



GEOGRAPH

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From the Department Head

(Your name here): building community, supporting international travel, and celebrating excellence

A few times during the year, our college development folks email me about upcoming visits with alumni, and they ask me what our department funding priorities are. They might also ask what specific opportunities exist for someone with a special focus on x-y-z. So, as head, I need to think about our development priorities from two different points of view; first, what will strengthen and position the department overall for success, and second, what unique projects will appeal most to particular donors.

I currently have four things on my general department funding wish list:

1. Global Experiences Endowment for our Undergraduate Students

As a geographer, you know how valuable travel is. International experiences are key to educating global citizens, but only about two percent of Penn State students actually travel each year on study abroad, in part due to the financial cost. What if every geography major graduated with at least one academic international experience on their

2. Outstanding Graduate Research (RA) and Teaching Assistant (TA) Awards Endowment

Being able to provide recognition for the best RA and TA in the department each year shows how appreciative professors are of their work, and it helps these students with the costs of attending graduate school. (Remember all the ramen noodles you ate?) It is a required first level of recognition that allows our best graduate students to be eligible for college and university awards for research and teaching. And, that recognition strengthens their CVs

when they start interviewing for their new careers in research and teaching.

3. We Are Geography Endowment
An unrestricted fund is important
for a department because it gives
the department head flexibility in
how it is used. One thing we use
this kind of funding for is creating a
vibrant community that helps attract
top talent in faculty and graduate
students and supports crossdisciplinary research. It is another
way we can support emerging
programs that do not already have
an endowment or students who
are pioneering projects outside the
mainstream.

4. A Gift to Renew the Department Front Entry

Do you remember when you first came to the third floor of Walker Building and found your hometown on the giant relief map outside room 302? The same map is still here; students and parents still come to find their town on it. As one of the main visual representations of our department's presence, it has not aged well; there are holes, tears, and tape. Its condition is making a shabby impression, and I would like to plan a renewed look for this entry wall.

There are also opportunities to add to existing endowments, such as the C. Gregory Knight Endowment in Geography, Coffee Hour to Go Fund, and others, so a modest gift lasts forever.

We recently reorganized the financial aid and awards pages on our department website to make it easier for students as well as alumni and friends to learn about the support

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Community Updates

STUDENTS

Congratulations to the students who completed their doctor of philosophy degrees in geography in 2016–17. Summer 2016: **Douglas Baldwin, Elaine Guidero, Li-San Hung, Paulo Raposo, Chonming Wang.** Fall 2016: **Jase Bernhardt, Nathan Frey, Rachel Isaacs, Amanda Young.** Spring 2017: **Peter Koby**

Congratulations to the students who completed their master of science degrees in geography in 2016–17. Summer 2016: **Kevin Bernstein, Carolynne Hultquist,** and **Mark Simpson.** Hultquist and Simpson are continuing into the doctor of philosophy degree program.

Welcome to the new resident graduate students who will be joining us fall 2017: Elham Nasr Azadani, Hanzhou Chen, Harrison Cole, Emily Domanico, Zachary Goldberg, Courtney Jackson, Grace Malley, Stacey Olson, Ruchi Patel, Michelle Ritchie, Anthony Zhao.

Cary Anderson, Lauren Fritzsche, Tara Mazurczyk, and Natalie Pawlikowski are the Supporting Women in Geography (SWIG) officers for 2017–18.

Megan Baumann, Eden Kinkaid, and Carolynne Hultquist were elected as the new graduate representatives of the Graduate Students in the Department of Geography (GSDoGs) organization for 2017–18. Lauren Fritzsche will continue to serve during the fall semester.

Megan Baumann and Yanan Xin are the Undergraduate Research Opportunities Connection (UROC) coordinators for the 2017–18 academic year.

Megan Baumann received an NSF Graduate Research Fellowship for 2017.

Eva Bonta received a Penn State Erickson Discovery Grant for her project "Gastronomic Tourism in Mezcala, Mexico."

Meg Boyle served as a panelist at the April "Teach-in on Climate Change and Environmental Policy in the Age of Trump."

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Department departures and arrivals

William Easterling, professor of geography and dean of the College of Earth and Mineral Sciences, stepped down as dean at the end of spring semester 2017 to return to the faculty and to serve as director for the NSF Directorate for Geosciences in Washington D.C.

Katherine Foo, a two-year postdoctoral scholar, has accepted a position as an assistant teaching professor in the Interdisciplinary & Global Studies Department at the Worcester Polytechnic Institute in Massachusetts.

Deryck Holdsworth, professor of geography at Penn State since 1987, retired at the end of June 2017 as a professor emeritus.

Donna Peuquet, professor of geography at Penn State since 1986, retired at the end of June 2017 as a professor emeritus.

Kimberley Thomas, a postdoctoral teaching fellow at the University of Pennsylvania, will be joining the department as an assistant professor

in Environment and Society.

Denice Wardrop, senior scientist and professor of geography and ecology, stepped down as the director of the Penn State Sustainability Institute to return to the faculty.

Liping Yang joined the department in 2016 as a postdoctoral scholar in the GeoVISTA Center.

Cynthia Zook started in March 2017 as our new administrative support assistant. She came from the University Faculty Senate office.



Dean William Easterling (right), assisted by Executive Vice President and Provost Nick Jones (left), opens a gift at his farewell reception held May 15 at The Nittany Lion Inn.

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Andrew Brown won third place in the 2016 EMS Undergraduate Student Poster Exhibition. His team's entry was, "Recession of the Ampatuni and Ausangate Glaciers."

