


# CALENDAR OF EVENTS

September 8	Annual State of the Department Address
September 23	Geography Department Fall Picnic Ellicott Creek Park, Shelter #9
September 29	Colloquium Speaker: Professor Trevor Barnes, University of B.C. "The Geographical State: The Development of Canadian Geography." 3:15-4:15pm in 145 Wilkeson
November 10	Colloquium Speaker: Professor Steve Walsh UNC-Chapel Hill "Mapping and Modeling Deforestation Patterns and Use/Land Cover Dynamics in the Northern Ecuadorian Amazon
November 12-18	National Geographic's Annual Geography Awareness Week
November 16-18	North American Regional Science meeting in Toronto
December 8	Department Holiday Party, Wilkeson Quad
April 17 – 21, 2007	AAG in San Francisco

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# THE COMPASS



Summer/Fall 2006

Vol. 1, Issue 3

## MESSAGE FROM THE CHAIR

As I write, UB Geography is about to embark on a new round of faculty hiring to replace Jean-Claude Thill (transportation analysis), Meghan Cope (urban/social geography), and Doug Flewelling (GIS). Jean-Claude is off to the University of North Carolina at Charlotte, Meghan is off to the University of Vermont, and Doug is off to Redlands University, California. These folks will be hard to replace, but we wish them well in their new slots. This has been a big year for Geography in the United States, and at UB. Harvard is exploring the possibility of re-instating Geography as a core part of its social science array, which sends a clear signal to the broader academic community. Specifically, geography matters. This year will also mark the second national ranking of Graduate Departments by the National Research Council (NRC). UB Geography ranked 11<sup>th</sup> in the nation in 1994, and we hope to score even better this time. Our third annual reception for alumni and friends at the AAG meetings in Chicago went well, and we hope to see an even bigger turnout at the San Francisco meetings next April. Our internal graduation ceremony this past May also went well. Our guest speaker (Dr. Emil Boasson, PhD, 2001) thrilled the crowd with cracking stories, subtle humor, and Nordic philosophy (Emil hails from Iceland). This past academic year, we graduated 34 BA, 31 MA, and 9 Ph.D. students. These are record numbers. Over the same period, the Department published a total of 60 journal articles, giving an average publication rate of 3.24 articles per faculty member – another Departmental record. Few Geography Departments in the U.S. or elsewhere come close to this rate of output. This past academic year also witnessed a major increase in external donations from former students and friends. These donations are being used to upgrade our laboratory facilities, as well as to create a travel fund so that graduate and undergraduate students can attend major academic conferences, job fairs, and other professional events. Finally, our new website is at last operational. Although fine-tuning is still required, especially with regard to cosmetics, the basic navigational structure is now in place.

Alas, our short western New York summer is fast coming to an end. Accordingly, it's time to start thinking about strategic issues for 2006-2007. Will the Buffalo Bills make it to the playoffs? How far will the Sabres go?

Cheers,



Alan MacPherson  
Professor and Chair

## PHOTOS TO SHARE WITH YOU



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Dr. Alan D. MacPherson, Chair and Editor  
Donna Banach, Co-Editor  
Cover photo by  
Donna Banach, Pinnacle Rock,  
Bartolomé Island, Galapagos

**Athol Abrahams**

UB Distinguished Professor, Ph.D.,  
University of Sydney, 1971

**Research:** Fluvial geomorphology, soil  
erosion, desert hill slopes.

**Jared Aldstadt**

Assistant Professor, Ph.D., San Diego  
State University and University of  
California, Santa Barbara, 2006

**Research:** Medical geography, spatial  
epidemiology, GIS, and spatial analysis.

**Sharmistha Bagchi-Sen**

Professor, Ph.D., University of Georgia,  
1989

**Research:** foreign direct investment in the  
United States, innovation and export  
strategies of small Canadian and US man-  
ufacturers, the dynamics of the pharma-  
biotechnology industry in the US, UK,  
Canada, and India, the internationalization  
of producer service firms, and the IT labor  
markets with a specific focus on the  
Cyber Security sub-sector.

