Message from the Chair:
Department of Geography & the Environment Planning for the Future

As we close out calendar year 2015, the Department of Geography & the Environment is well-positioned to advance its core mission of educating the next generation of students and creating knowledge in geography, environmental science, and geographic information science. This past year, we had the honor of hosting a distinguished group of scholars representing institutions such as Dartmouth College, Johns Hopkins University, and the University of Connecticut, who conducted an external review of our department and programs. In their final report, the review team concluded that

The Department of Geography and the Environment is a strong program in terms of faculty research, undergraduate and graduate education and its contributions to the Division of Natural Sciences and Mathematics and the University of Denver. Geography and the Environment addresses some of the fundamental research challenges of the 21st century involving the environment, space, natural resources, and planning. The Department has accomplished much in recent years, is using its resources effectively, and is on a trajectory that will further enhance its record of success. Through focused strategic planning and careful hiring the department can continue to build its position at the local, national, and international levels.

Following up on the external review report, the Department held a strategic planning retreat in September to identify goals and objectives for the next five years. Among the action items identified were: 1) to add three new tenure-line faculty positions in the areas of: a) climate change and society, b) geographic information science, and c) urban geography, planning, and water resources, 2) strengthen PhD student recruitment and development, 3) expand research opportunities for undergraduate students, 4) pursue a modular BS degree program in Geography with the first phase being a specialization in GIScience, and 5) develop areas of focus and departmental strengths for our undergraduate and graduate programs. We are very excited to pursue these and other action items as part of the University's strategic planning process which is underway this year.

The Department of Geography & the Environment enjoyed a highly successful year in 2015. We continue to have a large number of undergraduate majors: 65 students majoring in Geography and 105 students majoring in Environmental Science. In addition, we have 105 students who are pursuing a minor in Sustainability, Geography, Environmental Science, Geographical Information Science, or Geology. Our graduate programs have also grown recently, especially our online MS-GISc program, now with 53 students. Several of our students have been recognized with prestigious awards over the last year including the Conference of Latin Americanist Geographers Student Field Study Award, the Association of American Geographers Latin America Specialty Group Field Study Award, the University of Denver Graduate Studies Dissertation Fellowship, and the University of Denver Graduate Studies Inclusive Engagement Fellowship.
Department faculty have continued to excel in both teaching and research. Dr. Matthew Taylor was promoted to the rank of professor based on his outstanding record of teaching, research, and service contributions. Dr. Hillary Hamann was appointed as a teaching associate professor, Drs. Erika Trigoso, Helen Hazen, and Kris Kuzera were appointed as teaching assistant professors, and Steve Hick was appointed as a professor of the practice. Dr. Becky Powell received another grant from the National Science Foundation (NSF) for the project "Spatiotemporal dynamics of woody cover in a savanna landscape" in addition to the NSF grant she is currently working on. Becky is also the recipient of the Division of Natural Sciences and Mathematics (NSM) Outstanding Faculty Service Award for 2015 recognizing her work as chair of the University Sustainability Council and co-chair of the Engaging Community Task Force on Expanding Sustainability on Campus. Overall, department faculty members received or continued work on over 20 funded research and teaching projects totaling nearly $700,000, and presented 40 papers or lectures to professional groups over the last year. Please take a look inside this newsletter for more information about our teaching and research activities over the past year.

We welcomed one new visiting teaching assistant professor this year—Dr. Michael Minn. Michael joins us after completing his PhD degree from the University of Illinois-Urbana/Champaign, and finishing a post-doctoral research assignment studying patterns of foreclosures in cities. Michael will be teaching a variety of courses with us this year including Introduction to Geographic Statistics, People Places Landscapes, and Sustainability & Human Society.

The department invited University of Colorado-Boulder Distinguished Professor Emeritus of Geography Roger Barry for the 5th annual Laurance C. Herold Memorial lecture on April 30, 2015. Dr. Barry is an expert in the specialties of arctic climate, cryosphere-climate interactions, mountain climate, and climate change. Dr. Barry's Herold lecture presentation “The Role of Snow and Ice in Climate” was an excellent overview of how arctic and alpine environments interact with climate. It was especially meaningful to host Dr. Barry for the Herold lecture, since he and Larry both received their PhD degrees from the University of Southampton (UK) and both pursued long and successful academic careers in Colorado. We also enjoyed visits from many other scholars from around the country and throughout the world who presented their research at our colloquium series (see inside newsletter for a complete list of speakers), thanks in part to the Marsico Visiting Scholars program.

I want to extend a special thanks to all of you who have taken the time to remember us with your thoughtful gifts to the Geography and Environmental Science fund over the past year. Your donations make it possible for us to offer new and exciting programs to our students, provide financial assistance to our graduate and undergraduate students to support their research expenses and to attend conferences to present their research, maintain and replace much needed lab and field equipment, and allow us to support our technological needs. At the request of the Herold family, we created the Laurance C. Herold Memorial fund in support of student field trips and field work, and I am grateful to all of you who have supported this fund in Larry’s honor. Your contributions are always greatly appreciated.

We regularly update our alumni database and enjoy learning about what is happening in your lives. We are especially pleased at the large number of alumni who shared their news with us this year (see inside newsletter for alumni news). Please take a minute to help us keep informed of your activities by visiting the alumni page on the department website (http://www.du.edu/nsm/departments/geography/alumni-update-form.html). We are also interested in what you would like to see included in the newsletter and welcome your input. As always, we extend an open invitation for you to visit the department should you find yourself in the metro area. We annually hold a Kick-Off Fiesta in September or October and a Graduation Picnic in early June for faculty, staff, students, families, alumni, and “friends of geography.” Please feel free to join us for future alumni events that we will be hosting.

On behalf of the faculty, staff and students, please accept our best wishes for a happy holiday season and a peaceful, prosperous, and productive 2016.

Andy Goetz
Chair
Faculty and Staff
2015-2016

Faculty

E. ERIC BOSCHMANN, Ph.D.
Ohio State University, 2008. Associate Professor. Urban geography, economic geography, commuting, mixed methods, GIS.

J. MICHAEL DANIELS, Ph.D.

ANDREW R. GOETZ, Ph.D.
Ohio State University, 1987. Professor and Chair. Transportation, urban geography and planning, economic geography.

HILLARY B. HAMANN, Ph.D.
University of Colorado Boulder, 2002. Teaching Associate Professor. Hydrology, water resources, watershed biogeochemistry, physical geography, conservation

HELEN HAZEN, Ph.D.
University of Minnesota-Twin Cities, 2006. Teaching Assistant Professor, Environmental influences on human health, environmental conservation, international students

STEVEN R. HICK, M.A.
University of Missouri, 1983. Professor of the Practice, MS-GISc online Program Director, & GTAC Director. Geographic information science, project management, cartography, criminology.

MICHAEL J. KEABLES, Ph.D.
University of Wisconsin-Madison, 1986. Associate Professor and Senior Associate Dean, Daniel Felix Ritchie School of Engineering and Computer Sciences. Climatology, water resources, climate variability.

MICHAEL W. KERWIN, Ph.D.
University of Colorado, 2000. Associate Professor and Director, Environmental Science Program. Quaternary geology, dendroclimatology.

KRISTOPHER KUZERA, Ph.D.
San Diego State, University of California-Santa Barbara, 2011. Teaching Assistant Professor and Internship Director. GIScience, Remote Sensing, Statistical Analysis

MICHAEL MINN, Ph.D.

JING LI, Ph.D.

REBECCA L. POWELL, Ph.D.
University of California-Santa Barbara, 2005. Associate Professor. Human-environment interaction, natural resource management, remote sensing, statistics, land use/land cover, geographic information science (GISc).
Faculty continued

DONALD G. SULLIVAN, Ph.D.
University of California at Berkeley, 1989. Associate Professor and Director, Environmental Sustainability LLC. Director, Geography Program. Quaternary studies, biogeography, environmental change.

MATTHEW J. TAYLOR, Ph.D.
Arizona State University, 2003. Professor and Director, Graduate Programs in Geography. Latin America, political ecology, development.

ERIKA TRIGOSO, Ph.D.
University of Oxford, 2011. Teaching Assistant Professor. Vulnerability and adaptation to climate change, geographic information science, Latin America.

DAVID B. LONGBRAKE, Ph.D.
University of Iowa, 1972. Urban Geography, Urban and regional planning, quantitative methods, GPS, GIS.

TERRENCE J. TOY, Ph.D.

JOSEPH K. BERRY, Ph.D.

MARIA CAFFREY, Ph.D.

DOUGLAS R. CLARK, Ph.D.

ANDREA GELFUSO GOETZ, J.D.