Kathy Cappelli, Haley Darr, Adelaide Kellett, and Christopher Mertz served as EMS Ambassadors during the 2016–17 academic year.

Benjamin Carlsen's team won "Best Visualization" at Penn State's 2017 American Statistical Association (ASA) Datafest competition.

Laura Clemente-Harding received a National Center for Atmospheric Research (NCAR) Advanced Study Program (ASP) Graduate Student Visitor Program grant.

Ethan Davis was interviewed on *The Morning Mixtape* radio program about his new farm "Strong Roots Organic Farm" and Community Supported Agriculture (CSA) on Friday, April 7.

Carolyn Fish won the Cartography and Geographic Information Society Doctoral Scholarship Award for demonstrated excellence in cartography or GIScience and the potential to contribute to cartography or GIScience research.

Nate Frey's paper "Equity in the Distribution of Urban Environmental Amenities: The Case of Washington, D.C." was accepted for publication in *Urban Geography*.

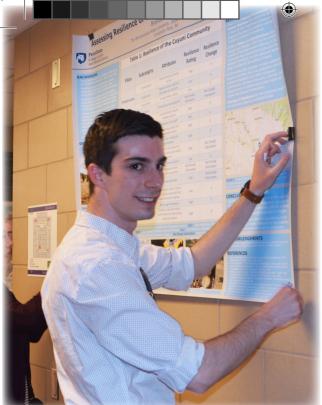
Lauren Fritzsche, Eden Kinkaid, Peter Ryan, Ramzi Tubbeh, Yanan Xin, and Renee painted the Penn State Lab for Analysis of Culture and Environment (PLACE) mural.

Russell Hedberg served on the board of the American Association of Geographers (AAG) Geographies of Food and Agriculture Speciality Group which published an op-ed in the *Finger Lakes Times* on how the current administration's proposed immigration policies will affect the food and agriculture sector in the United States.

Mikael Hiestand received the 2016–17 Anne C. Wilson Graduate Fellowship.

Courtney Jackson ('15) received an award to participate in the 2017

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Jack Swab sets up his research poster on the second floor of Walker Building.

Recognition R

spaces, contri

tudents, faculty, staff, alumni, and friends of the Department of Geography gathered on Friday, April 28, 2017 in Walker Building for the annual Recognition Reception. The purpose of the event was to recognize the accomplishments and contributions made throughout the year by Penn State geographers. This

Socializing and refreshments took place on the second floor as participants had the opportunity to examine research posters prepared by master's degree students and undergraduate students.

year, the event also celebrated lab

renovations in the department.

A formal dedication of the C. Gregory Knight Collaborative Learning Laboratory was held in room 229. The lab features worktables with multiple screens and keyboards to facilitate group projects.

Knight joined the Penn State faculty in 1971 and retired from the University as professor emeritus of geography in 2011. Knight's research interests were in climate change, water resources, resource management, global environmental change, and sustainable development. He authored books on ecology and change in Tanzania, climate change in Bulgaria, and methods for regional assessment of climate

change impacts. African carvings from his private collection were donated to the department and are on display in the new lab space.

"He was an excellent teacher, so I think this collaborative space is well-named for Greg," Department Head Cynthia Brewer said. "We're really happy to have this new space

for the undergrads and grads." The space also provides more connections between other department research labs, Brewer said.

Marieta Staneva, retired geography professor and Knight's widow, said, 'I would like to thank the whole community. I would like to thank Cindy, Bill Easterling [former dean of the College of Earth and Mineral Sciences, and the whole administration that took this wonderful step while Greg was still alive. Greg always wanted to bring people together to talk with each other." Brewer added that the college initiated the process of dedicating the renovated space for Knight several years ago. A short video of the dedication is available on the department website.

At 4:00 p.m. everyone moved to 112 Walker Building for the awards presentation.

Brewer served as the master of ceremonies, sharing the lectern with Donna Peuquet, undergraduate program officer, and Alexender Klippel, graduate program officer, to recognize students, faculty, and staff who won awards this year.

In her opening remarks, Brewer acknowledged all those who contributed to the creation of the new

n Reception celebrates new tributions, accomplishments

Videos of the C. Gregory Knight Collaborative Learning Laboratory dedication and the department awards presentation are available on the department website.

Knight Lab and thanked them for their work.

Fred and Marianne Gockley were in attendance to present *The Jeff Gockley Memorial Award*. The award was established in 2005 to honor the memory of their son Jeff Gockley ('97). It is awarded to top rising senior in the GIS option.

The 2017 award was presented to Yuying Ren who is pursuing a bachelor of science degree in the GIS option and minors in geosciences and economics.

Ren has worked as a research assistant in the Geoinformatics and Earth Observation Laboratory and conducted research through the Undergraduate Research Opportunities Connection program.

Marianne Gockley said she was pleased to present the 2017 award to Ren. "In looking at her résumé, I can see that she is a truly remarkable student."

Bruce Balmat presented the Balmat awards. *The Balmat Family Scholarship* is intended to help students who transfer from another major into the Department of Geography.

"My wife and I both graduated from Penn State in 1970 and we really did not have much connection with

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Marieta Staneva (left) and Cynthia Brewer (right) dedicate the new C. Gregory Knight Collaborative Learning Laboratory in 229 Walker Building.







Yuying Ren received the 2017 Jeff Gockley Memorial Award.

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our majors. When our kids became college age, our son enrolled here in engineering and our daughter then enrolled in education. However within one year they saw the light and they both transferred into the Department of the Geography, and the friendships the connections they made, and the support from the staff really made a difference in their experience at Penn State. As parents, we were really impressed with how they took advantage of the opportunities a Penn State education can offer," he said.

