigeneity, dispossession, and multicultural governance in Paraguay*, during the summer of 2017. My dissertation focuses on the politics of implementing Inter-American Court of Human Rights judgments on behalf of three Enxet and Sanapana indigenous communities in Paraguay while also examining how each community and its allies mobilize the law, indigeneity, and the language of rights to advance their territorial

claims, challenge the historic power of the cattle ranching industry, and reshape the way the Paraguayan

state addresses indigenous affairs. With support from the Summer Fellowship I will complete my dissertation in August so that I can begin a postdoctoral position with the University of Arizona Center for Latin American Studies in the fall of 2017. I am honored and humbled to have been selected for the 2017 Graduate School Summer Fellowship in the Department of Geography.

> I also received a Graduate School International Travel Award, which will assist with travel costs to an international conference to present my research.

Joel Correia

#### Alumni News

**Ian Rowen** (PhD, 2016) has a new job as Assistant Professor and founding faculty member of the new Geography Programme at Nanyang Technological University (NTU) in Singapore. Ian reports, "I start May 2 and begin teaching in August. NTU is opening a new Geography program and has hired 3 geographers to staff it. I am the only non-Singaporean. Our department will first be administered under the Sociology Division, and the idea is to eventually spin the department out on its own as we develop our own courses, a Geography Minor, then Major, and then perhaps grad degrees. NTU is a very ambitious and well-funded but very top-down university so it's hard to predict exactly what the program will be like in a few years. In other news, I'm also an Associate Researcher at the French Centre for Research on Contemporary China (CEFC) until the end of 2017. I don't know why they keep me around given the appalling state of my French!"



Ian Rowen

**Yonten Nyima** (PhD, 2012) draws from political ecology and political economy in examining rationales for, implementation of, and socioeconomic, cultural, political and ecological effects of China's ongoing development and environmental policies in Tibet. Dr. Nyima currently works on two research projects in pastoral Tibet. One is on the issue of lake expansion and the other is on China's latest policy on rangeland protection with the biggest spending ever on rangeland protection, i.e. a national Compensation for Ecological Services (CES) program. In recent decades a significant effect of global warming on the Tibetan Plateau is lake expansion. Lake Serling on the central Tibetan Plateau had expanded by one-third of its original size from 1640 km<sup>2</sup> to 2391 km<sup>2</sup> over nearly one decade between 2005 and 2014. Dr. Yonten Nyima examines the expansion of Lake Serling as observed by local pastoralists and its impacts on rangeland and pastoralists' livelihoods through a case study of the pastoral community most severely

affected by the expansion of Lake Serling. The purpose of the research is to add local knowledge of lake expansion in order to create a deeper understanding of the issue of

lake expansion and its impacts, and provide insights that aid in development of possibly replicable adaptation policy and long-lasting conservation efforts at local to national levels. China launched the CES program in 2011 and the core of the policy is to adjust herd size to carrying capacity through a reward mechanism for the purpose of protecting rangeland. Dr. Yonten Nyima investigates the rationales for formulation of the CES program, the politics of its implementation, its reception and its results through a case study from a pastoral community in the Tibet Autonomous Region.



Dr. Yonten Nyima interviewing a local pastoralist on the expansion of Lake Serling on the expanded lake shore, western Nagchu, Tibet, March 2016

#### Sarah Hart (PhD, 2014) won the

prestigious New (Early Career) Investigator Program (NIP) in Earth Science Award from NASA. The award is designed to support outstanding scientific research and career development of scientists and engineers at the early stage of their professional careers. The program aims to encourage innovative research initiatives and cultivate scientific leadership in Earth system science. The Earth Science Division (ESD) places particular emphasis on the investigators' ability to promote and increase the use of space-based remote sensing through the proposed research. The NIP supports all aspects of scientific and technological research aimed to advance NASA's mission in Earth system science.

From **Terry V. McIntyre** (BS, 1961): "While at CU, my mentor and good friend was Tim Kelley who said he saw a bit of potential in me. After I graduated in 1961, it was off to Oregon State where I received a Graduate Assistantship and earned an MS in Natural Resources in 1962. I later went to Penn State University to pursue a PhD in Geography as a graduate assistant. This proved to be an uncompleted endeavor. Then to Washington DC where I entered the Foreign Service. I was an economics officer who began working in Washington on Law of the Sea preparations because I could read a map. I was responsible for minerals and energy affairs in Canberra, Rio de Janeiro, and Caracas. So you see, it may be my academic background helped me out. While posted in Washington, I received a PhD in International Studies from American University. After a 21-year career, I retired to Brasil where I have lived for a total of 35 years. While in Brasil, I was the Deputy Executive Director of the Fulbright Commission in Brasilia for 8 years. Then 10 years as a professor at the Centro Universitario in Barra Mansa, RJ. I am now enjoying retirement but continue to be very active in Rotary where I keep busy in international service for District 4600."

**Thank You!** The Department of Geography is grateful to its alumni and friends for their financial support over the years. Our donors have had a big impact, making a difference not only to the Department as a whole, but to the lives of many individual students. There is always a real need for



funds to support academic departments. As we strive for higher standards and more and better opportunities for our students, we depend on the caring and generous nature of alumni and friends like you to meet these ever increasing financial needs. Your gift to the Department of Geography can take many different shapes. The information below may help you find the type of gift that best meets your needs, the impact you want, and the way you want to give. The CU Foundation can also assist you with your needs, be they for targeted or unrestricted programs.