**Sean J. Bennett**

Associate Professor, Ph.D., State  
University of New York, Binghamton,  
1993

**Research:** Sediment transport mechan-  
ics, gully erosion, reservoir sedimenta-  
tion, and watershed processes.

**Ling Bian**

Associate Professor, Ph.D., University  
of North Carolina at Chapel Hill, 1991

**Research:** GIS for environmental mod-  
eling, spatial representation, remote  
sensing, image retrieval, spatial scale,  
physical geography.

**Thomas Bittner**

Associate Professor, Ph.D., Technical  
University of Vienna, 1999

**Research:** Bioinformatics, formal ontol-  
ogy, qualitative spatial, temporal, and  
spatio-temporal reasoning, approximate  
reasoning, representation and reason-  
ing about vagueness and indeterminacy,  
medical information science, theoretical  
foundations of geographic information  
systems, spatial information science  
and formal geography.

**Irene Casas**

Assistant Professor, Ph.D., Ohio State  
University, 2002

**Research:** Transportation, GIS, loca-  
tion analysis, artificial intelligence.

**Trina Hamilton**

Assistant Professor, Ph.D., Clark  
University, 2006

**Research:** Corporate social and envi-  
ronmental responsibility, global gover-  
nance, and international trade.

**Chris P. S. Larsen**

Associate Professor, Ph.D., McMaster  
University, 1994

**Research:** Landscape ecology, vegeta-  
tion dynamics, fire, tree-ring analysis,  
fossil pollen analysis.

**Scott Mackay**

Associate Professor, Ph.D., University  
of Toronto, 1997

**Research:** Ecohydrology, land surface  
hydrology, hydrologic and ecosystem  
modeling, GIS, and remote sensing.



Jim McConnell (sweater) and Barry Lentek (right)  
unwrap gifts at their retirement party

An informal but enjoyable retire-  
ment reception was held for **Barry  
Lentek** and **Jim McConnell**. On  
March 24, 2006, at Byblos restau-  
rant near the North Campus.  
Vince Ebert, founder of the  
Department, delivered a keynote  
speech recognizing the achieve-  
ments of our two most recent  
retirees. Much food was gobbled,  
gifts were distributed, and our two

retirees went home happy – as did around 15 faculty members, all of  
our professional staff, and a small bunch of graduate students. Rest  
assured, however, that Barry and Jim will not be disappearing from UB  
anytime soon. They both have graduate students and committee  
assignments to deal with. So much for the easy life, eh?

**McConnell to Receive 2006 Award for Outstanding Contributions to International Education**

James E. McConnell, SUNY Distinguished Teaching Professor Emeritus  
in the Department of Geography, is the recipient of the 2006 Award for  
Outstanding Contributions to International Education at UB. The award,  
which was established in 2003, is an annual university-wide award cre-  
ated by the University at Buffalo Council on International Studies and  
Programs to honor faculty and staff who have made exceptional long-  
term contributions to international education at UB. These contributions  
may involve collaborative international research projects, reciprocal  
exchange and study abroad programs; recruitment or mentoring of inter-  
national students and scholars; development and teaching of courses  
and curricula with an international focus, and organization of internation-  
al programs, activities and events on campus. The Award serves to high-  
light the importance of international education at the university.

McConnell, who will receive the award at a special luncheon later this  
year, is being honored for his many activities in the international area  
over the course of his 38 years at UB, including his coordination of the  
International Trade Concentration in Geography, his role in founding and  
directing the Canada-US Trade Center, his research and publications on  
international trade and cross-border issues, and his teaching and men-  
toring of hundreds of international students.

## OUR THANKS

The students, faculty and staff from the Department of Geography would like to thank all of the alumni and friends who generously support our department. We are grateful to you and the anonymous donors as well!

Mr. Philip N. Andreozzi Jr. BA '71  
 Mr. Ralph F. Blenn BA '74  
 Mr. Timothy William Brennan BA '70  
 Mrs. Debra L. Cheroff  
 Mr. Jeffrey J. Chou BA '06  
 Ms. Jennifer M. Cook-Hanssen BA '91  
 Dr. David J. Cowen MA '99  
 Mr. Dale D. Danner BA '75  
 Dr. Joel Deichmann PHD '99  
 Mr. Elias A. Elias BA '85  
 Mr. David G. Ferguson BA '93  
 Mr. Richard J. Flavin BA '67  
 Mr. Russell T. Freize Jr. BA '73  
 Mr. Robert L. Gooding BA '85  
 Mr. Kevin Alexander Green BA '01  
 Ms. Kathryn J. Greenwald MA '87  
 Mr. Robert A. Grom BA '69  
 Mr. William W. Hewitt BA '67  
 Mr. Christopher P. Kaiser BA '91  
 Mr. John W. Kick MA '95  
 Mr. Dennis W. Koncelik BA '85  
 Mr. Robert W. Lang BA '91