"It makes my wife and I proud to see another generation coming out of Penn State, and the Department of Geography and making an impact," Balmat said.

He presented the *Balmat Family Scholarship in Geography* to Danielle Ruffe and Brittany Waltemate and the *Balmat Family Fund for Honors Scholars* to Sonia Kaufman and John Swab.

Peuquet presented the departmental undergraduate student awards. The awards are:

G.D. Richardson and Kathy LaSauce Undergraduate Scholarship in Geography in the College of Earth and Mineral Sciences: Andrew Brown, Colin Kelly, Connor Klassen, Christopher Mertz, Doran Tucker.

Geography Alumni Scholars (Outstanding Undergraduate Student) Award: Ruiqi Guo, McQuillan Murphy, Grant Smith, John Swab.

Peter R. Gould Center for Geography Education and Outreach Student Engagement Award: Kathy Cappelli, McQuillan Murphy, Grant Smith.

Klippel presented the departmental graduate student awards.

E. Willard and Ruby S. Miller Distinguished Graduate Fellowship in Geography: Sara Cavallo

E. Willard Miller Award in Geography: Ph.D. Paper (1st), Jenna Christian; Ph.D. Paper (2nd), Morteza Karimzedah; Ph.D. Proposal, (1st), Lucas Harris; Ph.D. Proposal, (2nd), Kelsey Brain; Master's Paper, Carolynne Hultquist; Master's Proposal, Jamie Peeler.

Outstanding Graduate Research Assistant Award: Elena Sava

Outstanding Graduate Teaching Assistant Award: Carolyn Fish

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Elena Sava received the 2017 Outstanding Graduate Research Assistant Award.

SWIG chapter promotes equity through outreach

Penn State's chapter of Supporting Women in Geography (SWIG) recognizes the role of gender, sexuality, race, and class in the organization of our everyday lives and aims to promote and empower individuals within geography by offering a supportive network and opportunities to grow professionally, intellectually, and personally.

In the 2016–17 academic year, SWIG introduced middle school girls from Park Forest Middle School in the State College Area School District and Moshannon Valley School District to the discipline of geography during Supporting Young Women in Geography Day, organized the panel "The Broader Impacts of Our Research" at the AAG conference, put together two holiday baskets for Centre County families through the Centre County's Women's Resource Center (CCWRC), and sponsored Antoinette Winkler-Prins' visit and professional development workshop on the National Science Foundation's Doctoral Dissertation Research Improvement Awards program.

Additionally, SWIG hosted regular lunches with visiting speakers. These lunches gave graduate students the

chance to talk about specific challenges and opportunities for underrepresented groups in geography, academia, and research.

This upcoming year, Penn State SWIG aims to increase outreach to SWIG chapters across the country as well as to local organizations, such as CCWRC by participating in their annual "Steps 2 Safety" 5K race.

The SWIG officers who served in 2016–17 were Julie Sanchez, Jamie Peeler, Kelsey Brain, and Megan Baumann. The SWIG officers for 2017–18 are Cary Anderson, Lauren Fritzsche, Tara Mazurczyk, and Natalie Pawlikowski.



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National Water Center Innovators Program Summer Institute.

Morteza Karimzadeh won a \$1000 NSF award to attend the 24th ACM SIGSPATIAL conference in San Francisco, California.

Morteza Karimzadeh has accepted a lecturer position with Ohio State University's Department of Geography.

Eun-Kyeong Kim won second place in the 2016 Korean Computer Scientists and Engineers Association in America (KOCSEA) Moon-Jung Chung Scholarship Competition and received a cash prize of \$600.

Eden Kinkaid received a Foreign Language and Area Studies Summer Graduate Fellowship to study advanced Hindi and conduct preliminary fieldwork this summer in India.

Eden Kinkaid was awarded an NSF Graduate Research Fellowship for 2017

Catherine and **Thomas Lauvaux** announced the birth of their son, Robin Amédée on Feb. 7, 2017.

Aparna Parikh won the Glenda Laws Student Paper Award from the AAG Geographic Perspectives On Women Specialty Group.

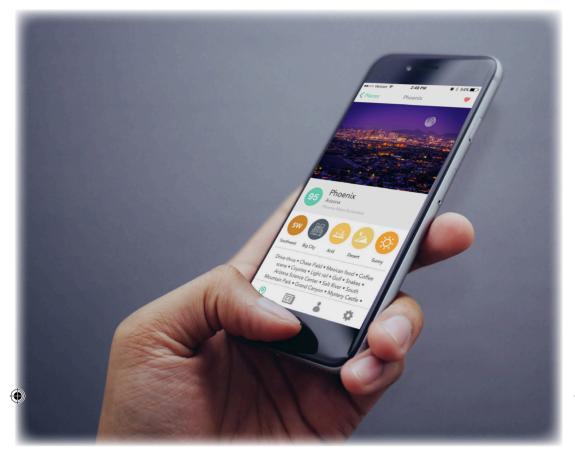
Jamie Peeler received an NSF Graduate Research Fellowship Honorable Mention for 2017.

MGIS student **Tyson Quink** won the 2016 Michael Murphy award.

Azita Ranjbar's article, "Silence, Silencing, and (In)Visibility: The Geopolitics of Tehran's Silent

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How my capstone MGIS project evolved into a business venture





hen most people think of geographic information systems (GIS), they think of maps. That's not necessarily wrong; it's just incomplete. My professional background demonstrates many commercial applications of GIS. Individuals using current technology also apply GIS in a number of ways on a daily or momentary basis: GIS is represented in the navigation on our phones; it largely powers our cars' computers (and the future of autonomous driving); it helps us search for that best vacation spot; it even assists us with recommendations through our Facebook profiles. GIS is now a fundamental component of everyday life decisions, whether we notice it or not. GIS will inevitably become even more intimately involved in decision making and confer many benefits for individuals.