#### **Geography Department Fund**

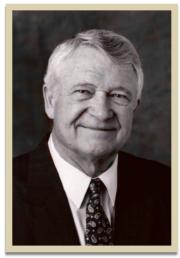
This fund is for academic support in the broad sense. If giving online and you want your gift to go to a specific scholarship, please provide scholarship name in the "Comments" section.

GIVE NOW Go online to: giving.cu.edu/fund/geography-department

### **Undergraduate Scholarship Programs**

#### A. David Hill Scholarship Fund

Established by Richard L. Knowlton, Professor Hill's former teammate and friend, and recently endowed by Myhra and Graham Hill, his wife and son. Applicant must be a Geography major, and have a minimum GPA of 3.0 in Geography, with a preference for those with interests in the environment-society relationship. Award is based on merit and demonstrated financial eligibility.



A. David Hill

GIVE NOW Go online to: giving.cu.edu/fund/david-hill-endowed-scholarship-fund

#### Albert W. Smith Geography Scholarship

Established in 1983 to honor Professor Smith at his retirement from the Geography Department faculty after thirty-one years of service to the University. Applicant must be a full-time senior majoring in Geography. Award is based on academic performance.

GIVE NOW Go online to: giving.cu.edu/fund/albert-w-smith-geography-scholarship-fund

#### Karl and Barbara von Dreden Stacey Scholarship

Established by Katherine and Frank Baxter in honor of Katherine's parents, Barbara von Dreden (CU class of 1940) and Karl Stacey (CU class of 1936). This scholarship supports undergraduate students to engage in summer research with faculty. Preference given to applicants who are juniors or seniors majoring in Geography, and graduates from Colorado high schools. Award is based on academic performance.

Go online to: giving.cu.edu/fund/karl-and-barbara-von-dreden-stacey-scholarship-fund

#### Theodore C. Myers Memorial Scholarship

Named in honor of long-time geography instructor Ted Myers. Scholarship is awarded to the undergraduate student with the most exceptional honors thesis.

GIVE NOW Go online to: giving.cu.edu/fund/theodore-c-myers-memorial-fund

#### Mable B. Duncan Scholarship Fund

To support scholarships for Geography majors at the University of Colorado Boulder, based on financial need.

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### Graduate Scholarship Programs

#### Gary L. Gaile DART Graduate Fellowship in Geography

This fund, in memory of Professor Gary Gaile, provides a fellowship/scholarship for Geography MA and PhD students doing field research addressing social and environmental concerns in developing areas.

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#### James A. and Jeanne B. DeSana Graduate Research Scholarship Fund

This fund provides invaluable support for graduate student research.

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#### Gilbert F. White Dissertation Fellowship

Named in honor of Professor Emeritus Gilbert F. White, this fellowship provides funding to outstanding PhD. students in the final year of dissertation preparation. Students are nominated by their academic advisors. Award is based on merit and financial eligibility.

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#### Geography Graduate Student Support Fund

To provide support for graduate students in the Department of Geography at the University of Colorado Boulder. Support may include research support and equipment purchases. Gifts to this fund can be made in memory of (IMO) **Jennifer Dinaburg**. Jennifer, a vibrant, active doctoral candidate in the Geography department, passed away on April 26, 2012 at the age of 31. In her memory, the department has established a small, named fellowship for doctoral field research.

Jenn was passionate about geography in many forms: through the environment, the outdoors, and through learning about China. After studying Chinese language and literature at Connecticut College, she traveled and worked extensively on the Tibetan Plateau. After a degree in environmental studies at Prescott College, her journey brought her to the Geography PhD. program in 2008 to study the commercialization of Tibetan medicinal plants in China's northwest Yunnan province. Jenn brought a love of mountains, travel, and unconventional learning to the department, where she was well loved for her sense of humor, wit and spirit.

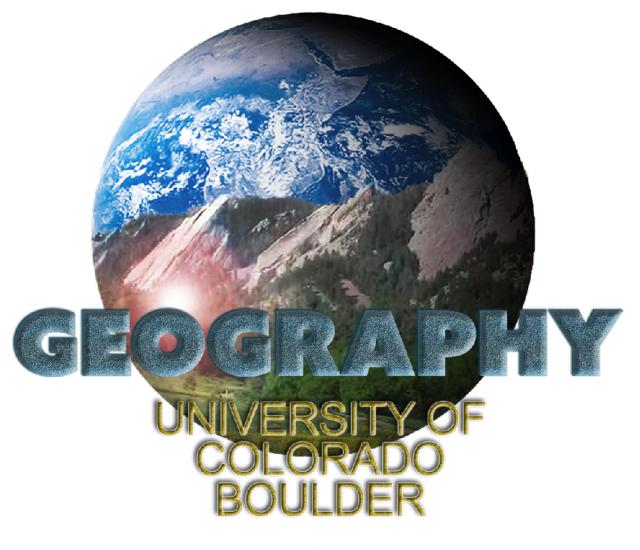
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Jennifer Dinaburg

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