Mr. Daniel J. Lucitt BA '01  
 Mr. James C. Magoffin BA '87  
 Mr. Michael R. Memminger BA '93  
 Mr. Robert J. O'Brien Jr. BA '77  
 Mr. James F. Oliver BA '95  
 Ms. Patricia M. Peters BA '69  
 Mr. Louis W. Pompei MA '70  
 Dr. Jeffrey B. Roet BA '73  
 Mr. Donald R. Rupp BA '81  
 Mr. Timothy J. Sayers BA '86  
 Mr. Matthew D. Schwartz BA '67  
 Mr. Carl J. Seeber BA '70  
 Mr. Shovie Singh BA '02  
 Mr. Richard F. Sloan BA '70  
 Mr. Joseph G. Szustakowski BA '66  
 Mr. Wendell A. Thrush BA '69  
 Mr. Timothy F. Trabold MA '83  
 Mr. Richard W. Trautman BA '68  
 Mr. Thomas N. Vacca BA '68  
 Dr. Ikuho Yamada PHD '04  
 Mr. Michael J. Zaszak BA '90

Please contact Ms. Linda A. Huffman for information on donations that can help you support the causes you care about and provide significant benefits to UB students. Please mention "Department of Geography" to make certain your gift stays within your department.

Ms. Linda A. Huffman,  
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Your generous donations help us purchase state of the art computer equipment for our GIAL, as well as support the travel needs of our undergraduate and graduate students.

### Alan D. MacPherson

Professor, Department Chair, Director of Canada-US Trade Center (CUSTAC), Ph.D., University of Toronto, 1988  
**Research:** Industrial adjustment to technology, small business development, international trade, survey research methods.

### David M. Mark

Professor, Director of the National Center for Geographic Information and Analysis (NCGIA), Ph.D., Simon Fraser University, 1977  
**Research:** Geographic information science, cognitive science.

### Jessie P. Poon

Professor, Director of Asia Pacific Economic Cooperation Study Center, Ph.D., Ohio State University, 1993  
**Research:** International trade and foreign investment, regional economic development, Asian business.

### Chris S. Renschler

Assistant Professor, Ph.D., University of Bonn, 2000  
**Research:** GI Science, environmental modeling, natural resources management tools.

### Peter A. Rogerson

Professor, Ph.D., State University of New York at Buffalo, 1982  
**Research:** Dynamic migration modeling, demographic forecasting, mathematical modeling.

### Narushige Shiode

Assistant Professor, Ph.D., University of London, 2005  
**Research:** Locational optimization, spatial temporal analysis, 3D visualization, urban planning and decision support systems, cyberspace geography, and Geographic Information Science.

### Michael J. Woldenberg

Professor, Ph.D., Columbia University, 1968  
**Research:** Fluvial geomorphology, morphometry of flow systems.

## EMERITUS FACULTY

**Charles H.V. Ebert** Distinguished Teaching Professor Emeritus, Ph.D., University of North Carolina, 1957

**Barry Lentnek** Professor Emeritus, Ph.D., Johns Hopkins University, 1966

**James E. McConnell** Distinguished Teaching Professor Emeritus, Ph.D., Ohio State University, 1969

**Richard A. Mitchell** Associate Professor Emeritus, Ph.D.

**David A. Smith** Associate Professor Emeritus, Ph.D.

## SAMPLE OF RECENT PUBLICATIONS BY FACULTY

**Abrahams, A.D.** and Gao, P. (2006). Bed-load transport equations for rough turbulent flows on plane beds. Earth Surface Processes and Landforms, in press.