So I wondered: could GIS even help individuals plan their future by making their best decisions in advance?

To answer the question, I began with self-assessment. I thought about my own priorities, what mattered most in life—and how they changed all too frequently. I wanted to be able to connect with my best opportunities and scenario, to plan my future with various considerations in mind. I realized that when faced with a transition in life that involves relocating, most of us agree that certain factors take precedence: jobs, schools, family, and cost of living. But what if there were an app that asked those important questions and many others—your favorite landscape, your least acceptable natural disaster, what you like to eat, how you exercise—and then presented you with cities and neighborhoods across

By Sarah Linden ('13g)

the United States that were a perfect fit based on your answers? This concept was the focus of the capstone project for my Penn State Master of Geographic Information Systems (MGIS) degree and finally appeared as a product in the App Store in November 2016. It's called "(To)."

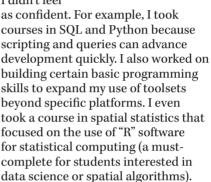
(To) encourages users to understand and focus on location as a primary component of decision-making rather than an afterthought. No matter one's life stage or goals, location has a large impact on quality of life. Satisfying an interest in outdoor exercise is obviously place-dependent, but even a financial factor like student loans can prove the importance of place: loan repayment support is available if you know where to look.

(To) currently focuses on opportunities for people pursuing careers in medicine and the many transitions, decisions, and compromises that occur along the way. Future versions will consider a range of career disciplines, and content will grow in all areas of the app. (To) is destined to become an ever more informed platform for better life decision-making. The youngest generation of professionals ascending through the ranks right now understands the valuable role location plays in their lives and will make many choices because of it. (To) is the mobile application that actually helps them do it.

None of this would have been possible without the Penn State online MGIS degree program and the wide-ranging, in-depth educational opportunities that came with it. When I enrolled, my purpose was twofold: first, to advance my foundational understanding of GIS; and second, to accelerate my personal mission focused on bringing the power of location to individuals. I have dedicated my career to helping large companies and nonprofit organizations facilitate decisionmaking using spatial data. I have worked on applications ranging from planning for new civic developments to using GIS to transform the 2013

National Scout Jamboree for the Boy Scouts of America.

To achieve this, my time at Penn State included electives in areas where I didn't feel



It was the flexibility to craft my educational agenda based on my aspiration to create an individualized-GIS solution that made my experience at Penn State so influential and life-changing. I wasn't just planning to transform my life through education, I was actually doing it.

While at Penn State, I was provided access to a range of tools (from open-source software to an influential Esri suite) and surrounded by professors who not only taught me how to use location tools but also encouraged me to contemplate the manifest opportunities they present.

I was challenged to write my own story and drive toward spatial data ideas and solutions unique to me. So, while I enrolled with the intent to further my understanding of the intersection of spatial data and application development, I also achieved a more profound result—a greater understanding of my own future, while helping others in the process.

Since raising sufficient capital, Linden works full time on (To), growing the product with a team of professionals who inspire her daily. If you'd like to learn more, please visit: www.to-wherematters.com or find it on the App Store by searching 'where matters.'

A

Peuquet, well-known for research a



advisee Diansheng Guo ('03g) at Coffee Hour in spring 2015.

Peuquet (left) with former

onna Peuquet, professor of geography at Penn State since 1986, announced her retirement to emeritus status at the end of June 2017.

Within the Department of Geography, Peuquet taught many undergraduate and graduate courses, advised graduate students, and served as the undergraduate program director and as the associate director of the GeoVISTA Center. "Dr. Peuquet advanced my thinking and influenced my career by expecting me to learn, think and work as an independent scholar," said Elizabeth Wentz ('97g), dean of social sciences in the College of Liberal Arts and Sciences at Arizona State University.

In 2016, Peuquet was selected as a Fellow by the University Consortium for Geographic Information Science for her contributions to the advancement of geographic information science education and research.

"Donna is a true scholar of geography, whose theoretical research on computational and cognitive geographic representation influences and inspires me to this very day in how I think about teaching and research. Perhaps even more importantly, however, Donna is a very kind and caring person, who was the best adviser I could hope for—responsible, inquisitive, and creative, and critically constructive

without being negative or judgmental. She was an excellent and supportive guide to the academic world. I always felt she had my best interests in mind," said Jeremy Mennis ('01g), professor of geography at Temple University.

Peuquet's research interests have been primarily in the areas of geographic knowledge representation, knowledge discovery, spatio-temporal data models, geocomputation, and GIS design. Since the early 1990s, Peuquet's work has centered on the representation of time and temporal dynamics, including database, visual and cognitive representation and how these interrelate. Arguing that the human user and the computer must be viewed as components of a single system, her 2002 book, Representations of Space and Time, explores that integrated perspective. That book is regarded as an essential read in the geographic information sciences (GIS) community.