JEFFERY KREEGER, MBA (Marketing)

MICHELLE MORAN-TAYLOR, Ph.D.
Arizona State University, 2003. Gender and international migration.

SEAN TIERNEY, Ph.D.

PAUL C. SUTTON, Ph.D.
University of California-Santa Barbara, 1999. Professor and MSGISc residential Program Director. Geographic information science, ecological economics, human-environment interaction, population geography.

MARTHA A. NAREY, Ph.D.

Emeritus Faculty

DAVID B. LONGBRAKE, Ph.D.
University of Iowa, 1972. Urban Geography, Urban and regional planning, quantitative methods, GPS, GIS.

TERRENCE J. TOY, Ph.D.

Adjunct Faculty

JOSEPH K. BERRY, Ph.D.

MARIA CAFFREY, Ph.D.

DOUGLAS R. CLARK, Ph.D.

ANDREA GELFUSO GOETZ, J.D.

JEFFERY KREEGER, MBA (Marketing)

MICHELLE MORAN-TAYLOR, Ph.D.
Arizona State University, 2003. Gender and international migration.

SEAN TIERNEY, Ph.D.
Post-doctoral Fellow

JENNIFER-GRACE EWA, J.D. & M.U.P.
University of Louisville, 2014.
IRISE Post-doctoral Fellow in the Provision of Open Space

The Department of Geography and the Environment
University of Denver
Boettcher West, Room 120
2050 E. Iliff Avenue
Denver, CO 80208

Phone: 303-871-2513
Fax: 303-871-2201
E-mail: geog-info@du.edu

Staff

Assistant to the Chair.

WILLIAM K. KINISTON, Master Certification of Advanced 3D Animation & Graphics, School of Communication Arts, 1996.
Office Assistant.

SELAM HABTEAB, Work Study

Matthew Taylor and Diego Pons demonstrate tree rings and its relation with current and past climate at STEMosphere.
(photo courtesy Karen Escobar)

GEOG 2500: Sustainability and Human Society
Sustainability Tour
(photo courtesy Michael Minn)

GEOG 3940: Urban Geography Seminar field trip
Office of Sustainability, City of Denver
(photo courtesy Emily Thomas)
New Additions by Michael Minn

Michael Minn joined the department in September as a Visiting Teaching Assistant Professor for the 2015-2016 academic year. His primary research interests are energy, open-source software, and pedagogy in higher education.

Michael's path to geography, like many in the field, was circuitous. He holds a Bachelor's degree in music education, a Master's degree in computer science, and worked in the performing arts in New York City in the 1990s and early 2000s.

Looking to make a career change in the mid 2000's, Michael stumbled upon an interview with Vaclav Smil, a Canadian researcher who has written on energy issues for over 40 years, with a special focus on promoting better understanding of the complex relationship between energy and society, as well as the challenges of future energy transitions. Michael's interest in energy and transportation issues was first stoked during the oil crises of the late 1970s, and he wondered, "What would it take for me to be him?" A quick web search revealed that Smil’s PhD from Penn State was in Geography, which was surprising because Michael didn’t know you could even study geography at the college level.

Michael also discovered that the City University of New York's geography program was located just across Central Park from his apartment at the time. The academic advisor there, Jochen Albrecht, suggested that Michael's interest in cities and comfort with technology would be of value in the study of human geography. Michael went on to earn a second Master's degree, along with an Advanced Certificate in GIS.

Michael's research interest in passenger railroads and their potential role in a more energy-constrained future drew him to the work of Julie Cidell, a prominent transportation and urban geographer at the University of Illinois in Urbana-Champaign. He also found that Illinois's Civil and Environmental Engineering department featured a strong railroad engineering program. Dr. Cidell agreed to be Michael's dissertation advisor, and a good funding offer combined with closer proximity to family led Michael to Illinois, where he completed his PhD in 2014 with the dissertation, "The Energy Futures of Long-Distance Passenger Rail in the United States."

"Passenger rail sits at the intersection of a wide variety of historical, technical, political, social, and spatial influences. This makes it perfect for study from the interdisciplinary perspective of contemporary geography, but also makes it largely impossible to predict the future. While electrified rail systems have shown surprising growth over the past couple of decades, transportation around the world is almost totally dependent on liquid hydrocarbon fuels. Future changes in the availability and price of those fuels will likely change the transportation mix, although the timing and nature of those transformations is the multi-trillion dollar question. If the automobile and the airplane cannot be adapted to the post-fossil-fuel era, electrified rail might take on a bigger role. There's also the possibility that our great-grandchildren, like our great-grandparents, just won't move around as much as we’ve become accustomed to during the era of cheap oil. Maybe we'll have to build stronger local economies and communities. Maybe we'll have to live closer to our extended families. Maybe that will be a good thing."

Michael was familiar with the geography program at DU through the department chair, transportation geographer Andrew Goetz, and from the annual conferences of the Association of American Geographers. "My past encounters with DU grad students at AAG were uniformly positive and I was delighted when the opportunity arose to spend a year at DU. My preferred teaching style is the seminar and the students in my classes have generally been quite thoughtful and engaged, especially when discussing the complex social and environmental challenges they will confront in the future. Adding in the dynamic urban environment and natural beauty of the region has made my time here quite enjoyable and fulfilling."
Faculty Highlights

Congratulations to Matthew Taylor who was promoted to full professor this summer. Matthew joined the department in 2003. He has received grants from the National Science Foundation and National Geographic Society among many others for his research in Latin America, has authored/co-authored more than 30 publications, led students to Nicaragua in both interterm and field quarter trips, and was awarded the University of Denver’s William T. Driscoll Master Educator Award in 2013 for his outstanding teaching. We have appreciated his many contributions to the department over the years and congratulate him on this achievement.

Becky Powell was awarded the Outstanding Faculty Service Award at the 3rd Annual Division of Natural Sciences & Mathematics Awards Ceremony and Reception in December. Becky is chair of the University Sustainability Council and serves on the Curriculum & Research Committee of the Sustainability Council. She is also the departmental representative on the Faculty Senate and served as a member of the Senate Financial Planning Committee. Last fall, at the invitation of Chancellor Chopp and Provost Kvistad, Becky served as co-chair of the Engaging Community Task Force on Expanding Sustainability on Campus. Some of her other many service activities from the past year include panelist for a social justice colloquium, a panelist for an Office of Teaching and Learning session on “Connecting Science and Society in the Classroom”, and a panelist for a workshop at the DU Writing Center. Congratulations Becky!

Postdoctoral Fellow Update

Postdoctoral Fellow Jennifer Grace Ewa has partnered with The Trust For Public Land on two grant proposals that would evaluate the impacts of green infrastructure on equity and health. While the grants are pending, she is writing about the need for evaluation, proper data monitoring, and nuanced metrics that quantify spatial justice and well-being. Earlier in the year Jennifer Grace co-taught an online course on Adaptive Planning and Resilience with her former mentor at the University of Louisville. Check out her most recent co-authorship: The Social-Ecological Resilience of an Eastern Urban-Suburban Watershed: The Anacostia River Basin


Inauguration of Chancellor Chopp and Imagine DU Initiatives

Chancellor Rebecca Chopp was officially inaugurated as the 18th chancellor of the University of Denver on September 18, 2015. In her inauguration address, Chancellor Chopp introduced the newly released draft of the DU IMPACT 2025 strategic plan. The plan will guide the University’s direction in the next 10 years and beyond. You can learn more about Imagine DU and the DU IMPACT 2025 strategic plan at http://imagine.du.edu/du-impact-2025/

Student co-chair helps Sustainability Council work toward a greener DU by Tamara Chapman (originally appeared in University of Denver Magazine, April 2015)

In fall 2014, Mollie Doerner became the Sustainability Council’s first student co-chair.

Mollie Doerner’s interest in green issues was first stoked when, as a first-year student, she joined the University’s Environmental Sustainability Living and Learning Community (ESLLC).

That meant she shared living space with other students who were passionate about sustainability and joined them in a weekly class dedicated to local and regional environmental challenges. Among their many activities and research projects, class members toured a passive solar house, and journeyed to the mountains to measure snow pack and to see, firsthand, the devastation wrought by the tiny pine bark beetle.

“It was a great introduction to what it means to pay attention to the environment,” says Doerner, who majored in French and geography and who is wrapping up the graduate portion of a 3+2 bachelor’s and master’s degree in geography.

Since those days with the ESLLC, she has volunteered with the University’s Environmental Team and the Sustainability Council, which works with the Center for Sustainability to spearhead the University’s efforts to reduce greenhouse gas emissions. In fall 2014, Doerner became the council’s first student co-chair.
“I think it is great to have a student in a leadership role,” says council co-chair Rebecca Powell, associate professor in the Department of Geography and the Environment. The council draws on faculty, staff, administrators and students for ideas and contributions, Powell says. “And all of these constituents have equal footing.”