**Aldstadt, Jared** and Arthur Getis (2006). Using AMOEBA to Create a Spatial Weights Matrix. Geographical Analysis 38.

Banerjee, S., Kang, H., **Bagchi-Sen, S.**, and Rao, H.R. (2005). Gender divide in the use of the Internet applications. International Journal of E-Business Research, Vol. 1 (2), pp. 24-39.

**Bennett, S.J.**, and C.V. Alonso (2006). Turbulent flow and bed pressure within headcut scour holes due to plane reattached jets. Journal of Hydraulic Research, 44(4), 510-521.

**Bian, L.** and Liebner, D. (2006). A network model for dispersion of communicable diseases. Transactions in GIS, (in press).

**Bittner, T.** and Donnelly, M. (2006). On formalizing parthood and containment relations in bio-ontologies. Artificial Intelligence in Medicine, in press.

**Casas, I.**, Malik, A., Delmelle, E. M. Karwan, and M. H., Batta, R. (2006). An automated network generation procedure for routing of reconnaissance aircraft. Network and Spatial Economics, in press.

Ewers, B.E., **D.S. Mackay**, J. Tang, P. Bolstad, and S. Samanta (2006). Intercomparison of Sugar Maple (*Acer saccharum* Marsh.) stand transpiration responses to environmental conditions from the Western Great Lakes Region of the United State.

Agricultural and Forest Meteorology, in press.

Fabrikant, S. I., Montello, D. R., and **Mark, D. M.** (2006). The distance-similarity metaphor in region-display spatializations. IEEE Computer Graphics & Applications, in press.

Howes, D.A., **Abrahams, A.D.** and Pitman, B. (2006) One- and two-dimensional modeling of overland flow in semiarid shrubland, Jornada Basin, New Mexico. Hydrological Processes, in press.

Kwan, M.-P and **Casas, I.** (2006). A GIS-based travel simulator under ITS: activity scheduling in the presence of real-time information. Geoinformatica, in press.

**MacPherson, A.** and Pritchard, D. (2006). Outsourcing innovation: the case of the Boeing 787. Journal of Labor Research, in press.

**MacPherson, A., McConnell, J.E.,** Vance, A. and Vanchan, V. (2006). The impact of US government anti-terrorism policies on Canada-US cross-border commerce: an exploratory study from western New York and southern Ontario. Professional Geographer, 58:266-277.

Moser K.A., Smol J.P., MacDonald G.M., and **Larsen C.P.S.** (2002). 19th century eutrophication of a remote boreal lake: a consequence of climate warming? Journal of Paleolimnology 28: 269-281.

**Poon, JPH**, P. Nijkamp and K. Button (Eds), (2006). Highlights in Regional Planning, UK: Edward Elgar, in press.

**Renschler, C.S.** and Lee, T. (2005). Spatially distributed assessment of short-and long-term impacts of multiple best management practices in agricul-

doors in the future. Unique aspects of his teaching include no textbooks and occasional field trips to explore marketing tools.

**Bertolas, Randy (Ph.D. 1995 with Dr. Woldenberg)** has been selected to receive one of the National Council for Geographic Education's (NCGE) Distinguished Teaching Achievement (TA) awards for 2006. This award recognizes outstanding contributions to geography education. Randy will be honored at the awards reception and banquet during the NCGE annual meeting in Lake Tahoe, Nevada, October 5-8, 2006.

**Fontaine, Gene (B.A. 1993)** is the founder and President of E-source, Inc., of Rhode Island. Gene states that his company is redefining a fundamental element in the electronics manufacturing supply chain. His entire business is predicated on solving classical geography problems. Continued success, Gene! Again, good evidence that 'economic geography' is not just an academic venture that stays in the classroom!

**Gaye, Papa Samba (M.A. 1997, International Trade)** is employed at AccuSoft Corporation, in Massachusetts. Papa, we have not seen you in a long time. Come visit!

**Mandikos, Bridget Cullen (Ph.D. 2001)** has three children; two sons ages 5 and 2 and a daughter about 3 months old. Bridget is a Lecturer at Griffith Law School in Australia. Bridget's research combines legal expertise with economic geography. Her main scholarly interests revolve around the internationalization of legal services and foreign direct investment within the legal services domain.

