# The Compass

## Department of Geography Newsletter 2017-18

The Department of Geography has been designated as a Center of Academic Excellence in Geospatial Sciences



University at Buffalo Department of Geography College of Arts and Sciences

## MESSAGE FROM THE CHAIR SEAN J. BENNETT

Photo by D. Levere

I am delighted to share with you the Fall 2017 edition of The Compass, the newsletter for the Department of Geography here at the University at Buffalo. In this issue, you will read selected success stories of faculty, students and alumni making a difference in our local-to-global community and within our profession. It is through these stories that the true impact of geography and geographic research can be measured and realized.

This coming year, we invite you to share your news and information with us and to participate in scheduled events here at UB and at the AAG meeting in New Orleans. Lastly, let me thank all alumni who have generously contributed to departmental activities and events, scholarships and awards.

With best wishes,

Sean J. Bennett, Professor and Chair

## STAFF

**EDITORS:** Sean J. Bennett, Betsy Crooks, Elin Hawkinson, Nan Ding

**CREATIVE DIRECTOR:** Renee Ruffino

**DESIGNER:** Casey Ridings

1

## **IN THIS ISSUE:**

- 3 >> Geography Headline News
- 5 >> Faculty news
- $7 \gg~$  Student News
- 8 >> Alumni News

## **GEOGRAPHY HEADLINE NEWS**

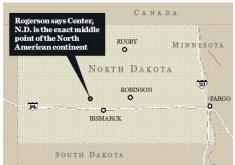
The Department of Geography has been designated as a Center of Academic Excellence in Geospatial Sciences by two federal agencies with an interest in building the United States' expertise in the field. The recognition comes from the National Geospatial-Intelligence Agency (NGIA) and the United States Geological Survey (USGS). As a Center of Academic Excellence, the university will work



with the NGIA and USGS to build, strengthen and cultivate the current and future geospatial sciences workforce in support of America's geospatial intelligence needs and challenges.

## **Peter Rogerson, PhD** pinpoints the geographical center of the North America Continent

in Center, N.D. In 2015, Prof. Rogerson developed a technique that uses azimuthal equidistant map projection, combined with a computer program and a special mathematical formula, to determine geographic centers of American states. For years, Rugby and other cities in North Dakota fought for the center of the continent. Rogerson's new method, which takes into account the curvature of the Earth, revealed that the exact middle point of the North American Continent is the aptly named Center, N.D., a city 150 miles southwest of Rugby.



(from J. Tokasz, The Buffalo News)

## **Ling Bian, PhD** and her team are conducting a smartphone initiative to track flu in WNY during this flu season.

Participants use their phones to answer a few questions about whether they experienced flu symptoms and whether they went to the doctor, as well as which public places they visited. They also keep their phone's location services activated, enabling the research team at the National Center for Geographic Information and Analysis at UB to analyze how people come into contact with one another. The information will be used to create a computerized model of how communicable diseases spread in a region and help public



## health officials respond. In debates over immigration, economic anxieties loom large.

A common concern is that an influx of workers born abroad will depress wages for native-born Americans. However, **Abigail Cooke**, **PhD** and her co-researcher Thomas Kemeny, PhD provide evidence that immigrant diversity increases wages, generating widespread benefits for both highand low-paid workers. Cooke and Kemeny are sifting through 18 years of employment data from the U.S. Census Bureau to understand how wages respond to changes in



the mix of immigrants in a region or workplace. This research is exploring how diversity influences wages of workers in different fields and how cities whose residents are more welcoming to immigrants may receive larger rewards from the immigrant diversity in their midst. (from C. Hsu, UBNow and I. Ivanova, MONEYWATCH)

## Days before the presidential election, experts from around the world convened at the University at Buffalo to debate

one of the campaign season's most controversial economic topics: The Trans-Pacific Partnership (TPP), an agreement that would govern trade between 12 Pacific Rim nations, including the United States. "The discussion has largely been focused on the question of, 'Is this good for the United States?' or, 'Is Vietnam a winner here or not?' It is this high-



2017-18 | The Compass

## **GEOGRAPHY HEADLINE NEWS**

level, country by country assessment of winners and losers in narrow economic terms, but in reality, the implications of this deal is much more complex and far reaching; within every country, there will be people who are going to be hurt by this, and people who are helped by this," says **Prof. Abigail Cooke**. She is an organizer of the symposium, along with Department of Geography colleagues **Trina Hamilton, PhD** and **Marion Werner, PhD** and UB School of Law colleague Meredith Kolsky Lewis.