Powell credits Doerner with working hard to engage students “in our process and our meetings.” Doerner, she says, has learned a lot about the University’s organizational structure and how to work effectively within it.

In her role as co-chair and in her work with the Center for Sustainability, Doerner has focused on assisting student efforts to promote zero-waste hockey games at Magness Arena and on researching offsets for the carbon emissions associated with air and car travel — two areas the University is unlikely to eliminate.

“The point is that when you fly or drive, you release carbon emissions into the air,” Doerner says. “Offsetting is really the only way we know of right now if we want to meet our carbon neutrality goal.”

Offsets can be purchased, but with the University’s budget in mind, Doerner has looked at ways in which volunteer work might offset auto and plane emissions. For example, students could join efforts to distribute energy-efficient light bulbs in economically distressed areas or help arrange for free energy audits for Denver residents. Both efforts could result in emission reductions.

Doerner’s work with zero-waste hockey games has put her in the gritty trenches of sustainability work. Under this initiative, students work with the Ritchie Center for Sports & Wellness to reduce the overall waste associated with concessions and to divert the remaining waste from landfills. “Reduce is first because that is the only thing we know is effective. If we can reduce it in the first place, then we don’t have to worry about what happens next,” Doerner says.

What happens next is the challenge facing those students who, like Doerner, serve as zero-waste goalies. It’s their job to monitor trash receptacles and urge patrons to recycle or compost whenever possible.

“When we began, there was pretty much zero percent diversion of waste. Now we have nearly 70 percent of the waste going into composting or recycling,” Doerner says. That’s within striking distance of the 90 percent diversion that would qualify, according to the EPA, as zero waste.

Throughout her University of Denver experience, Doerner has taken advantage of opportunities to better her understanding of sustainability and how best to achieve it. While studying in Senegal as part of DU’s signature study-abroad program, Cherrington Global Scholars, Doerner saw how access to irrigation technology enhanced the sustainability of food-supplying gardens.

“Sustainability is really about access to things,” she explains. “If it is easier for you to water your plants, you won’t have to use as much fertilizer.”

When she graduates, Doerner hopes to put her understanding of geographic information systems (GIS) — not to mention the various skills she has honed on the Sustainability Council — to work for the benefit of nongovernmental organizations and nonprofits. Many of them, particularly those focused on environmental and economic sustainability, could benefit from the kinds of data GIS provides.

“There’s a lot of aid that is well intended,” she notes, “but that never addresses its mark.”

Mollie is the daughter of DU Geography alum Jim Doerner (MA 1988, PhD 1994) who is now Professor of Geography at the University of Northern Colorado.

**DU Undergraduates use their Urban Geographic Skills in two Community-Based Research Projects** by Eric Boschmann (originally appeared in Center for Community Engagement & Service Learning Public Good Impact Newsletter, summer 2015)

During the Spring 2015 quarter, students in the GEOG 3410 Urban Applications of GIS (Geographic Information Science) course found themselves exploring an understanding of the human world through the scale of the city and the neighborhood. Many urban geographers argue that the beauty of examining the world through the city and the neighborhood lies in the reality that this is where the matters of the production and reproduction of everyday life occur. It is here, then, where practical research questions need answering, and 14 geography undergraduate students applied their knowledge and skills to help tackle two community-based research projects relevant to Denver-area non-profit organizations. Relationships with community partners were established through the Science Shop at DU’s Center for Community Engagement and Service Learning (CCESL), a highly useful clearinghouse that connects community organizations with DU students and faculty, to help address local issues. A CCESL mini-grant supported this community engaged learning experience.

Our community-based research projects worked with two local organizations: A Little Help ([www.alittlehelp.org](http://www.alittlehelp.org)) and Reading Partners – Colorado ([http://readingpartners.org/location/colorado/](http://readingpartners.org/location/colorado/)). Both organizations needed research conducted to better understand where to expand their services in the near future. The student groups worked for 10 weeks: from client needs assessment, to project design and implementation, and final production of deliverables, which included large format maps, a final report, and an oral presentation to the community organization. These excerpts from their final reports highlight the research conducted for each organization:
DEPARTMENT UPDATES, CONTINUED

Reading Partners Colorado: Analysis Of Volunteer Demographics And Suggestions For Future Recruitment

“Based on data collected by Reading Partners Colorado, we constructed four maps and three graphs with the purpose of answering our two research questions. To address our first question, ‘what does the average Reading Partners volunteer look like?’, we used the created figures of volunteer data to get an idea of who current volunteers are from both a socio-demographic and a locational standpoint. These figures display physical location, proximity to schools, and some demographic information about Reading Partners Colorado and are also used to address our second research question, ‘where should Reading Partners look to recruit new volunteers?’ To address this second question we also used ESRI Tapestry Segmentation data to analyze the top five lifestyle classifications for areas where current volunteers live. This analysis is used to suggest new areas in which to target recruitment.”

Aging Populations along the Colorado Front Range:
A report prepared for “A Little Help”

“A Little Help (ALH) connects aging adults who need extra assistance with neighbor volunteers to prolong senior independence, as well as to promote intergenerational involvement. Currently ALH operates in Denver only, but has aspirations to expand into high-need neighborhoods across the Front Range. This project assessed where ALH should focus their efforts for successful expansion in the short and medium term. First, the current state of members in Denver was mapped, showing that ALH is firmly established where the organization was established; the majority of members concentrate in the 80210 and 80209 zip codes. Additionally, the most recent census data was used to map current aging populations in Denver, Boulder, Lakewood, and Colorado Springs, as these are all areas of interest to ALH’s expansion. Second, aging population projections were mapped across the aforementioned cities for the years 2020, 2025, and 2030, in order to determine where growth of aging adults will be greatest.”

After receiving the final reports of the student research, one community organization leader said, “These findings will be very useful moving forward as we make strategic decisions to launch in different areas of these new cities, as we work with donors and volunteers, and as we recruit members to receive services. There are myriad uses for these deliverables to be implemented to benefit our organization, grow our impact, and help our mission thrive.”

And finally, throughout the quarter all students were asked to reflect upon their role as GIS/geography scientists in the context of community based research. At the end, one student commented: “I never considered the social implications of GIS prior to this class. Now, however, I know that I have the ability to positively affect an individual, an organization, or my community because of my access to specific technologies and training. With this access, I personally believe that a level of social responsibility is also gained.”

Interterm 2015

Recent PhD graduate, Gary Lavanchy led a fall interterm trip to South Africa in August. This course gave students a firsthand look at the physical and cultural landscapes of South Africa. The class studied the varied natural landscapes that produce the commodities (e.g. gold, diamonds, wine, and agriculture) that have attracted the interest of outsiders for centuries and that have influenced the cultural landscapes particular to South Africa. Activities included hiking in the Central Drakensberg Mountains, a service-learning project in a Zulu community, a visit to a game park, a tour of Robben Island, a visit to a township, and explorations of several key physical and cultural sites near Cape Town.
DEPARTMENT UPDATES, CONTINUED

Field Quarter 2015

This year's field quarter courses took students to the Grand Mesa region of Western Colorado, the Czech Republic, the Baja Peninsula in Mexico, and several U.S. National Parks including Yellowstone, Grand Teton, Badlands, Wind Cave, Arches, Canyonlands, and Capitol Reef. Below are a few reflections from students.

Bennett Black
After traveling thousands of miles and sleeping outside for nearly ten weeks, it's going to be difficult returning to the static classroom. Hands on research opportunities, camping in national parks, beachside morning lectures, and exploring centuries-old buildings makes calculus sound even more unappealing. This was the fastest and most enjoyable quarter of my time at DU, by a considerable margin. I would venture to guess that I learned far more in each of these classes than I would have in a traditional educational environment. Information learned in the field seemed more relevant and easier to retain, giving credibility to the increasingly popular idea of the environment as a living classroom. When all is said and done, my field quarter experience further solidified my belief that the best way to live is to get off the beaten path.

Milena Johnson
Before starting Field Quarter, I had very few expectations about what the quarter would entail. I had never conducted fieldwork before, but I was eager to learn through hands-on experiences. After spending 11 weeks out in the field, I can honestly say that this was the most rewarding academic experience of my life. I feel that I have learned and retained more information in this one quarter than I would if I were at DU. The format of this class helped me learn the material and encouraged me to think differently. Every day I was learning something new and becoming more curious. Field quarter has revolutionized the way I see the world and has made me a better student. I am extremely thankful to have had this experience. It has provided me with lifelong friendships and memories that have enhanced my time at DU. Overall, field quarter has turned me into a lifelong learner and left me with a heart full of unforgettable memories.