**Quodomine, Richard D. (B.A. 1996, M.A. 2003 with Drs. MacPherson and Thill)** Rich is a Transportation Analyst with the NYS Department of Transportation, in the Rural Transit Analysis Bureau, Division of Research. He works with Geographic Information Systems to help define best-use and lowest-cost routes for rural areas in need of public transportation funds. These areas generally have little to no local public funds available for transportation. Rich also coordinates with several other state agencies to determine special usage needs, such as transportation for people with disabilities or in welfare-to-work programs. This is a new and exciting challenge for Rich. Congratulations on your achievement!

Tsou was thus able to generate updatable online information on the position of the fire's hot spots in relation to population and property locations. He says, "People could go to the website and see where the fire was, where properties had been destroyed, which areas had the most significant damage, and know exactly what the fire's impact was on their families and friends."

Tsou is also involved with two other major research projects. A \$1.8 million collaboration between NASA and the U.S. Border Patrol is focusing on improving security at border crossings. GIS technology is used to monitor border activity in San Diego and to create a database for field agents in the field or other agencies such as police and firefighters. Tsou is also assisting the city of San Diego in using the Internet to monitor its water supply. Volunteers sample and measure the water's quality in various locations, and Tsou's team gathers the data, converts it into GIS and publishes it on a Web site where citizens can go to check the water quality in their neighborhood.

#### Career begins at UB

Tsou envisions a bright future for GIS, and has partnered with the National Science Foundation to develop a GIS training and awareness program aimed at encouraging high school and community college students to enter the field. "Right now I think we have realized only 5 to 10 percent of its potential," he says, "and in the next five or 10 years you will see a huge growth in geo-spatial technology applications." Outside of the commercial sector he envisions cell phones, laptop computers and PDAs becoming part of the GIS network, so that in the future a park ranger, police officer or firefighter can use those devices to access up-to-date information in the field and then make critical decisions on how to rescue, evacuate or protect citizens.

Tsou, who is married with three children, says that he is very proud to be an alumnus of the University at Buffalo and grateful for the assistance he received there. "The faculty there really gave me support," he says, "and I appreciated their help. As a foreign student, I knew no one and they welcomed me and trained me very well for my future career."

#### MORE ALUMNI NEWS

**Adler, Marc (M.A. 1983)** Mark teaches Applied Marketing Techniques through Millard Fillmore College and Principles and Techniques of Advertising for the Department of Communication. An article in the U.B. Spectrum highlighted his teaching focusing on networking. He encourages each student to get to know as many people as they can in hopes that it will lead to open

tural watersheds. *Journal of Soil and Water Conservation* 60(6): 446-456.

**Rogerson, P.**, Sinha, G., and Han, D. (2006). Recent changes in the spatial pattern of prostate cancer in the United States. *American Journal of Preventive Medicine*, 30: S50-S59.

**Rogerson, P.** (2006). Statistical methods for the detection of spatial clustering in case-control data. *Statistics in Medicine* 25: 811-823.

Sorokine, A., **Bittner, T.**, and **Renschler, C.S.** (2006) Ontological investigation of a multiscale ecosystem classification using the national hierarchical framework of ecological units as an example: *Geoinformatica* 10(3): September 2006 issue.

## FACULTY NEWS

**Sharmistha Bagchi-Sen** has been named a fellow of the American Council on Education (ACE) for 2006-07. The ACE Fellows Program is designed to strengthen institutions and leadership in American higher education by identifying and preparing promising faculty and senior administrators for responsible positions in college and university administration. Bagchi-Sen was one of 38 fellows nominated by senior administrators at their institutions, and was selected in a national competition.

**Ling Bian** and **Pete Rogerson** are working with Professor James Olson from Pharmacology and Toxicology on modeling concentrations of PCBs in the soil near an industrial site in Anniston, Alabama. They are modeling the concentration as a function of physical variables such as distance from the creek, slope, elevation, etc. They are just beginning to get data on PCBs in individuals' blood samples, and want to see how well the actual blood levels correlate with the soil samples and model values. (Usually one just has the soil samples, so they'll be able to assess how good that kind of data is).

**Sharmistha Bagchi-Sen** and **Peter Rogerson** are working with Professor Minakshi Trivedi from the School of Management on modeling daily sales of digestive-health products from a local supermarket chain. They're hoping to develop a model that predicts daily sales, and then

monitor actual sales day to day, so that they can quickly detect any increases that might be due to gastrointestinal illness. This kind of outbreak detection can occur several days earlier, in comparison with waiting for patients to go to physician's offices with complaints.