(from C. Hsu, UB Reporter)

#### CUSTAC is now CTED: The Center for Trade, Environment and Development. CTED Co-Directors, Profs. Abigail Cooke, Trina Hamilton and Marion

Werner, are hard at work setting up a new website, developing curriculum resources and advancing cutting-edge research on international trade. In October 2017, they published a Special Section on the changing panorama of trade governance, especially given President Trump's trade agenda, in the journal Competition & Change. This collection emerged from their 2016 Symposium on mega-regional trade agreements. Their introduction to the collection, Trade governance at a crossroads: continuity and change in uncertain times, is open access and written for a wide audience.

#### On August 2-4, 2017, the National Center for Geographic Information and Analysis at Buffalo (NCGIA-Buffalo) hosted the 25th International Conference on Geoinformatics at the Marriott Hotel near UB's North Campus. A total of 240 participants from

89 universities and corporations around the world, along with 50 family members, gathered at UB to exchange novel ideas in GIScience



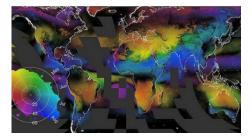
among other GIS professionals. The conference featured a large number of world-class GIScience scholars as keynote speakers. The highlights also included 23 UB alumni and past faculty members from the past 40 years.

#### **Chris Renschler, PhD** is working with the United Nations on natural resources and disaster management. His team has developed a software tool that enables researchers, as well as policymakers, to model how natural disasters and other environmental changes may affect soil erosion. Prof. Renschler first caught the attention of the United Nations, especially the



International Atomic Energy Agency (IAEA), in 2016 while completing a Fulbright Fellowship in Vienna, Austria. The United Nations asked Prof. Renschler to assist countries in work on the management of natural resources and the response to extreme events, like earthquakes, hurricanes, and floods. So far, Prof. Renschler and his team have presented to experts from 13 Asian countries on natural resources and disaster management. (from C. Hsu, UB Reporter)

Adam Wilson, PhD conducted an interesting research study on the habitats and distributions of species using an unconventional source of information: clouds. His study examined 15 years of data from NASA's Terra and Aqua satellites and built a database containing two images per day of cloud cover for nearly every square kilometer of the planet from 2000 to 2014. The results of his study showed that variations



in cloud cover sharply delineated the boundaries of ecological biomes, including tropical cloud forests that harbor many species not found anywhere else in the world. Cloud cover also helped the researchers to better predict where specific species live. The research team determined the size and location of habitats for the montane woodcreeper (a South American bird) and king protea (a South African shrub) in unprecedented detail. (from C. Hsu, UB Reporter)

## **FACULTY NEWS**

Sara Metcalf, PhD has received a new NIH/NIDCR grant (U56 award DE027447) titled, "Implementing a Participatory, Multi-Level Intervention to Improve Asian American Health." Prof. Metcalf is MPI of the study with Drs. Mary Northridge (NYU College of Dentistry) and Chau Trinh-Shevrin (NYU School of Medicine). This study combines community-based participatory research with dynamic modeling to inform implementation of an intervention that leverages community health workers and electronic health records to improve oral health outcomes for Chinese Americans living in New York City.

#### In October, 2017, **Marion Werner, PhD** continued her work with smallholder rice producers in the Dominican

**Republic.** She presented to farmers her initial findings of a survey that she carried out in 2016 and conducted a feedback session (pictured here). Prof. Werner's research on food systems and trade in the Caribbean is funded by the Regional Studies Association (UK), the Baldy Center for Law and Social Policy and UB's Community for Global Health Equity.



UB's Community for Global Health Equity (CGHE) has announced the winning research teams from its inaugural Ideas Lab workshop, "Seeding Food Equity for Global Health," which was held in late January 2017. The goal of the workshop was to facilitate and amplify transdisciplinary research among UB artists, scholars and scientists to promote food equity among farming communities in the Global South: Africa, Central and Latin America and most of Asia. Personnel from the Department of Geography include Profs. Leo Wang and Marion Werner and PhD candidates Jessica Gilbert and Xinghe Liu, who will examine the "double burden" that middle-income countries face as undernourishment declines, yet malnutrition and obesity increase. The team will study how farmers' participation in the local, national and global supply chains influences nutritional and health outcomes in the Dominican Republic. (from E. Sweeney, UBNow)



Photo by D. Levere

The National Center for Geographic Information and Analysis (NCGIA) is coleading the STEM Partnership to extend Geographic Information System (GIS) in Buffalo Public Schools. This

program brings together teachers and students to work on GIS, and encourages interaction between teachers and students. The effort has shown such strong results that the program was awarded a \$1.2 million grant from the National Science Foundation to continue operating for three more years. **Prof. Ling** 



Photo by D. Levere

**Bian**, director of the UB site of the NCGIA and co-principal investigator of the grant, said, "UB has made strategic investments over the years to build a robust and diverse research enterprise in GIS science. This grant helps us fulfill part of our mission, which includes promoting educational outreach for students and professional development for educators."