Internship Program

The internship program continues to be strong, linking students in the Department of Geography and the Environment with many different organizations to provide valuable work experience in the field. Through the internship experience, our students augment their classroom education with real-world situations. Nearly all subfields of geography and environmental science lend themselves to internships including GIS, remote sensing, human-environment interactions, transportation, and urban planning. Most of our interns are paid for their work and many receive academic credit. We are always open to new internship possibilities and hope that alums and friends of DU Geography and the Environment will consider hosting an intern at your business or organization.

2015 Internships include:
- Sylvia Brady (Ph.D. student, Geography): Planning Intern – Denver Regional Council of Governments
- Alexis Bunim (B.A. student, Geography): Intern – Four Nines Technologies
- Matthew Casali (M.S. student, GISc): GIS Intern – Denver Water
- Jane Dahl (B.S. student, Environmental Science): Intern – Minnesota Department of Natural Resources
- Bianca Garcia (B.A. student, Environmental Science): Intern – Denver Office of Sustainability
- Nicholas Gilroy (M.S. student, GISc): GIS Intern – ESRI
- Adolfo Gonzalez (B.A. student, Geography): Intern – Green Corps
- Grace Kellner (M.A. student, Geography): Intern – Food and Water Watch
- Jessica Lally (B.A. student, Environmental Science): Intern – Hazon Colorado
- John Max Marno (M.S. student, GISc) – GIS Intern – Hunt Data LLC
- Kaela Martins (B.S. student, Environmental Science): Intern – Denver Arts and Venues
- Margaret Mosenthal (B.A.student, Geography): Environmental Intern – Thorne Nature Experience
- Audrey Ng (B.A. student, Environmental Science): Intern - Environment Colorado
- Jaclyn Phipps (M.S. student, GISc): GIS Intern – City of Littleton
- Stephen Rijo (M.A. student, Geography): Intern – Denver Regional Transportation District (RTD)
- Samuel Rose (B.A.student, Geography): Intern – United States Geological Survey
- Walter Scheib (M.A. student, Geography): Intern - Denver Office of Sustainability
- Amir Siraj (Ph.D. student, Geography): GIS intern - University of Michigan-Howard Hughes Medical Center
- Daniel Zimny-Schmitt (B.A. student, Environmental Science): Environmental Intern – Crescent Point Energy
FACULTY NEWS

News from E. Eric Boschmann

With regards to my teaching efforts this calendar year, I wish to highlight two courses in particular. In Winter 2015 I taught the GEOG 3940: Urban Geography Seminar, with a special emphasis on “Exploring the intersections of cities and urbanization, global climate change, and social inequalities”. This seminar contained a mixed graduate and undergraduate student enrollment, and each week brought very thoughtful efforts by all students.

In Spring 2015 my GEOG 3410: Urban Applications of GIS course again participated in two community-based research projects. This work was supported by DU’s Center for Community Engagement and Service Learning (CCESL). All students agreed that the real-world application of their work was one of their most valuable experiences. For more details on this class, please see the article elsewhere in this Newsletter.

In this calendar year, my two papers published were both collaborative efforts with colleagues and a former graduate student. Both articles reflect my research interests in urban mobility, transportation, and the journey to work. Greg Kwoka (MA, 2013), Andy Goetz and I published a paper based upon Greg’s thesis work. It appeared in Transportation Research Part A: Policy and Practice and received broader exposure as it was profiled in the www.CityLab.com blog under the title: “What’s More Important to Non-Car Commuters: Living or Working Near Transit?”. This fall another article appeared in Computers, Environment and Urban Systems, and was a collaboration with colleagues from my Ohio State days: Michael Niedzielski (Univ. of North Dakota) and Morton O’Kelly (Department Chair, Ohio State).

And finally, this year I graduated my 8th Master of Arts student, Walter Scheib IV!

Mike Daniels spent much of 2015 conducting sabbatical research at Czech Agricultural University in Prague, Czech Republic. He developed a project with collaborators from several Czech universities and the Czech Academy of Sciences that focuses on soil erosion, long-term agricultural sustainability, and sedimentologic/hydrologic connectivity between hillslopes and floodplains. The research was funded by U.S./Czech Fulbright commission and by U.S. National Science Foundation. He and colleagues conducted extensive preliminary fieldwork, coring floodplains of rivers in the agricultural regions of southern Bohemia, and using these cores to assess anthropogenically modified erosion and deposition patterns. The project also incorporates spatially distributed soil erosion modeling, for which Master’s student Grace Kellner spent two weeks in Prague training with hydrologic engineers at Czech Technical University. During the year Mike delivered research presentations to audiences at four Czech universities, to a gathering of Fulbright scholars in Trencianske Teplice, Slovakia, and to an international audience of earth and environmental scientists at the European Geophysical Union meeting in Vienna.

Since returning to the U.S. in August Mike taught the introductory course for geography graduate students: Fundamental Geographic Perspectives. He also taught on Field Quarter, returning to Czech Republic for two weeks in October with a group of bright and enthusiastic DU undergraduates.

Andy Goetz had the opportunity to attend the International Geographical Union (IGU) regional conference in Moscow, Russia, and was fortunate to meet several Russian colleagues at Moscow State University. While it was a quick trip, Andy was impressed by the architecture in Moscow, especially the ornately-decorated subway stations and the massive buildings of Moscow State University. The Department of Geography at Moscow State is housed in the main building on the 22nd floor, which local colleagues claim make it the “highest” geography department in the world!

In March, Andy was invited to deliver a lecture for the Livable Transportation Systems and Urban Planning Colloquium at the University of Connecticut, co-sponsored by the Departments of Civil & Environmental Engineering, Geography, Economics, and Landscape Architecture. It was a pleasure to meet several colleagues and students there, including a student who interviewed Andy for a short film "The Millennial Shift Towards Walkable Cities" that appeared in the New Urbanism Film Festival in Los Angeles: https://www.youtube.com/watch?v=EitewrczPbE

Andy also received two external research grants from the National Center for Intermodal Transportation for Economic Competitiveness (NCITEC) to: 1) study public-private partnerships as part of Denver’s FasTracks rail transit program, and 2) investigate agreements between freight railroads and passenger rail operations in shared use corridors.

Finally, Andy was especially pleased that three of his graduate student advisees- Meghan Mooney, Michelle Nichols, and Stephen Rijo- completed their Masters degrees last year.
Hillary Hamann had a full and productive year in 2015. A highlight was being selected to participate in the Colorado Foundation for Water Education’s “Water Leaders” program. Along with 14 other water professionals from across Colorado, she met 5 times over the course of 6 months and discussed leadership and water issues around the state. It’s hard to complain when you get to spend a summer afternoon discussing water supply at a Palisade, Colorado winery and peach farm!

As usual, teaching is a highlight for Hillary and she had stellar groups of students in Environmental Systems, Water Resources & Sustainability, Historical Geology, and her fall FSEM Colorado’s Rivers. Classes included several opportunities to get out in the field including the Denver Botanic Gardens, Dinosaur Ridge, a behind-the-scenes tour of the fossil collection at Denver Museum of Nature and Science, and a great day of stream restoration work along the St. Vrain River in Longmont.

In May, Hillary gave a keynote talk to a group of talented graduates at the Association of Women Geoscientists award dinner. Over the summer, she presented a talk about kinesthetic learning in large classes and participated in a number of great workshops at the Geoscience Educators Rendezvous in Boulder.

A final highlight for the year was an anniversary trip to the Canadian Rockies that included backpacking in the Mt. Robson Provincial Park and a visit to the famous Burgess Shale Cambrian Fossil site in Yoho National Park. 14 miles and 3000 feet of hiking in the rain were fully worth the chance to see the site of Charles Wolcott’s famous find of exceptionally preserved animals from the Cambrian Explosion over 500 million years ago.

Helen Hazen has enjoyed her first year and a half teaching at DU, developing a variety of introductory courses. This year she is extending her teaching back towards the geography of health, with an introductory course in the winter quarter and a field course to England on health and the environment planned for summer interterm. She continues to work on writing up her recent research on home birth, and has organized an extensive session on geographies of reproduction for the upcoming AAG in San Francisco. Helen has begun working with the Colorado Geographic Alliance towards promoting geography in the grade school curriculum, and has become active in providing geographic education in local schools and youth programs.

Steven Hick continues to direct GIS in the department, including labs, classes, advising, enrollment management, etc. This year we topped 50 students in the program and we’ve added second sections of classes so each class is now taught two times per year. The GIS Certificate Program has continued growth and continues to be the feeder program for the graduate degree program. In the GIS program we launched the first UAV “flight school” offering actual flight training by FAA certified instructors. Students met in Denver for one of two weekends to learn to develop data collection missions and fly UAVs. Next step – UAV photogrammetry! Two graduate students have conducted UAV-related research flying different sensors on board seeking heat signatures in objects buried in snow near Winter Park, Colorado and collecting data on vegetation health in vineyards near Palisade, Colorado.