**Pete Rogerson** is working with Gerald Bové (Ph.D., Geography, 2005) and Professor Nagase (Roswell Park Cancer Institute, in cancer genetics) to compare two-dimensional images of healthy and tumor tissue. The comparison is now done by eye over a light table. They are using image comparison methods from remote sensing to more quickly and efficiently find where the differences are.

In March 2006, **Jim McConnell** presented a paper (co-authored with Alan MacPherson) at the Linea Terrarum International Borders Conference in El Paso, Ciudad Juarez, and Las Cruces. The paper focused upon the impacts of new U.S. border security measures on North American cross-border trade, logistics management, and the location of production. Jim retired from UB in mid-May, 2006, and promptly spent the next seven weeks in Singapore teaching two international business courses as part of UB's international-education program with the Singapore Institute of Management. He is looking forward to additional research and writing commitments, and he and his wife Ellie will be spending some quality time with their grandchildren.

**Narushige Shiode** was recently highlighted in IMPACT, a U.B. brochure. Naru combines his interests in architecture, computer science and geography to analyze urban environments. Shiode's award-winning projects use complex theories of spatial analysis and state of the art methods of GIS to solve real-world problems. His research reveals his wide range of expertise: spatial studies comparing how real and virtual cities grow; "geo-visualization maps" of Internet pathways; three-dimensional, virtual reality computer models of ancient Egyptian monuments and of downtown Buffalo; and GIS-based health-care studies of cancer risks and perinatal care. Much of his award-winning work is supported by UB funding and represents ongoing collaborations with the schools of architecture and planning, nursing and public health professions, as well as universities in the U.S. and Japan.

### **SPOTLIGHT: Ming-Hsiang Tsou, MA '96 - Cutting edge technology**

Story by —Jessica Dudek [ub-alumni@buffalo.edu](mailto:ub-alumni@buffalo.edu).

Professor of Geography Ming-Hsiang Tsou, MA '96, has helped combat the 2003 San Diego wildfires, monitored the quality of the city's water supply and



enhanced homeland security - all while sitting at his computer. Tsou specializes in geographical information science (GIS), which uses computers to link the physical world to important spatial information, such as the location of fire hot spots, population centers and border activity. This cutting-edge technology, one of the most promising

and fastest-growing science fields, has far-reaching implications. Tsou says, "Things like working with the San Diego wildfires demonstrates how important the GIS and geospatial technology is and how it can help people prevent damage and recover from disaster."

Tsou majored in geography as an undergraduate in his native Taiwan, and his interest in GIS led him to UB. "SUNY Buffalo was my first choice because it has one of the best GIS centers in the country. Also, the geography department is very good and there is a strong history of GIS education there." He says that his MA advisor, Barbara P. Battenfield, as well as David Mark and the late Hugh Calkins, all had significant impacts on his career. He went on to earn his PhD at Colorado University, where he began researching Internet mapping.

#### **Teacher and researcher**

Now at San Diego State University, Tsou teaches courses in computerized map design, Internet mapping and GIS and was awarded the outstanding faculty award by the students in 2004. Tsou enjoys both his teaching and research and says that the two pursuits feed off of each other: "Often when I teach, I learn from my students, and a lot of times when I find a research topic, it has actually come from one of my students. For example, a graduate student suggested that I take a look at the beta version of Google Earth (software that combines 3D data and imagery to display detailed global information in real time) before it even came out."

This type of Internet mapping figured heavily in Tsou's involvement with the San Diego wildfires in 2003. He downloaded satellite imagery of the region from NASA, overlaying that with local maps of San Diego and census data.





## CAREER FAIR

The **Geography Career Fair 2006** was a great success! A total of 20 representatives from 14 agencies/firms and more than 80 students from disciplines including geography, planning, and geology participated in the event. Faculty and staff were pleased to see our alumni coming back as recruiters at the fair. The following employers were represented at the event:

Americorps, Bergmann Associates, Ecology and Environment Inc., Erie County GIS Office, Erie County DSM – Dept of Environment and Planning, U.S. Fish and Wildlife Services, U.S. Department of Commerce, USDA Natural Resources Conservation Service (Batavia and East Aurora), Osmose Inc., Shaw Environmental and Infrastructure, Lu Engineers and Wendell Duchscherer Architects.

