# BEOFRAPHY & PLANNING BEOFRAPHY & PLANNING BEOFRAPHY & PLANNING Newsletter

### Volume 12: Winter 2016

Message from the Chair

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#### Greetings from the Geography and Planning Department! Many exciting things have taken place over the past year and I hope you enjoy reading about them in this latest volume of our newsletter.

We started off the 2016-2017 academic year by celebrating our new Urban and Regional Planning B.S. program. In September, we officially kicked off the new planning program with current majors, department faculty and staff, planning program alumni, and administrators from Buffalo State and UB. As you may recall, the department significantly revised the Urban and Regional Planning program curriculum and that revision was approved by the New York State Education Department last spring. We wanted to get the word out about the new program, so we invited local planning program alumni, as well as colleagues from UB's planning program, to campus. Dr. Jason Knight told everyone about the revision and program strengths and then we had time for current Urban and Regional Planning majors to network with our alumni. Everyone seemed to

enjoy themselves and we thank our very supportive alumni for taking time out of their schedules to visit campus!

In other news, please keep reading to find out what faculty and staff in the department have been doing over the past year. Many have been actively conducting research and presenting their results at regional, national, and international conferences.

Finally, it is with great sadness that I report that Professor Emeritus Elbridge "Al" Renning Jr. passed away suddenly on December 12<sup>th</sup>. Al started teaching in the department in 1965 and retired in 1997. Al's research and teaching interests were in the areas of cartography and physical geography, climatology, in particular. Al was a staunch supporter of the department and he frequently came to campus for our holiday and student awards lunches. He always made time to visit with faculty to chat about current activities going on in the department. Al will be greatly missed.



Buffalo State SNSS Dean and Provost attend our Urban and Regional Planning kick-off event with students and alumni.

Dr. Kelly Frothingham

### 'It's Local!' Departmental Conference

In Spring 2016, the Department of Geography & Planning and the National Weather Service hosted **'It's Local!'** a conference on Buffalo's weather and climate. The conference, celebrating the 15<sup>th</sup> anniversary of our meteorology & climatology program, attracted 100 attendees into the halls and classrooms of our department, providing an opportunity for the community to learn about weather, climate change, and weather-related research from our program, and from that of the local office of the National Weather Service. Don Paul, retired chief meteorologist with WIVB-TV, and Tom Niziol, winter weather expert from The Weather Channel in Atlanta, GA, were keynote speakers. Jude Sabato, Department of Earth Sciences, provided a demonstration of his 'atmosphere tank'. A number of our students participated: assisting as hosts on the day of the conference, presenting their research posters, and attending a special session on the business of meteorology with Tom Niziol. Many thanks to Dr. Stephen Vermette for organizing this conference and to the students, faculty, and staff who assisted on that day. Financial support for the event was provided by the Buffalo State Grant Allocation Committee.

### Photos from the 'It's Local!' Conference



Students attending Tom Niziol's weather business workshop.



Don Paul, Tom Niziol, and Stephen Vermette (left to right).



Dr. Camille Holmgren

### Dr. Camille Holmgren

Dr. Camille Holmgren spent spring 2016 on sabbatical in Tucson, Arizona. From there, she traveled around Arizona and New Mexico collecting plant material for a study of creosote bush polyploid (plants having more than two paired sets of chromosomes) distribution along the Sonoran-Chihuahuan Desert boundary. Lab work to identify ploidy levels is ongoing, with the goal of comparing patterns seen in the modern plant material with fossils previously collected from the area.

Dr. Holmgren also continued working on a classroom module, The Changing Biosphere, which is part of InTeGrate, an NSF Science, Technology, Engineering, and Mathematics Talent Expansion Program (STEP). Materials have been piloted, revised, and are undergoing final scientific and pedagogical peer review before publication online.

Along with recent graduate Michael Borrelli (Geography, 2013), Dr. Holmgren also published a paper in Journal of Arid Environments entitled "Dietary modifications of packrats in response to changing plant communities: Evidence from fossil plant cuticles spanning >55,000 years in Sonoran Desert packrat middens." This work began as an Undergraduate Summer Research Fellowship that Borrelli continued to develop for his Geography Senior Thesis. A UUP Individual Development Award allowed Dr. Holmgren to travel to the American Quaternary Association Biennial Meeting in Santa Fe, New Mexico to present this work.