Personally I have branched out into new teaching areas like the Geology of National Parks. For those that don’t know me, I used to be a National Park Ranger and you will find my iconic ranger hat in my office today. In the spring I took students to Florissant Fossil Beds National Monument, Rocky Mountain National Park, Great Sand Dunes National Park and Preserve, Black Canyon of the Gunnison National Park, Curecanti National Recreation Area, Carlsbad Caverns National Park, and Guadalupe Mountains National Park. In the fall with the Field Quarter class we traveled to Arches National Park, Canyonlands National Park, Capitol Reef National Park, Grand Teton National Park, Yellowstone National Park, Devils Tower National Monument, Badlands National Park, and Wind Cave National Park. By the time you read this I will have completed a Natural Hazards of Hawaii class and visited Haleakala National Park and Hawaii Volcanoes National Park.

During the late summer we installed high-end video conferencing equipment in the “big” GIS lab. This technology enabled me to teach the first real-time, “live” GIS class to students in the room simultaneously with eight students online who were seated between California and New York and points in between. We are running this new program delivery format as a pilot project for two academic quarters at which time we will assess the delivery format and technology and proceed from there. It has been a wicked busy year and there is still much ahead.
Mike Keables

After four years serving as the interim dean of the Ritchie School of Engineering and Computer Science, Mike is spending this fifth (and hopefully final) year assisting with the leadership transition for the new dean who was hired in July. Mike is spending most of his time shepherding the completion of a new $62M building for the Ritchie School, meeting with contractors, making final design modifications, and planning for the grand opening later this summer. He continues to teach Environmental Systems: Weather & Climate and is looking forward to offering his upper division meteorology course in the spring. MSGIS student Rebecca Boyd completed her project this fall under Mike’s supervision. Her project is entitled “A comparison of historical predicted future runoff in the Upper Mississippi River Basin” and involved an analysis of modeled runoff conditions under current and CO2 doubling climate scenarios. Mike is planning on returning to the Department of Geography and the Environment sometime later this summer.

Mike Kerwin is on sabbatical in Thailand. He is working as a Scholar in Residence at the International Sustainable Development Studies Institute in Chiang Mai.

Kristopher Kuzera continues to direct the Internship Program, supervising dozens of students in Geography and Environmental Science as they transition from DU into the working world. Kris is also instructing a wide variety of courses this year, including the Our Dynamic Earth sequence, Advanced Geographic Statistics, Environmental Systems Hydrology, and online Geographic Information Analysis.

This past year, Kris was recently honored by his undergraduate institution, Illinois State University, as a Distinguished Alumni in Geography and was invited back to campus in Normal, Illinois to give an invited lecture to the student body on careers in Geography after graduation. Hopefully recruiting more students to come to DU in the process!

Jing Li enjoys working with students through various teaching and research activities. She taught five different GIS courses at different levels. She also advised a number of graduate students as the primary advisor or as committee member. Two of her advisees successfully completed capstone projects and graduated during the spring, 2015. Working with Qing Liu (a Ph.D. candidate), Jing has developed a multidimensional visualization framework in the cloud to support the visualization and analysis of complex climate phenomena. The project has been awarded as the third place in the NASA World Wind Europa Challenge. The research outcome of the project will appear in an article to be published in Environmental Modeling and Software, one of the most leading journals in environmental software.

Jing is also actively working with colleagues in the department and undergraduate advising to promote the minor in GIS across campus.

Becky Powell has recently been awarded funding from the National Science Foundation (Geography and Spatial Sciences Program) for a project titled “Spatiotemporal dynamics of woody cover in a savanna landscape,” in collaboration with colleagues T. Michael Anderson (Wake Forest University) and Ricardo Holdo (University of Missouri). The team will explore the role of spatial processes in driving woody plant structure in savanna ecosystems, and how this might change as the result of different natural and anthropogenic disturbance regimes.

Becky continues to serve as chair of the DU Sustainability Council, a body of faculty, staff, and students from units across campus tasked with coordinating sustainability efforts across the University. Last fall, at the invitation of Chancellor Chopp and Provost Kvisstad, Becky served as co-chair of the Engaging Community Task Force on Expanding Sustainability on Campus (along with Chad King, DU Sustainability Coordinator). The recommendations of that group are summarized in a proposal titled, “Cultivating a Sustainable Community: University of Denver Just and Sustainable Future Initiative.”

Don Sullivan taught his usual classes last academic year, but added a new class on Climate Change and Society, focusing on the scientific evidence for global climate change. The 2015 field quarter was again a success, with new sediment cores collected near Grand Lake, Colorado, and a great trip to Baja California, where the effects of the recent Hurricane Odile were very much in evidence. The southern cape region was very hard hit, and many of the larger hotels in Cabo San Lucas and San Jose del Cabo were still boarded up. Don’s spring quarter was somewhat truncated! Health issues forced Don into the hospital for much of the last half of the quarter (huge thanks to Hillary Hamann, Ph.D. student Ian Slayton, and Brianna Johnson for stepping in to finish the quarter in E. Systems, Geography of Colorado, and the ESLLC, respectively), but by mid summer he was in the field in western Colorado. Don continues to pursue research in Quaternary climate change, working with graduate student Ian Slayton in the Grand Lake area, and continuing his research on Grand Mesa. In addition, Don continues to work with the turtle conservation folks in Todos Santos, in Baja California Sur, on turtle nesting and hatching success.
Paul Sutton

I have spent the year working in Thailand, Australia, South Africa, and India. I co-authored a report for the Economics of Land Degradation Initiative that was sponsored by the United Nations titled: The Value of Land (http://eld-initiative.org/fileadmin/pdf/ELD-main-report_05_web_72dpi.pdf ). This work involved mapping land degradation globally and assessing the impact of land degradation on agriculture and ecosystem services. We estimated that land degradation in the past several decades has resulted in a loss of over 4-10 Trillion dollars per year. I also spent several weeks with the people of the Panchabhuta Conservation Foundation (http://panchabhuta.org/) in the Western Ghats of India. I am working here to help local people use arguments based on the economic value of ecosystem services to win greater control over land use decisions in their area. Luca Coscieme and I recently co-authored a paper in the journal ‘Science of the Total Environment’ titled: Accounting for ‘Land Grabbing’ from a biocapacity viewpoint (http://www.sciencedirect.com/science/article/pii/S0048969715306835). This paper explores what countries of the world are having their ‘land grabbed’ by other countries according to the relative size of their ecological footprints and national natural endowments or ‘biocapacity’.

I continue to stay in touch with several DU alumni including Amanda Weaver, Alex Muleh, Ben Tuttle, Kristina Yamamoto, Andrea Santoro, Jason Thoene, Nick Stabler, Robin Harris, Jared Long, Tilottama Ghosh, and Lisa Piscopo. I am proud to say that Amir Siraj has completed his PhD and has taken a post-doc at Notre Dame University. Qing Liu is progressing nicely with her PhD.

I am getting increasingly interested in communicating my research to the broader public and have engaged in some alternative venues of publication and outreach. I am even considering joining the 21st century and getting a facebook page and a twitter account (The horror, the horror). I provide links to some examples of my outreach efforts below. I always love to hear from former students and friends of geography so do not hesitate to send me an e-mail.

My ‘modest proposal’ to ‘Kill All the Bees’ on ABC radio in Australia.http://www.abc.net.au/radionational/programs/ockhamsrazor/a-modest-proposal-kill-all-the-bees/6501638
Companion Piece to ‘Kill All the Bees’ in ‘The Conversation’
‘Planet Talk’ with Vandana Shiva & Tim Jarvis at World Music and Dance Festival in Adelaide.
https://www.youtube.com/watch?v=GvlHAEp8q50&feature=youtu.be
Piece in ‘The Conversation’ on BBC Earth’s ‘Earth Index’

Erika Trigoso continues to teach one quarter of her Honors Scientific Inquiry—Natural course Global Environmental Change. In addition, she teaches courses on Sustainability, Human Geography, Contemporary Environmental Issues, and a FSEM seminar on Geography and Genealogy. Erika also had the opportunity to teach e-systems in the summer. Erika service activities involved being the liaison between the department and DU’s library and also the department’s representative for the Intercultural Global Studies minor. She is currently writing two publications related to her teaching experience in honors and field classes. In addition she has joined the Divest DU committee that aims to focus on investments other than fossil fuels. This year she has been nominated to NSM award as Outstanding Junior Faculty.