Like many geographers, Peuquet discovered her major. She earned a bachelor's degree in urban geography from the State University of New York (SUNY) at Buffalo and then a master's degree in urban geography from the University of Cincinnati. After graduating with her master's degree, she worked for three years as a senior planner for the City of Niagara Falls, New York, her hometown. "They were in the process of urban renewal at the time," Peuquet said. "I was a native of the city with personal knowledge, as well as the training. The standard tool for planning at the time was something known as the 'windshield survey, if you wanted to know what was happening, you hopped in the car and looked."

h and service in GIScience, retires

"Then I was given custody of a recently completed survey that included detailed information about every property in the city that went beyond the standard property tax records. Not only the size and materials of any structure, but also its condition, detailed land use, and how many people lived there if it was a residence. In exploring how I might be able to do a comprehensive analysis,

I discovered a very new thing at the time called a 'geographic information system.' I was hooked. There was one person in the United States who was teaching GIS at the time, and only at the graduate level: Duane Marble. So I started the PhD program at SUNY Buffalo to study with him. After the switch from urban geography to what we now know as GIS, I never looked back."

"My dissertation argued the case for raster processing as opposed to vector processing for many situations, particularly when dealing with large amounts of data. This went against the dominant trend at the time, which was focused on working toward a single, standardized (and vectororiented) representation."

Although she is officially retiring, Peuquet said she plans to continue advising graduate students and conducting research. "The word 'retirement' to most people assumes you're going to quit work. At first, I didn't want to announce very widely I was retiring for that reason—because I intend to remain engaged," she said.

A career actively engaged in the geospatial revolution has left Peuquet with a lot of history on her bookshelves that is not in the formally published literature. "One of the big problems I now have is how to sort through all this stuff," she said gesturing around to the materials in her office.



A keepsake from the past, when Peuquet was in the minority advocating raster processing.

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Protests" was published in *Hypatia*, a top feminist philosophy journal.

Azita Ranjbar has accepted a tenuretrack position with Ohio State's Department of Women's, Gender and Sexuality Studies.

Elena Sava won the 2016 Penn State Institute for CyberScience student poster competition.

Yanan Xin earned travel awards for CyberGIS '16 conference and presented a poster for a research project.

Travis Young received an NSF Graduate Research Fellowship for 2016.

Jiayan Zhao co-authored with alumnus Rui Li ('12g) a paper accepted by the German artificial intelligence journal, *KI – Künstliche Intelligenze*.

FACULTY and STAFF

Clio Andris was named an Emerging Cities Champion for her 2016 bus costumes project by the The Knight Foundation and 8 80 Cities.

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She knows where the wild things are for dinner

Bronwen Powell joined Penn State in January 2016 as an assistant professor of geography and African studies. She joined Penn State after nearly four years as a postdoctoral researcher with the Center for International Forestry Research. Powell has spent a large portion of her career living and working in Africa, where she examines the social, cultural, and environmental determinants of human diet and nutrition.

Powell grew up in a rural area outside of Toronto, Canada, and recalls spending a lot of her spare time roaming in the forest around her home and learning about edible and medicinal plants from her father. "We collected fiddleheads, mushrooms, and berries," she said. "I still love collecting wild foods. If you see me looking at weeds on the side of the road you can probably assume I am thinking about dinner. It's a thrill for me that my childhood hobby has become a central topic of my research career. I love to hear from people in different places what wild foods they eat, how they cook them, why they like them (or don't like them), and how they manage their farms and forests to ensure they have access to a good supply of wild foods. In some places wild foods are essential parts of healthy diets and other places they are delicacies in local cuisine. I love too, that I can compare the ways other people use wild foods to the way my family does."

A wild food, Powell said, is anything that grows or may grow spontaneously without human intervention. The same species could be a cultivated food in some places and a wild food in others. "For example," Powell said, "what we call 'pig weed' (*Amaranthus* spp) in North America is cultivated in East Africa. In other cases people transplant wild foods from the forest to places closer to their homes."

Wild foods typically include vegetables, mushrooms, wild meat, fruit, fish, insects, and nuts. "The important thing about these types of foods is that they are also the types of foods that are nutritionally important: they are generally high in micro-nutrients and fiber and low in fat and sugar," Powell said, "Given that these days food security isn't about getting enough calories (that's not so hard with cheap processed noodles and soda found almost ubiquitously across the globe), but about getting enough healthy foods that support a balanced diet, these types of foods can be very important. "Research shows that in some settings, a large portion of the fruits and vegetables consumed come from the wild."

"Low fruit and vegetable consumption is listed as one of the top ten risk factors for mortality globally by the World Health Organization. Worse, global production of fruits and vegetables falls far short of what is needed to meet the recommendations globally," Powell said.

A nutritional paradox can emerge when communities transition from subsistence livelihoods, relying upon wild foods, to market-based and income-oriented livelihoods. "There are trade-offs for that income: people either have to spend time working at some non-traditional activity and may then have less time to grow a garden or go to the forest to collect wild food, or if the income is through some sort of paymentfor-environmental-service scheme, there may be new restrictions on how they are allowed to use their forests. If there is fruit on the farm, kids usually eat fruit, but if a parent has to go to the market and purchase food, all of a sudden they have to decide between purchasing enough rice for four days or purchasing rice, fruit, and vegetables for one day. It is quite understandable that families with

Powell discusses dietary diversity and life in general with friend and research participant, Zaina Housseni, in the East Usambara Mountains, Tanzania, in 2012. Photo by Keith Powell.

financial constraints struggle with those decisions," Powell said.

Working with government officials to develop national food security and land use policies that make it easier for those families to get the nutrition they need is a meaningful way Powell applies her research. "It has been a great privilege to work with colleagues in Burkina Faso, Ethiopia and other places, to support and have a small part in the policy change that they have driven in their own countries," she said.