(from G. Potter, UB Reporter)

## **FACULTY NEWS**



Chris Larsen, PhD



Trina Hamilton, PhD

## **Chris Larsen, PhD** recently received three years of funding from the National Science Foundation to work on a project titled

"Assessing the environmental and human drivers and cultural dimensions of changes in oak forests of the eastern United States." He is doing this research with two colleagues from SUNY Geneseo: David Robertson, PhD, a historical geographer, and Stephen Tulowiecki (a former PhD student at UB). The larger goal of the project is to evaluate hypotheses for the decline of white oak across the eastern U.S. The research is focused around Geneseo, N.Y., as there are a series of landmark oak trees there whose presence has been variously ascribed to Colonial landscaping and Native American land use.

**Trina Hamilton, PhD** started the semester with a quick research trip across the pond to London, England to conduct interviews and event ethnography at the International Jewellry London (IJL) trade show. She surveyed (but didn't partake in!) the champagne and gin bars, but spent most of her time talking to jewelers and consultants about diamond origins and ethics as part of her on-going research project on the evolution of the ethical diamond market. Lab-created diamonds, Australian diamonds and even Russian diamonds are becoming a bigger part of the story than they were when Canadian diamonds were quickly cornering the so-called ethical market about 15 years ago.



Wilkeson Building (photo by D. Levere)

## **STUDENT NEWS**



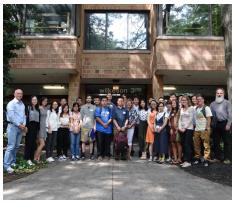
Photo by J. Hickey, The Buffalo News



PhD-candidate Xiaonan Tai



Profs. Trina Hamilton, Monica Stephens, and Marion Werner



Incoming graduate students, August 2017

It was the summer of 2016, five years after an earthquake and tsunami caused three nuclear reactors to meltdown at the Fukushima Daiichi Plant in Japan. PhD-candidate Misa Yasumiishi had returned to the country to investigate the accident's lingering effects. With a team from the University of Tokyo, she collected more than 400 soil samples from lands that were once a family farm. Her goal is to analyze how much radioactive material remained in the ground to quantify an invisible threat. "Unlike a flood or a fire, a nuclear disaster has a very unique or peculiar side to it," Yasumiishi said. "You cannot see radiation. It may be there, or it may not be there; you cannot know this unless you measure it. It's an invisible threat. It creates a feeling of distress and anxiety." (from T. Pignataro, The Buffalo News)

When entering the international trade program, Mac Craik, (BA, International Trade, exp. Dec. '18), stated that he was unsure what to expect but was excited to learn how the world economy worked and to see how markets could be affected. He said he was pleasantly surprised at how useful the critical skills and knowledge of development patterns were. Mac is currently interning at a foreign policy advising firm in Washington, D.C. and feels that his research skills, along with the concept of global markets, have been a key to his success and have made an immediate impact at his workplace. Mac said he is grateful to the staff and students of the Department of Geography and would encourage all students to understand the basics of international trade.

## **PhD-candidate Xiaonan Tai** was awarded the CUAHSI PathFinder fellowship and the Abrahams-Woldenberg Field

Scholarship to conduct a field study in the Snowy Range of the Medicine Bow Mountains in Laramie, Wyo. during 2017 summer. She collaborated with colleagues from the University of Wyoming to understand the relationship between the water status of trees and their micro-site conditions. She took measurements of leaf water potentials, tree sap flow velocities and in-lab analysis of soil texture.

#### In October, 2017 **Profs. Trina Hamilton, Monica Stephens, and Marion Werner** attended the Critical Geography Mini

**Conference at Penn State.** Joining them were six of the department's PhD students, who presented on a diverse variety of themes, from food systems planning and neighborhood change in Buffalo to new geographies of aid and investment among countries in the global South. The conference was a unique opportunity to network and share ideas with other PhD students and faculty in the region working on research projects that are concerned broadly with space and social justice.