In addition to her teaching activities, service activities, and writing two publications referring to geography in higher education, Erika and her husband Stephen are busy preparing for the arrival of their first baby!

Matthew Taylor made multiple (lost count) research trips to Latin America and Europe this year. In addition to continuing research into climate change and agriculture in Guatemala and Honduras (funded by the National Science Foundation and Guatemala) he also spent time in the Spanish archives in Guatemala City and Sevilla, Spain, examining Spanish Colonial records for references to droughts and pluvials. This is a project that can be continued by students in the years to come. In Nicaragua Matthew continues his work with students and the community. Indeed, two students, Gary LaVanchy (Ph.D.) and Nico Earhart (MA) completed their research in Nicaragua and graduated this year. Our goal is to continue our research here — the struggle for water in rural communities increases every year, especially because the region is now in its third drought year and, at the same time, demands for water for a growing population continue to increase. We are the only group conducting water-related research along the dry Pacific coast. If you want to join in on this research as students or alum, please let Matthew know. We have a growing need for expertise that crosses many disciplines. Matthew continues to publish in a wide variety of journals with students and colleagues from around the world. He is still pushing his dream of opening a DU campus along the “Emerald Coast” of southern Pacific Nicaragua — if you want to be a part of this effort, let me know. The idea is to revolutionize learning for our undergraduate and graduate students as they work in cross-disciplinary teams to solve problems identified by local communities. If you are interested in joining this venture, let me know. I wish everyone a very happy and productive 2016.
Eric Boschmann


J. Michael Daniels


Andrew Goetz


Jing Li


Matthew Taylor


Eric Boschmann

J. Michael Daniels
Daniels, J. M., "Sedimentary archives of agricultural land use change in southern Bohemia," Czech Agricultural University, Prague, Czech Republic. (February 2015).
Daniels, J. M., "Geomorphological perspectives on human-environment relationships across multiple timescales," Department of Anthropology, University of Western Bohemia, Plzen, Czech Republic. (November 2014).

Andrew Goetz
Goetz, A. R., "Transport investment and smart growth planning: Travel behavior and land use impacts of rail transit and transit-oriented development in Denver, Colorado, USA," Biennial Conference of NECTAR, Network of European Communications and Transportation Activities Research (NECTAR), University of Michigan, Ann Arbor, Michigan. (June 14, 2015).
Goetz, A. R., "FasTracks 10 Years After the Vote: What Have We Learned," Rocky Mountain Land Use Institute annual conference, Rocky Mountain Land Use Institute, University of Denver. (September 2014 - March 13, 2015).


Hillary Hamann


Helen Hazen

Hazen, H., "Representation of Ecological Regions by Protected Areas," DU Emeritus Faculty Organization, DU. (April 3, 2015).

Steve Hick


Mike Kerwin

Kerwin, M. W., "‘If You’re Not Cheating, You’re Not Trying’ Do Honor Codes Still Work?," Colorado College All Campus Lecture, Colorado College Honor Council, Colorado College. (April 22, 2015).


Kerwin, M. W., "Fighting the Cheating Machine: Do Honor Codes Still Matter?," Sewanee The University of the South Lecture Series, Sewanee The University of the South, Sewanee, TN. (January 20, 2015).


FACULTY PRESENTATIONS TO PROFESSIONAL GROUPS 2014-2015, CONTINUED

Kerwin, M. W., "First Fire and Now Floods: What is Equilibrium in a SW Sky Island?," An invited talk to the Faculty and Staff at the Southwestern Research Station, Southwestern Research Station, Portal, AZ. (September 24, 2014).

Kristopher Kuzera


Jing Li


Rebecca Powell


Don Sullivan


Matthew Taylor


Eric Boschmann


Boschmann, E., "Internationalizing urban geographic teaching and research: From Guatemala to Buenos Aires," Faculty/Curriculum Development Grant (Internationalization), $3,000.00. (July 1, 2014 - June 30, 2015).

J. Michael Daniels


Andrew Goetz


Goetz, A. R., "Innovative Approaches to Improved Intermodal Transportation Infrastructure Funding and Financing through Public-Private Partnerships," Sub-grant, Sponsored by National Center for Intermodal Transportation for Economic Competitiveness, Federal, $57,764.00. (February 2015 - Present).


Hillary Hamann


Kris Kuzera


FACULTY RESEARCH OR INSTITUTIONAL GRANTS AND CONTRACTS
2014-2015, CONTINUED

Jing Li


Rebecca Powell


Matthew Taylor


Taylor, M. J., "Climate Change and Sustainability in Guatemala: Using Spanish Colonial Documents to Verify Climate Reconstructions and to Document Human Responses to Climate Change," Professional Research Opportunities for Faculty—PROF (DU), $16,460.00, Submitted: January 15, 2014, Awarded: May 1, 2014. (June 1, 2014 - October 2, 2015).

Taylor, M. J., Quigley, M., "Mitigation of environment and socioeconomic consequences of water scarcity in rural landscape conversion," Public Good Fund Grant (CCESL), $9,500.00, Submitted: March 1, 2014, Awarded: May 1, 2014. (June 1, 2014 - June 1, 2015).

STUDENT NEWS

PhD student Nikolai Alvarado was elected during the Chicago 2015 AAG meeting to be one of the newsletter and social media co-editors for the AAG Latin America Specialty Group (LASG). The newsletter is sent out in collaboration with the Conference of Latin Americanist Geographers and is aimed at keeping geographers with a focus in Latin America current on recent publications, conferences, awards, and other news. As co-editor Nikolai has been responsible for establishing a social media presence for LASG (Facebook.com/AAGLASG), as well as creating (along with Adrienne Johnson from Clark University), a new section for the newsletter which features past LASG award winners. The new section, called Then and Now, is an attempt to reconnect with past fund recipients and to follow up with how these awards have helped establish their careers, projects, and activities they are pursuing today. Ultimately, the purpose is to demonstrate the long-standing impacts that these awards can have on the academic trajectories of LASG student members. The first scholar featured this past fall was recent DU Geography PhD graduate Gary Thomas Lavanchy.

PhD student, John Davis, is co-author in an article published in the upcoming issue of Human Geography, volume 8 issue 3 titled “Mutual Aid, Environmental Policy, and the Regulation of Faroese Pilot Whaling”. Previous DU lecturer, Russell Fielding is a co-author and MA alumni, Rebecca Brice took the picture at the end of the article.

This summer, MA student Sydney Firmin, was able to attend the SPATIAL short course at the University of Utah by receiving a NSF grant through ITCE (Inter-university Training for Continental-scale Ecology). Over the period of two weeks, she worked on research questions using spatial stable isotopes, GIS and R. Because of this experience, she is collaborating with animal migration researchers to expand on and validate her thesis work.

Diego Pons, PhD student, received the 2015 Conference of Latin Americanist Geographers Student Field Study Award. For his project entitled “Climate change and coffee adaptation: Developing dendroclimatological records in the southern volcanic chain of Guatemala” he received the very prestigious Robert C. West PhD Award for field study. In addition, Diego received the University of Denver Graduate Studies Inclusive Engagement Fellowship for the last academic year.

PhD student, Sarah McCall, received the University of Denver Graduate Studies Dissertation Fellowship for the 2014-2015 academic year.

Geography major Madeleine Meredith, received funding from the Undergraduate Research Center at DU for her proposal entitled “Discourses of Development through the Lenses of Art and Science”. The funds enabled her project this summer in Nicaragua where she was working to create a public mural that depicts the rapid changes taking place along Nicaragua’s Pacific coast. This mural will incorporate data from land cover and land use change analysis as well as feelings about the change gathered from local residents. The resulting mural will be a collaborative effort undertaken in close collaboration with the community of Gigante.

Recent PhD graduate, Gary Lavanchy, was awarded the Best Doctoral Student Paper Award from the Water Resources Specialty Group of the AAG. The award was based on a manuscript submitted several months prior to the conference. The paper deals with struggles over groundwater resources along the Pacific Coast of Nicaragua.

Recent MS graduate, Mollie Doerner, won the NSM Graduate Student Service Award for 2014-2015. The award was announced at the NSM Spring Picnic in May.

Amir Siraj, recent PhD graduate, was co-author on an article entitled “Temperature and population density determine reservoir regions of seasonal persistence in highland malaria” in Proceedings of the Royal Society B. With high-resolution surveillance record on malaria that spans multiple years, the authors demonstrate that in addition to altitude (temperature), human population density is important to explain the locations where malaria cases persist during the low transmission season in an African highland region prone to epidemic outbreaks. The increasing effect of population density on cases is not typically accounted for in models for the population dynamics of the disease. As malaria risk decreases in more urban environments, this counter-intuitive finding identifies novel control targets during the low transmission season in African highlands.