"From farmers and hunters; from women who never went to school but know dozens of wild vegetables as well as exactly where to find them and when; from parents who have raised their teen-aged sons to be responsible members of their communities despite the allure of 'modernity;' I have learned that there are many ways to learn and know about the world. I have met many illiterate people who have an amazing depth of knowledge about their world, as well as a lot of wisdom. I am continually amazed by how clearly (some of) my research participants understand the reasons they do what they do and the constraints that impact their decisions. In academe we get so caught up in our ways of learning and our types of knowledge that we can lose sight of the fact that there are other, equally valid ways of learning and knowing," Powell said.

Powell recently received a Wilson Research Initiation Grant from the College of Earth and Mineral Sciences that will support her new project on agribiodiversity and landscape diversity in foodsheds in Morocco. "I hope that next in terms of new projects is more work with the Gumuz communities in Ethiopia," she said, adding, "and of course I'd love the opportunity to work in the East Usambara Mountains in Tanzania again.





Q&A with Joshua Inwood

Joshua Inwood joined the Department of Geography in July 2016 as an associate professor and has a joint appointment as a senior research associate with the Rock Ethics Institute.

Q: What first inspired your scholarly interests in issues of place, social power, and inequality?

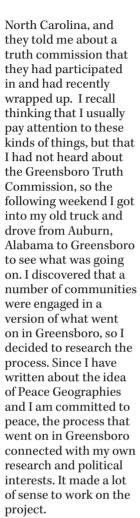
II: I have always been interested in issues of justice and inequality, but it wasn't until I got into graduate school and I began reading and thinking about social relations and the making of space and place that I realized how the organization of space and place is central to not only understanding inequality, but also how we might address structural inequality. In looking back, I will also say that September 11, 2001 was also transformative. I really like to listen to music while I work, and I was listening to the radio when I heard an announcement that a plane had hit the

World Trade Center. I thought, "wow, that is too bad" and I went to class. Two hours later, when I walked out of the classroom, people were crying and saying that we were under attack and that planes were flying into buildings all over the country. I ran back to the department where everyone was huddled around a little portable television in the office. and the world had completely changed. It was a terrible time, but it was also a time of a political reawakening on university campuses and you really had to pick a side and try to work for the world you wanted, not the one we necessarily had.

Q: What then led to the more concrete and specific research on the emergence of Truth

and Reconciliation Commissions in the United States?

II: It was kind of an accident. I was (and still am) interested in the writings and teachings of Martin Luther King Jr., and in particular his vision of economic and racial justice. He often wrote and talked about the idea of The Beloved Community—an idea of community that stands in opposition to the way we currently organize ourselves and is an attempt to address economic and political inequality. Anyway, I was calling around to a bunch of Beloved **Community Centers** across the United States and trying to get a sense of the way these centers were related to King's ideas. I called up a Beloved Community Center in Greensboro,



Q: How does focusing your scholarship on those who have been marginalized and terrorized affect you, and what challenges do you face in this area of inquiry?

JI: Given my identity, I enjoy a tremendous amount of privilege and so the challenges I face engaging in this research are pretty small in terms of the challenges that are faced by the communities I work in.

Q: How are we continuing in 2017 to defend segregationist spaces and practices?

JI: That's a good question. There are so many examples today:

"I hope that we will be able to explore how the study of civil rights needs to be a central focus of geography."

the prison-industrial complex, the way we police communities, the continued economic inequality, the growth of white supremacist violence directed towards minority populations in the United States. and continuing controversies over our landscape and the taking down of Confederate memorials throughout the South. Race has always been central to the workings of the United States, but in the wake of the most recent election, we have seen a fairly robust uptick in violence directed towards minorities in the United States. There is no question—at least in my mind—that when political leaders engage in the kind of latent and sometimes not-so-subtle appeals to the worst legacies of U.S. history that there is going to be a backlash against minority populations. It has almost always worked that way and unfortunately, I am afraid we are witnessing the tip of a very large iceberg and we are going to see more attacks like we recently witnessed in Portland and on the campus of the University of Maryland.

Q: What's next on your research agenda?

JI: I recently received

(with co-author Derek Alderman) a National **Science Foundation** grant to look at the Student Non-Violent Coordinating Committee (SNCC) and the way they used geographic data to plan, execute, and engage in civil rights struggles throughout the United States, but in particular in the South. While many people assume that the civil rights struggle was the result of unplanned events, the reality is that SNCC was highly organized and used a wide variety of data to plan the civil rights struggle. SNCC, for example, had its own research arm and that engaged in a deep analysis of segregation in the United States and in the South in particular.

I just got back from visiting the Ella Baker papers archive in New York and archives at New York University and I am really, really excited about what we are finding. I think we have an opportunity to contribute to a broadening of the idea of geospatial intelligence to include a range of activities and events that are not normally associated with the craft, and I hope that we will be able to explore how the study of civil rights needs to be a central focus of geography.

COMMUNITY from page 13

Clio Andris received a \$159,000 grant from the Knight Foundation for the project "Census 2.0: A Census of Connectivity."

Jennifer Baka was selected as an early career representative for Future Earth's Knowledge-Action Network on Water-Energy-Food Nexus.

Jennifer Baka, Alan MacEachren, Prasenjit Mitra (IST), and Liping Yang received a seed grant from the Institute for CyberScience for their proposal "Comment Analytics: Leveraging Big Unstructured Data to Understand Spatial and Temporal Variations in Public Response to Government Policy."

Mark Bonta ('90), assistant professor of earth sciences at Penn State Altoona, received the Pennsylvania Geographical Society Distinguished Geographer Award.

Guido Cervone received a grant from the NSF for EarthCube Building Blocks Collaborative Proposal "The Power of Many: Ensemble Toolkit for Earth Sciences."