With a journey from the civil war in Lebanon to college president in Buffalo, **Bassam M. Deeb, PhD**, an alumnus from the department, knows what it's like to be a stranger in a strange new land. Deeb climbed to the top rung of higher education leadership in 2012 when he was named the president of Trocaire College, but decades earlier, he



Photo by D. Gee, The Buffalo News

fled civil war in his native Lebanon and resettled with his family in Buffalo. Deeb was 15 at the time and spoke no English. It's an experience that gives him a perspective in the ongoing fiery debate over American policies on, and treatment of, refugees and immigrants. Deeb said he understands the instinct of people who want the country "to be more protective" and better gird itself against danger. But he's also concerned by the attitude of some Americans to keep out people not born in this country. Deeb credits the help he had as a teenage immigrant for launching him to where he is now and appeal for welcoming communities.

(from J. Tokasz, The Buffalo News)

#### Two department alumni, **Rohan Shah** and **Josh Krouse**, established an online education company called interactiveX.

The company has designed a technology platform for higher education called "Classavo" that gives professors a simple way to convert their "books and paper" courses into online experiences. Class materials like books, 3-D models, schedules, grades, attendance and more can be managed on a cloud-based platform that students can access from their smartphones or computers. It is also an in-class tool that can display material on classroom computer screens. The company, which recently was admitted to the START-UP NY economic development program, partners with open-source e-book publishers, and hopes to contract with larger publishers such as Pearson and McGraw-Hill. It allows for a quick transformation of a traditional classroom into a modern, screen-based learning experience



Photo by D. Levere

that today's students may expect. The company now has 4,000 student customers at five schools. To date, 16 professors at UB, Canisius College, SUNY Buffalo State, Penn State and UB's satellite university in Singapore are using the service. (from G. Potter, UBNow) The Bethel Park Great Alumni Hall of Fame was created in 2013 to recognize and honor Bethel Park High school alumni who have demonstrated outstanding



Photo by G. Tomkowitz, Bethel Park H.S.

accomplishments either personally or professionally after graduating from Bethel Park High School. Carl Amrhein, PhD, ('74, second from left in picture), holds a BS in Geography from Pennsylvania State University (1978) and a PhD in Geography from State University of New York at Buffalo (1984) with research interests in economic geography, labour markets, decision theory, migration and quantitative methods. Amrhein served as Provost and Vice-President (Academic) at the University of Alberta from 2003 to 2014. Amrhein came to the University of Alberta following his 17 years at the University of Toronto. He also served as Visiting Professor, Graduate School of Education, Peking University, Haidian, Beijing, China during October 2012. Amrhein was awarded the Officer's Cross of the Order of Merit from the Federal Republic of Germany in 2011. He received an Eagle Feather to honor his contributions in advancing the role of Traditional Knowledge of the First Nations in university programming in 2014. Also in 2014, he was awarded the Alberta Lieutenant Governor's Award for Excellence in Public Administration. (from Bethel Park H.S.)

## **Aldo Giammusso** (BA '01) is President of AldoMedia, LLC.

His company was ranked by *Business First* as the #2 Website Design Firm in Western New York. They do website design and search engine optimization along with 360° Virtual Tours.



# **Will Schulmeister** (BA '14, MA '15) founded Eagle Hawk in

2016, along with RIT alumnus Patrick Walsh. Schulmeister's company provides a variety of drone-based data collection services, including mapping and detailed inspections. Eagle Hawk specializes in thermal data analysis and geo-referencing of data to help solve real world problems. The company is currently developing a GIS-based software to help manage and utilize drone data for our clients. In just a year, they have completed work throughout the northeast U.S. and Fla.



#### **Dann Karlson** (BA '97) was recently selected as the Deputy Director of International Affairs for the National Oceanic and Atmospheric Administration (NOAA). In

this capacity, Karlson provides leadership to a broad portfolio of international activities and programs at NOAA. This includes developing policies, guidelines and procedures on international issues affecting the agency; coordinating NOAA's interactions on international issues with other federal agencies and with various bilateral and multilateral partners, participating in the negotiation of international agreements, and representing NOAA on U.S. delegations to international fora. As Deputy Director, Karlson manages a team of international affairs specialists and support staff within the Office of International Affairs at NOAA Headquarters in Washington, D.C. Karlson lives in Odenton, Md. with his wife, Shawna, and their two children, Gabriel (8) and Anna (4).

#### **Rich Quodomine** (BA '96, MA '03) is the father of two boys, ages 15 and 16, and is currently the Lead GIS Analyst for the City of Philadelphia's Department of Public Property.

He oversees the geodatabase that maintains all 11 million square feet of public property, along with integrating this data with applications that govern their work order systems, lease and space management software and energy efficiency programs. Quodomine is always anxious to work with UB Students on career planning, goals and ideas in geography. Feel free to contact him at

rdquodomine@gmail.com.