Recent MS graduate, Katy Waechter, and BA Environmental Science graduate Jacqueline Curry, received the Association for Women Geoscientists-Laramide Chapter Outstanding Student Awards at their spring awards dinner.

Like us on Facebook!
www.facebook.com/DUGeography
CURRENT AND RECENT STUDENT PRESENTATIONS/PAPERS/POSTER SESSIONS

- **Sylvia Brady** - “Assessing the state of transportation and mobility in Guatemala City.” Association of American Geographers Annual Meeting, Chicago, IL (April 2015).
- **Matthew Layman** - “3D GIS in the oil and gas industry.” Association of American Geographers Annual Meeting, Chicago, IL (April 2015).
Congratulations to our AY 2014-2015 Graduates!

**Doctoral Program**
Gary Lavanchy
Amir Siraj

**Master’s Program: Geography**
Nico Earhart
Meghan Mooney
Stephen Rijo
Walter Scheib

**Master’s Program: GISc**
Jackie Atha (online)
Todd Barr (online)
Steven Bixler (online)
Esther Bowlin (online)
Rebecca Boyd
Trafford Brown (online)
Kirk Bustrom (online)
Kasey Camp (online)
Scott Chapin (online)
Richard Cornell (online)
Mollie Doerner
John Early (online)
Bryan Franey (online)
Carmen George (online)
Benjamin Glennon (online)
Ryan Isherwood
Jennifer Joern (online)
Eric Jones (online)
Bryn Karabensh (online)
Justin King (online)
Matthew Layman
Nicholas Ludolph (online)
Michelle Nichols (online)
Devon Pace (online)
Leslie Perry (online)
Erin Sevatson (online)
Melissa Slater (online)
Gary Smith (online)
Nathaniel Thompson (online)
Joshua Vosejpka (online)
Katrina Waechter
Derek Watson (online)
James White (online)

**Bachelor’s Program: Environmental Science**
Molly Abromitis
Mackenzie Boli
August Comstock (double major with Geography)
Christopher Chang
Jacqueline Curry
Monica Diercks
Daniel Ettelson
Sarah Gosnell
Alexandra Gougeon
Matthew Jarvis (double major with Geography)
Larkin McCormack
Michael Nagy
David Ososky
Anne Pettinato
Michael Podshadley
Brett Sherman (double major with Geography)
Callie Smith
Robert Sutherland
Sumner Van Brunt
Kacie Vanbuskirk
Chelsea Warren
Eric Wippman

**Bachelor’s Program: Geography**
Cassandra Ali
Trevor Allt
Zachary Andres
Andrew Bauman
Allison Boyd
Stephen Budlong
Alexis Bunim
Alexander Burke
Charles Carlisle
Matthew Chu
Phoebe Coburn
Heather Cook
Antonia Coteus
Rileigh Elliott
Adolfo Gonzalez
Emily Green
Austin Hafenstein Holmes
Robin Harris
Junlin He
Lauren Hirsh
Arielle Kapiloff
Jacob Kaster
Kathleen Lockhart
Janelle Lowe
Cody Main
John Marno
Jamie McAllister
Kevin O’Connell
Collin Olson
Ruth Orr
Parker Quakenbush
Wyeth Seidel
Madeleine Torraca Jones

Some of our spring graduates with faculty and staff  
(Photo courtesy Meghan Mooney)
HAPPENINGS

Our department always looks forward to fellowship opportunities with faculty, staff, students, alumni and friends throughout the year. We welcome you to join us at any of our events.

Keables Kup Bowling Competition

We kicked (or should we say rolled) the year off, with the Keables Kup Bowling Competition in January. For the second year in a row, recent Ph.D. graduate, Gary Lavanchy, won the kup.

Spring Awards Ceremony and Graduation Picnic

Once again, it was great to see the wonderful participation in our annual Spring Awards Ceremony and Graduation Picnic in June. We hold this event outside the Boettcher West building every year on the Thursday before graduation. For the first time this year, we committed to having our picnic zero waste! With help from the Office of Sustainability, compost bins were set up around the area and all plates, napkins, cups, and utensils were compostable. Guests enjoyed caprese skewers, Italian eggrolls, fried chicken, mac & cheese and grilled vegetables.

The following awards were presented at this year’s spring picnic:

• Dr. Thomas M. Griffiths Memorial Award in recognition of undergraduate scholarship and independent research in Geography- Phoebe Coburn
• Environmental Science Program Award in recognition of undergraduate scholarship and independent research in Environmental Science- Mackenzie Boli and Jill Hamilton
• Dr. David B. Longbrake Award for Merit in Geography in recognition of exceptional departmental service by an undergraduate student- Collin Olson
• Dr. Robert D. Rudd Memorial Award in recognition of graduate scholarship, research and/or exceptional departmental service in Geography- Gary Lavanchy and Meghan Mooney
• Professor Moras L. Shubert Award for outstanding accomplishment by a senior in Environmental Science- Matthew Jarvis
• Dr. Laurance C. Herold Award for outstanding graduate teaching assistant in Geography- Rebecca Boyd and Stephen Rijo
• Alan Bryce Henry Memorial Scholarship given to undergraduate students who have demonstrated outstanding scholarship in Environmental Science- Bianca Garcia and Julia Richards
• Paul Stanford Bernhard Memorial Scholarship for Environmental Science- Kaela Martins

Breakfast at the Boettch

All Geography & the Environment students were invited to our second Breakfast at the Boettch in September to enjoy bagels, fruits, and coffee with faculty.

Welcome Back Fall Fiesta

The fall fiesta always provides a wonderful opportunity to welcome everyone back for another academic year. We continued our food truck tradition at the fall picnic in October bringing in taco and cupcake food trucks.
COLLOQUIUM UPDATE

Throughout the quarter, the Department hosts a Colloquium series in which scholars and professionals are invited to present their work related to geography and the environment. These lectures are open to all faculty, staff, students, alumni and friends of the Department. Each lecture is held in the Boettcher Auditorium.

Colloquia presentations for 2015 include:

- Justin Pidot, JD, Sturm College of Law, University of Denver- “Criminalizing Citizen Science”, November 5, 2015
- Dr. John Brett, University of Colorado, Denver- “Farming the City: Land Use Potential in Denver and Wheat Ridge”, October 22, 2015
- Dr. Michael Minn, University of Denver- “Foreclosure and the Production of Space in Phoenix”, September 24, 2015
- Dr. Christy Briles, University of Colorado, Denver “Journey of a Biogeographer: DU and Beyond”, May 21, 2015
- Dr. Carol Kearns, University of Colorado, Boulder- “Bumblebee Biogeography and Conservation on the Front Range”, May 7, 2015
- Dr. Roger Barry, University of Colorado, Boulder- “The Role of Snow and Ice in Climate”, April 30, 2015- Laurance C. Herold Memorial Lecture
- Dr. Edwards Dunlea, National Academy of Sciences (Chemistry Marisco Scholar)- “Recent Reports in Climate Science from the National Academy of Sciences”, April 14, 2015
- Dr. Martha Narey, University of Denver, Guild of Natural Science Illustrators, Rocky Mountain Society of Botanic Artists- “...Worth a Thousand Words”, April 9, 2015
- Dr. Jason Henderson, San Francisco State University- “Street Fight: The Politics of Bicycle Mobility”, March 5, 2015
- Dr. Kevin Krizek, University of Colorado-Boulder- “Transport-Land Use Interactions: Direct Implications for Bicycling and the Future of Transport”, March 3, 2015
- Jerry Tinianow, Chief Sustainability Officer, City and County of Denver- “Jumping Off the High Board: Taking Municipal Sustainability to Scale”, February 26, 2015
- Dr. Sarah Glaser, Korbel School of International Studies, University of Denver- “The Potential of Aquaculture in Lake Victoria and Challenges for Wild Fisheries”, February 19, 2015
- Amir Siraj, Ph.D. Candidate, University of Denver- “Spatial Considerations in Disease Transmission Dynamics,” January 29, 2015
- Jeff Lee, Director, Rocky Mountain Land Library- “From South Park to Denver: Building a Headwaters-to-Plains Learning Network”, January 22, 2015
- Dr. William Philpott, University of Denver Campus-wide event- “Rocky Road: Reading the Landscape of Colorado’s Interstate 70”, January 8, 2015

If you are interested in presenting for our colloquium series please let us know.
Geog-info@du.edu
ALUMNI AND FRIENDS: SPOTLIGHTS

Class of 2012, Michael Swan, B.A. Geography, is currently the Environmental and Transportation Planner at Harry S. Truman Coordinating Council (RPC).