Guido Cervone received a grant from the Office of Naval Research for his project "Fusing Radiation Data from UAVs and Social Media During Nuclear Emergencies."

Guido Cervone, Alan MacEachren, and **Liping Yang** won an NVIDIA GPU Grant (NVIDIA awarded one Titan X Pascal GPU card).

Guido Cervone was awarded \$9000 grant from the University of Split-Penn State Collaboration Development Fund.

Karen Cox was the February recipient of the College of Earth and Mineral Sciences staff "Rock In Role" Award.

Marnie Deibler was the November recipient of the College of Earth and Mineral Sciences staff "Rock in Role" award.

Lorraine Dowler was elected as a national councilor for the American Association of Geographers.

Roger Downs received the 2017 American Association of Geographers Presidential Achievement Award, which honors individuals for their long-term, major contributions to the discipline.

Christ Fowler was quoted in a *WalletHub* piece about 2017's most and least recession-recovered cities.

Chris Fowler received a grant as part of the Family Life Project, funded through the NIH Environmental influences on Child Health Outcomes (ECHO) initiative.

Deryck Holdsworth was named a General Education Faculty Fellow for 2016–17.

Joshua Inwood was quoted in a news story on CBS "KKK members insist they're not 'white supremacists."

Joshua Inwood's article, "Dealing with hate: Can America's truth and reconciliation commissions help?" was published on *The Conversation*.

Joshua Inwood's article, "MLK in TrumpLand: America should look to Martin Luther King Jr. during this post-election chaos," originally published on *The Conversation*, was picked up by Salon.com, and he was interviewed for a podcast about it.

Brian King's book, *States of Disease: Political Environments and Human Health*, was published.

Brian King's article, "How bucking climate change accord would hinder fight against HIV/AIDS" was published on *The Conversation*.

Brian King was elected to serve on the Faculty Senate.

Alex Klippel was named as the Gosnell Senior Faculty Scholar and Faculty Fellow at the Stuckeman Center for Design Computing.

Alex Klippel was promoted to professor.

Lise Nelson published an article on undocumented immigrant labor on *The Conversation* and was interviewed by 98.7 The Freq radio station.

Teresa Onorati is a visiting scholar in GeoVISTA/Geography through the end of summer. Onorati is visiting from the Universidad Carlos III de Madrid where she is currently a postdoc in the Department of Computer Science.



Online Geospatial program graduates with their families and faculty attending a pre-Commencement reception at the John A. Dutton e-Education Institute on May 7, 2017.

Bronwen Powell was invited to speak at this year's UN Forum on Forests held in at UN Headquarters in New York.

Bronwen Powell secured funding from the Bill and Melinda Gates Foundation and UK AID, in collaboration with colleagues at the Center for International Forestry Research, for a new project.

Two papers co-authored by **Bronwen Powell** have been cited in a news story on *Mongabay*.

Anthony Robinson was named president of the North American Cartographic Information Society for 2016–17.

Stevie Rocco, assistant director for learning design in the John A. Dutton e-Education Institute, was promoted to senior lecturer.

Angela Rogers was accepted as a College of Earth and Mineral Sciences Administrative Fellow for 2017.

Erica Smithwick was a panelist on WPSU's "Conversations LIVE: Climate Change" on Thursday, April 27.

Erica Smithwick was profiled as part of WiScifiles, a WPSU series about women in science at Penn State that launched January 2017.

Erica Smithwick and Alex Klippel, along with several colleagues from the Earth and Environmental Systems Institute (EESI) and other institutions, received a grant from NSF-Dynamics of Coupled Natural and Human Systems, to use virtual ecology and ecosystem modeling to assess values and trade-offs in decision making about sustainable forest management under climate change.

Alan Taylor received the AAG Biogeoraphy Specialty Group's Henry C. Cowles Award for Best Publication.

Alan Taylor's research was cited in a former *New York Times* blog, "Dot Earth," about fire management policies in California's Sierra Nevadas.

Annie Taylor, director of the John A. Dutton e-Education Institute, was named assistant dean of distance learning for the College of Earth and Mineral Sciences.

Melissa Wright received the American Association of Geographers Harold M. Rose Award for Anti-Racism Research and Practice.

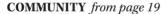
COMMUNITY continues on page 20





Before and after: renovations in Walker Building

At left, the top photo shows a gutted GeoVISTA Center. The bottom photo shows the newly renovated space.



Melissa Wright and Yitian Zhai are the editors of theory@buffalo's, an interdisciplinary journal of the humanities, issue 19: Difference: Sexual, Cultural and Universal.

Liping Yang and **Guido Cervone** were awarded a 2017 NCAR/ Computational and Information Systems Lab (CISL) summer research grant.

Michelle Zeiders, lecturer in the John A. Dutton e-Education Institute was promoted to senior lecturer.

Karl Zimmerer was a Research Fellow at the Bellagio Center and Harvard, and a Fulbright Senior Research Scholar in Spain during his 2016 sabbatical.

Karl Zimmerer and his advisee **Nathan Clay** had articles published in the March issue of the *Annals of the American Association of Geographers*.

ALUMNI

Sheryl Kron Larson-Rhodes ('85) has accepted a full-time, tenure-

track position as first year experience librarian at SUNY Geneseo. She also serves as the library liaison to the departments of communication, geography, and languages and literatures. Larson-Rhodes lives outside of Rochester, NY, with her husband and two cats.

Jeremy Crampton ('87g, '94g) and Reuben Rose-Redwood ('02g, '06g) were selected as new editors for the journal, *Dialogues in Human Geography*, starting in January 2017.

Jen Fluri ('01g, '05g) was featured in the podcast, "Feminists on the Frontline."