**Ren Vasiliev** (MA '88) gave an invited presentation at the 11th **United Nations Conference** on Geographical Names Standardization on Aug. 10, 2017. The title was "Urban Place Names in New York State." From Oct. 18 to Dec. 9, 2017, Vasiliev had an art exhibit at the SUNY Collage at Geneseo Lockhart Gallery, Geneseo, N.Y. The title of the show was "ArtWorks" and is a number of her collage works (see www.renvasiliev.com). In addition to her master's from the department, Vasiliev earned a PhD from Syracuse University in 1996. She has been teaching geography at SUNY College at Geneseo since 1993.

## **Christine Tjah jadi-Lopez** (BA '14, MA '17) currently lives in Panajachel, Guatemala,

where she came to do her master's project research. To support herself financially, she began a ballet school (Transformación Ballet) and teaches local and foreign children, giving scholarships to about half of the students. She currently has 41 ballet students and held her first public recital this past August (see www.facebook.com/ transformacionballet). During the day, she volunteers as a director of a local artisan-owned weaving association, TEIXCHEL (www. teixchel.org). TEIXCHEL is a T'zutujil indigenous-owned weaving association which weaves and embroiders exclusively using natural dye and nontoxic, ecological dyes. "I always tell people that without a doubt, my reason for still being here is because God has pushed me and encouraged me to stay here in Guatemala and continue with the work I am doing here with ballet and

the weavers. I also want to encourage anyone to come and visit Guatemala and the weavers. It is beautiful and an eye-opening experience! Feel free to contact me at **cdtjah ja@buffalo.edu**," said Tjahjadi-Lopez.



## **Karyn Tareen** (BA '98) is CEO of Geocove, a GIS software and professional services firm

established in 2006 for the sole purpose of providing the appropriate GIS support and technology to local government. Geocove has won awards for their work but Tareen said what's most important to them is that they continue to make their customers successful. Geocove has been an authorized Esri business partner since 2007 and their team has decades of experience providing GIS consulting, data collection applications and tools to government agencies and utilities throughout the United States and internationally. Geocove is pleased to announce that as of June 1, 2015, they moved to New York State as part of the START-UP NY program (Baird Research Park, across from UB North Campus. Please see https://www.facebook.com/ Geocove/).



## **Chris Olney** (Minor '95, MA '97) has worked at the Finger Lakes Land Trust for the past

nine years, a non-profit land conservation organization serving 12 counties of central/western N.Y. Olney said that their focus is on places (natural places/habitats, agricultural lands, working forests, scenic areas, recreational resources, water/ hydrological features, etc.), and they put GIS to use regularly.

#### Alumni **Dann Karlson** (BA '97, on left), and **Joel Deich mann** (PhD '99, on right) have

maintained their UB friendship, meeting often at Buffalo Bills and Buffalo Sabres games. In August 2017 they met at Fenway Park with Deichmann rooting for the Boston Red Sox and Karlson for the



Baltimore Orioles. No matter the outcome, sharing a ballgame and a beer with friends is always a winner. Karlson and Deichmann are both long-time members of the Geography Football Pool.

## The NYS GIS Association Awards were announced in

Oct. 2017, at the NYS GeoCon in Lake Placid and we congratulate alumni **Brian Barnes**, Town of Amherst, and **Mary Perrelli**, Department of Geography and Planning, Buffalo State College. They were honored with the Individual Contributions



Mary Perrelli (center)

to the Profession Award. This recognition is given for outstanding contributions to the profession over the past year and is intended to recognize recent outstanding achievement in advancing GIS programs, projects or initiatives, or producing innovative research or presentation material.

## Give to the Department of Geography

Thank you for your support of the Department of Geography! With the support of alumni and friends, we can access vital resources to enhance our department and provide support for students, research projects and programs. We are grateful for your generosity.

You can support your department and help to provide for our students by making a gift online: https://www.buffalo.edu/cas/geography/about-us/give-to-us.html

#### Stay Connected

You will always be a part of UB and we want you to stay connected and get involved by:

- Attending alumni events and programs
- Becoming a Regional Network Leader
- Help build a strong network of alumni in your region
- Mentoring UB students
- Attending career events with students
- Recruiting prospective students as a UB Admissions Ambassador
- Connecting with an alumni chapter in your area
- Giving to UB and making an impact on students
- Following UB and the College of Arts and Sciences on social me

#### To get involved, please visit

http://arts-sciences.buffalo.edu/alumni/get-involved.html or email UB-CollegeAlumni@buffalo.edu





























105 Wilkeson Quad Ellicott Complex, North Campus Buffalo, NY 14261



## Discover their Research https://www.buffalo.edu/cas/geography.html