Dr. Jason Knight

# Dr. Jason Knight

Dr. Jason Knight, along with three colleagues, had a book titled Shrinking Cities: Understand Urban Decline in the United States published by Routledge in August 2016. The book examines population decline in America and focuses on its social, physical, and economic consequences as well as the policies utilized to attempt to ameliorate the challenges. Working with a local community, he programmed and wrote a grant application to address the issue of "zombie," vacant, and distressed properties. The \$150,000 grant will be used to help the city better address housing conditions, track vacancy and abandonment, and develop housing policies to improve its overall housing market. Additionally, he organized and chaired a session on shrinking cities at the 2016 American Association of Geographers Annual Meeting in San Francisco and has done so for the upcoming AAG Annual Meeting in Boston. He remains active in local planning efforts and is currently working on a local municipal comprehensive plan and is also the President of the Board of Director's for a local Main Street program under the National Trust for Historic Preservation. He recently accepted an invitation to join the Site Selection Committee for Habitat for Humanity Buffalo.

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### Dr. Stephen Vermette

My writings, over the past year, have focused on the recognition to, and the contributions of, an eminent geographer, Alexander von Humboldt. Two articles were published: 'Buffalo's Humboldt Centennial', published in the Western New York Heritage Magazine; and 'Chains of Connection: Alexander von Humboldt's Meteorological Legacy Lives On', published in Weatherwise. Over the past year two projects took up much of my time. The first, co-sponsored by our department and by the Buffalo

Office of the National Weather Service, was a conference held at Buffalo State on WNY's weather and climate. The second, through a competition hosted by Teachers In Space, Inc., was the design and construction of a CubeSat experiment - sampling particles and detecting ozone - which flew aboard the Airbus Perlan II glider. The glider soared to high altitudes on mountain waves over southern Argentina. We're awaiting receipt of the samples. The Peran II project was supported, in part, by

a joint University of Buffalo/Buffalo State/Buffalo Public School Interdisciplinary Science and Engineering Partnership (ISEP), funded by NSF, and involved two groups of students: six college students from SUNY Buffalo State and five 8th Grade students from the Dr. Charles R. Drew Science Magnet School (Drew Science Magnet). Work with the New York Geographic Alliance (NYGA) continued with a NOAA project: 'B-WET Upper Susquehanna Project'. Lastly, the 16th running of 'Cavern Studies' (GEG 120) was successfully offered.



**Dr. Stephen Vermette** 

### Dr. Kelly Frothingham

Dr. Frothingham taught her GEG 421/521 Watershed Analysis course to another large group of students during the Fall 2016 semester. An enthusiastic group of undergrads and grad students spent a rainy Saturday in the field working on their class project. The project involved qualitatively assessing stream conditions on the portion of Scajaquada Creek that flows though Forest Lawn Cemetery. Project community partners included Buffalo Niagara Riverkeeper and the Buffalo District of the US Army Corps of Engineers. A final report will be submitted to Buffalo Niagara Riverkeeper.

Dr. Frothingham also attended the Middle States AAG annual meeting held in Altoona, PA in early November. She presented a talk entitled "The Challenge of "Multiple-use" in Evaluating the Success of Riparian Restoration."



Students on the GEG 421/521 field trip...after the rain had let up for the day!

# Dr. Tao Tang

Dr. Tang was invited to present the research paper "Time Scale Sensitive Sensor Applications in Collecting and Analyzing Geographic Event Data" at the International Conference of Ontological Approaches to Sensor Data Analysis hosted by the National Center for Geographic Information Analysis – University at Buffalo site. He conducted the summer field work with Dr. Christopher Pennuto of the Biology Department and other team members on the research project "The use of low-altitude un -manned helicopter remote sensing to detect invasive plant species in the Erie Canal System: method development applied to water chestnut". Dr. Tang also traveled to the Ireland to present a research paper at the "ISEH 2016, ISEG 2016 & Geoinformatics 2016 Joint International Conference on Environment, Health, GIS and Agriculture" hosted by the National University of Ireland – Galway in the summer.



Dr. Tang presenting a research paper at the International Conference of Ontological Approaches to Sensor Data Analysis.

#### **Department Newsletter**

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Prof. Veryan Vermette

### Prof. Veryan Vermette

Adding 'real world' content to my courses in 2016 involved a July trip to Oahu and the Big Island of Hawaii. Visits to sites such as ancient Hawaiian shrines and sacred places, playing traditional games, and experiencing 'the old ways' at Hawaii's first coffee plantation deepened my understanding of Hawaiian cultural geography. We hiked miles up and down rainforestdraped mountains, along coralstrewn lava beaches, across dormant and forming lava fields (Kilauea was quite active), and through lava tubes and volcanic craters (steam vents in Kilauea Iki shown in the photo). The 'really big excitement' of this trip was the 4.3 earthquake centered ~10 miles from our residence, and Tropical Storm Darby that hit the islands the day before, and day of, our departure for home. Hawaii can't get much more exciting!