Amy Trauger ('01g, '05g) and Jen Fluri ('01g, '05g) are launching a new Feminism, Gender and Geography book series published by the West Virginia University Press.

Helen Poulos ('02g) is quoted and one of Alan Taylor's photographs is used in an article on *Seeing Science* about how photographic images influence perceptions of ecological issues.



At right, the top photo shows a very dusty room 229 under construction. The bottom photo shows the new C. Gregory Knight Collaborative Learning Laboratory.



Martha Selig ('06) was awarded second place in the Analytic Presentation Map category for her poster "Protecting Los Angeles County's Scenic Ridgelines" at the 2016 Esri User Conference.

Patrick Dougherty ('14) graduated from the University of South Florida with a master's degree in urban and regional planning in May 2016. After serving as an intern for a year and a half at a planning/engineering/design firm in Tampa, Florida, he accepted a full time position as a planner and GIS analyst with the same company.

David Lautenschleger ('14g) was hired as a full-time assistant professor at the University of Akron in the College of Applied Science and Technology. He will be teaching surveying and GIS courses.

Sid Pandey ('14) was elected as Advocacy Subcommittee Chairperson for the Maryland State Geographic Information Committee (MSGIC).

Rachel Passmore ('14) finishes her 27 months of Peace Corps service

in August and will begin graduate school at Columbia University in New York, pursuing a master's degree in public health.

Doug Baldwin ('16g) and colleagues have had their paper on soil moisture variation accepted by the journal *Geoderma*.

Adrienne Cooke ('16) will be attending graduate school at the University of Illinois, fully funded on a fellowship.

Mario Machado's ('16g) article, "President Obama's human goodness will be sorely missed," appeared in the January 2017 edition of the *Huffington Post*.

Vanessa Massaro ('16g) has accepted a position as an assistant professor of geography at Bucknell University.

Patrick Stephens ('16) had a map published as part of a scientific article on phys.org. Stephens generated this map while working on an independent study with Andrew Carleton in fall 2015.

DEVELOPMENT from page 3

available and ways to give. If you visit: www.geog.psu.edu/about-us/financial-aid-and-awards, you can see all the ways we are providing financial aid to students.

In addition to my general needs wish list, there are many ways to create incredible and specific funding opportunities that align with a donor's passion. For example, if you are passionate about unmanned aerial vehicle research, or supporting environmental justice fieldwork in Africa, endowing a faculty chair in landscape ecology, or creating a crowdfunding campaign on Let's Grow State, we want to work with you to make it happen.

When prospective students are exploring programs, what stands out is the support provided to them, the resources available in the department, and the kind of community they will be joining. Your philanthropy, general or specific, is what gives a prospective student the push to say yes to an acceptance letter, buy the plane ticket to travel abroad, or learn from the top minds

in our discipline. These moments define each Penn State geographer's experience and stay with them for the rest of their lives.

We recognize and thank our benefactors in a variety of ways. We send thank-you letters and write news stories about major gifts. Penn State recognizes the most generous supporters by inviting them to become members of University or college giving societies. But one of the most meaningful, in my mind, is that we see a gift as a tangible connection, and we want you to participate in the department activities related to what you support.

If you're ready to put your name on something I've mentioned above or have another creative idea, give me a call. Our development office can work out the details for nearly any giving scenario we can come up with. I'm looking forward to hearing from you and realizing our shared vision for excellence in geography.

We always want to know where you are in life. Send your news to geography@psu.edu.

RECEPTION from page 8

Ruby S. Miller Endowment for Geographic Excellence: Megan Baumann, Carolynne Hultquist, Elena Sava, Marie Louise Ryan

Brewer presented the faculty and staff awards. In introducing the Staff Outstanding Service Award, Brewer said, "Denise has had quite a year, doing lots of detective work on the budget due to the impacts of Lionpath. She manages a smooth-running main office and is a generally helpful person."

Department of Geography Staff Outstanding Service Award: Denise Kloehr

College of Earth and Mineral Sciences Wilson Awards Banquet winners were recognized at the annual college Wilson Awards Presentation Banquet. Faculty Mentoring Award: Andrew Carleton

Wilson Award for Excellence in Research: Alan Taylor

Wilson Research Initiation Grant: Bronwen Powell

In her concluding remarks, Brewer mentioned the retirements of Donna Peuquet and Deryck Holdsworth, and that they would be celebrated with Coffee Hour events in the fall. "They have given their last classes and I bet that feels pretty good."

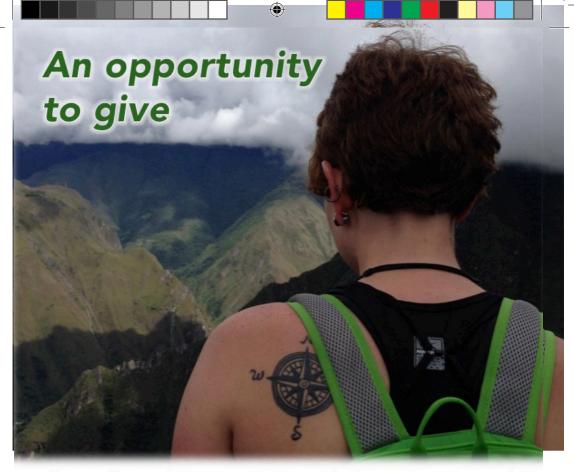
To the graduating students, Brewer said, "Keep learning; keep learning new tools, keep seeking out new ways of solving problems, seek out collaborators around the world. Be geographers. Get out there and have a great time, do well, and enjoy being geographers."

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