Spring 2015 graduate, Arielle Kapiloff, B.A. Geography, was accepted to Columbia University’s Masters in Sustainability Management Program.

Chris Ruff, B.A. Geography, 2009, is in his first year as a teacher at Steamboat Springs High School after spending a season as a hydrologic technician for the Forest Service and then five seasons as an archeological technician and assistant crew chief around the western U.S. Starting January 14th, he is excited to be teaching a high school geography course.

Dan Kasper, a 2012 M.A. Geography graduate, teaches at Delaware Technical Community College in Delaware in the Energy Technologies Department (Energy Management and Renewable Energy Solar are two of their degrees). He also started teaching online for Penn State in their Energy and Sustainability Policy Program. It is a fully online, Open Education Resource degree program.

For the past 25 years, Douglas Towne, B.A. Environmental Science, 1984, has worked as a hydrologist for the Arizona Department of Environmental Quality characterizing the groundwater quality throughout Arizona. He has authored over 30 reports and presented his research at local and national conferences. Doug is editor of the Society for Commercial Archeology Journal (since 2004) and Arizona Contractor and Community magazine (since 2012). A former contributor to Phoenix New Times, he has authored more than 30 history articles for Phoenix magazine, including the cover stories, “Phoenix in the 1920s” and “the Arizona Centennial”. Doug also creates floating montages which incorporate roadside vintage imagery; the resulting pieces are as much social commentary as they are homage to the past. His art has been featured in Modified Arts, Tempe Public Library, the Trunk Space, Tohono Chul Park, the Downtown YMCA, Frontal Lobe Gallery, and at Central Gallery. A badminton enthusiast, Doug has smashed shuttlecocks to win competitions in seven states and one national title. He lives in mid-town Phoenix with his lovely wife and the secret to his success, Maureen. At a DU Phoenix alumni function in 2011, Doug won a $1,000 scholarship for which he selected the geography department as the recipient.

Spring 2015 graduate, Michelle Nichols, M.S. Geographic Information Science, is currently interning for the National Association of County and City Health Officials establishing its first GIS department. Launched on October 16, they were recently invited to brief the Pandemic Prediction and Forecasting Science Technology Work Group at the White House about their program.

Class of 1971, Janis Edwards, B.A. Geography, will be retiring in 2015 from the University of Alabama Department of Communication Studies, where she has served as an Associate Professor for 13 years. She looks forward to concentrating on her work as a studio artist although now that Hillary Clinton is running for president, she won’t be able to resist working on her research in gender and politics, and visual rhetoric. Although a PhD in rhetoric and public address seems a departure from geography, her geography training helped with one of her recent book chapters on the cultural and visual meaning of Nihonmachi (Japantowns on the West Coast).

Kyle Keahey was one of the first graduates of the Environmental Science program in 1981. Kyle is a Vice President with HNTB Corporation in Austin, Texas. Kyle received his Masters in Regional and City Planning from the University of Oklahoma and has been primarily involved in the planning, design, and implementation of transit projects in Denver (West Corridor and I-225 projects), Dallas, Houston, Aspen-Glenwood Springs, Charlotte, Salt Lake City, and San Antonio. Most recently, Kyle was the project lead for a $1.4 billion urban rail proposal in Austin that, ultimately, was not approved by voters last November. Despite the failed election, continued planning efforts continue to identify alternative mobility strategies to address Austin’s growth.

Douglas Clark continued to be involved in the Bureau of Reclamation Research and Development program. He conducted and reported on an electronic survey of Reclamation staff regarding their modes of communication with stakeholders and the public. The findings were that face to face communication is still the most effective means of ”getting the message out“ and, just as importantly, receiving feedback. That said, employees wanted to investigate or make more use of newer technologies such as IdeaScale, Survey Monkey, televideo conferencing, and various forms of social media.

During the past year, Clark also produced a technical guide for data management that steps personnel through the various phases of the data lifecycle: planning, acquisition, evaluation, maintenance, access, analysis, reporting, and archival. Currently, he is working on another technical guide for the deployment of unmanned aerial systems to manage natural resources and water infrastructure.
ALUMNI AND FRIENDS: SPOTLIGHTS, CONTINUED

This fall, Alicia Tyson, M.S. Geographic Information Science, 2013, joined the Colorado State University Department of Geosciences Ph.D. program as an IWATER Fellow. She will be conducting watershed and land use management research in the Colombian paramo.

Christine Johnson, B.A. Environmental Science, 1991, just celebrated her 14th year at Xcel Energy. She works in the Environmental Sciences department as an Environmental Analyst providing permitting and compliance assistance associated with the Clean Water Act for the Colorado facilities. As Project Manager, she recently completed a 5-year process to relicense their pumped-storage hydroelectric facility located near Georgetown, Colorado with the Federal Energy Regulatory Commission.

Kevin Maddoux, B.A., Environmental Science, 1997, has joined Felsburg, Holt & Ullevig (FHU) as a principal. With over 130 employees, FHU is a Colorado-based consulting firm specializing in transportation and environmental planning, traffic engineering, and transportation system design.

Katherine Williams, M.S. Geographic Information Science, 2011, is working at Schneider Electric as Product Manager for ArcFM Design and Work Products, a geospatial suite of products that extend the ArcGIS platform with functionality for Utility and Telecom providers.

The DU Admissions Office featured alumni, Tommy Crosby, B.A. Geography, 2014, in a video about his new position as Sustainability Coordinator for DaVita here in Denver. You can watch the video here.

The Office of Graduate Studies Career Services featured Kristina Yamamoto, Ph.D. Geography, 2012, in their Alumni Spotlight. An excerpt from the interview is below. Visit the Graduate Career Services website for the full interview.

Current Job Title: Geographer
Name of Organization: United States Geological Survey (USGS)
Bachelor’s Degree: B.S., Natural Resource Management, University of California Berkeley
Graduate Degree: M.S., Geographic Information Systems, University of Denver
Graduate Degree: PhD Geography, University of Denver

Interview
What does your current position entail?
I work as a research assistant for the USGS in Denver. Currently, some of my projects include extracting stream networks from elevation data and examining how well the decades-old mapped streams in Alaska match up with current stream positions. (I also occasionally teach a physical science course at The Women’s College at DU.)

How did you get your current position?
I was at a geography conference during my first year in the PhD program at DU, and I was presenting my master’s research on using satellite imagery to analyze sea turtle habitat in Turkey. After my presentation, someone from the USGS came up to me and we started talking about what I had done. By the end of the conversation, he brought up coming to work for the Survey.

Which aspects of your background have been most helpful in your current position?
A lot of different aspects have been helpful, including the research skills I picked up and the class material, but I think the most important thing is as a grad student, you’re required to no longer be a consumer of knowledge, but also a producer. I learned about the publishing process and how to figure out things on my own and when to ask for help. These are all skills I started to develop before grad school, of course, but they are really honed in those few years.

In Memory of Tom Flanagan

Thomas Flanagan, MA in Geography (2007) was killed by a drunk driver while riding his bike:

On August 21, 2015 the world lost an amazing father, husband, and friend. Tom was doing one of the things he was most passionate about, road biking Lookout Mountain Road, when he was hit by a drunk driver. He leaves behind his wife, Carrie, and his 7 year old son, Owen. Tom had an amazing zeal for life. He had unbounded love for his family, a true passion for the outdoors, and an unrivaled enthusiasm for any festive event that Colorado had to offer.

You can make a donation in support of the Flanagan-Jantz family by going to: http://www.gofundme.com/tomflanagan

We enjoy hearing from our Alumni and welcome you to go to our website and click on the Alumni Update Form to send us updates.
Thank you to our Contributors!

The Geography & the Environment Department faculty, staff, and students would like to express our sincere appreciation and gratitude to the following alumni and friends for their financial contributions to support the department this year:

Carolyn and Langford Anderson  Neil and Renae Humburg
Laurie Bernhard and Paul  Kenneth Kaye
Stanford Bernhard Foundation
Tennille and Troy Blair  Michael and Dawn Keables
Dorothy and John Bregar  David Longbrake
Angela G. and William H. Brenton  Brent N. Petrie
Robert and Lynn Butcher  Cynthia Peters
Douglas Clark  Michael Podshadley
John and Ann Haartz  Claudia and Trevor Smith
Carolyn and Frederick Hack  Terrence and Linda Toy
Joyce L. Herold  Janice Vaughn

Help Support Excellence in Geography and Environmental Science at the University of Denver!
To make a gift online, please visit: http://www.du.edu/give/index.html

University of Denver
Department of Geography and the Environment
Boettcher West, Room 120
2050 East Iliff Avenue
Denver, Colorado 80208
303-871-2513
Geog-info@du.edu
http://www.du.edu/nsm/departments/geography/index.html