Dr. Vida Vanchan

### Dr. Vida Vanchan

For the fifth year, Dr. Vanchan successfully organized the Annual Southeast Asia Week in March of 2016 on 'Refugees in Crisis' to promote diversity, engagement and educational enhancement on campus featuring panelists from academia, local non-profit organizations, local immigrant and refugee communities as well as student poster displays.

At a national level, Dr. Vanchan chaired and co-organized another two successful sessions on 'Global Value Chains, Firms, Routines, Globalization and All That: Beyond Partial Theory and Economic Geography' at the Annual Meeting of Association of American Geographers in San Francisco, CA. In addition, she co-authored and presented a paper on 'New Geographies of Manufacturing' at the conference.

At an international level, Dr. Vanchan served as assistant to chair and on the advisory board of the International Institute for Scientific Research (IISR) for the 12<sup>th</sup> Asian Pacific Round Table for the Sustainable Consumption and Production Conference in the summer of 2016. She also gave four invited lectures on topics ranging from geography, development to research methods and critical thinking at major universities in Cambodia during her early sabbatical work.



Dr. Wende Mix

# Dr. Wende Mix

Dr. Mix has been busy working with faculty in the Mathematics and Computer Information Systems Departments to form a Data Analytics Interdisciplinary Unit at Buffalo State College. She developed a new hybrid course, GEG 584 Geospatial Programming, for Masters students and is teaching it this spring. Dr. Mix, with Mary Perrelli, developed several web mapping applications and tutorials as part of an IITG grant entitled "Developing GIS Course Modules for Introductory Science and Social Science Courses". Two applications for exploring temporal changes in disease patterns were developed for the Anthropology department. Another temporal application for the Sociology department <u>explores changes</u> in racial distribution in Buffalo, NY between 1960 and 2010. The app provides a compiled spreadsheet with data to allow students to compute the Gini Index. Dr. Mix also created a

#### self-guided map tour for the Reinstein Woods Nature Preserve. Dr. Mix is developing a new course for the Master in Public Administration entitled "Open, Big Data for Public Administration" which focuses on Census data and other open data sources that are valuable to persons working in public administration. The course will be offered during the Fall 2017 semester.

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# GIS Mapmaking in Non-geography Courses



Temporal exploration of disease patterns in the U.S.

Mary Perrelli, GIS lab manager, and Dr. Wende Mix were awarded a \$10,000 SUNY IITG grant to develop GIS course modules for introductory science and social science courses. The course modules will facilitate the incorporation of GIS, GPS, and remote sensing technology and techniques into nongeography courses. The goal of these modules will be to introduce students to GIS technology and the benefits of the technology to their discipline. Students will learn how to think spatially, ask spatially related questions and look for answers with a spatial component.

## Student and Alumni News

#### Student award winners from May 2016:

National Council for Geographic Educationoutstanding student in geography: Megan Klein

National Council for Geographic Educationoutstanding student in planning: Keith House

WNY American Planning Association: Sarah Gatti

Katheryne Whittemore Award for Outstanding Geography & Planning major: Seth Atkinson

David Bullough Memorial Award for Academic Excellence: Elliot Love

Chair's Discretionary Award: Scott Thompson

Updaft Award for Excellence in Meteorology & Climatology : Justin Blicharski and Seth Atkinson

Snowspotter recognition: Kayla Szykowny

#### Congratulations to all our award winners!

Alumni-we want to hear from you! Where are you? What are you doing? Please contact a department faculty member so you can be featured in our next newsletter.



2016 Student Award Winners

Alumni news:

Seth Atkinson and Kayla Szykowny were selected to participate this past summer in the National Weather Service (NWS) Volunteer Program.

Melissa Bender, a 2014 graduate of our Meteorology & Climatology Minor (later graduated from Columbia University with a M.A. in Climate and Society), was recently accepted for a postgraduate fellowship with the U.S. Environmental Protection Agency's (EPA) Office of Air and Radiation/Office of Atmospheric Programs, under the Climate Change Division (CCD) in the Greenhouse Gas Reporting Branch (GGRB).

Scott Thompson, 2016 Urban & Regional Planning graduate, is currently in an AmeriCorps position in Lansing, Michigan that is funded through the Cities of Service "Love your Block" neighborhood revitalization program. Scott provides resources to neighborhood organizations, including funding opportunities and GIS services, and he is the content manager for the city's new neighborhood website.

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