The Geography Department, GGSA, and UGSA provided the financial support. Deelesh and Teri at CASET provided the technical support. Special appreciation goes to Betsy, Joe, and Linda for their supervision and execution of many critical aspects of the fair. The fair could not be run smoothly without the hard work of 17 student volunteers. Aubrey and NCGIA staff provided valuable help. This year, faculty members actively contributed to and participated in the fair. Please see <http://www.geog.buffalo.edu/~lbian/careerfair06.ppt> for volunteers at work, and students, faculty, and the employer representatives at the fair. Many thanks to the Career Fair Planning Committee: Sol, Lee, and Ling.



Chris S. Renschler at podium.  
Photo by David Tulloch, Cook College-Rutgers University

Every year in February, the University Consortium for Geographic Information Science (UCGIS) meets in Washington DC to discuss and publicize the importance of geographic information science as a foundation for a wide array of essential government activities. This annual meeting provides the opportunity for the UCGIS community to showcase cur-

rent GIScience research projects to agencies, as well as to members of Congress and their professional staff. This year's theme "Geospatial Information Science and Technology: An Integrating Force in Disaster Preparedness, Mitigation, and Recovery" emphasized the central role of GIScience in our national response to natural disasters, and emphasized the need for GIS in Homeland Security of all types. The UCGIS organizers selected **Chris S. Renschler** as one of four speakers to present their research in a session held at the Library of Congress (see photo). His presentation with the title "Integrated Research and Implementation in GIScience and Extreme Events" addressed the integration of user-friendly GIScience and environmental modeling tools using readily available datasets to support a rapid, practical and effective communication and decision-making platform in integrated environmental and disaster management.

## FUNDING OPPORTUNITIES

Please visit the Graduate Student Association website at <http://www.gsa.buffalo.edu/funding.html> for news on funding opportunities for graduate students. Opportunities include the Mark Diamond Research Fund, which gives grants to graduate students for research expenses related to their thesis or dissertation. PhD students may apply for up to \$1,200 and Master's students for up to \$750.

Sponsored by the United States Department of State, Bureau of Educational and Cultural Affairs, the **Fulbright Program** provides funding for students, scholars, teachers, and professionals to undertake graduate study, advanced research, university teaching, and teaching in elementary and secondary schools. <http://www.fulbrightonline.org/>

**The Canadian-American Studies Committee at UB** welcomes proposals from full-time faculty and graduate students at UB for projects and activities that are designed to encourage and promote increased awareness and understanding at UB of Canada and of relations between Canada and the United States. <http://canam.buffalo.edu>

The **Canadian Embassy** in Washington, DC has funding for individual grants including research, graduate student fellowships, faculty enrichment and senior fellowships. Please see their website at: <http://www.dfait-maeci.gc.ca/can-am/washington/studies/grantguide-en.asp>

The **NSF Graduate Research Fellowship Program** is due Nov 1. The program is for outstanding graduate students who are pursuing research-based Master's and Doctoral degrees. These awards are \$40,500 (\$30,000 stipend and \$10,500 for cost of education allowance). Travel money is also available. Fellowships are intended for individuals in the early stages of their graduate study. Applicants must be United States citizens or nationals, or permanent resident aliens of the United States. For additional information see: <http://www.nsf.gov/pubs/2006/nsf06592/nsf06592.htm>

The **U.S. Geological Survey** invites applications for the USGS Mendenhall Postdoctoral Research Fellowship Program. Opportunities for research include coastal landscape evolution, 3D geologic mapping and effects of groundwater dynamics on volcanism. Program and application is available at <http://geology.usgs.gov/postdoc>. Closing date for applications is 11/15/06.

2008), with the full \$500,000 for international experiences! Starting in summer 2004, each year we send about 6 students from the UB IGERT program, and recruit about 6 more from around the country through a national competition. The students are from a wide variety of disciplines, and are joined by a dozen or more students and other researchers from Europe and other regions.

Believe it or not, we work the participants pretty hard, while also exposing them to wonderful Tuscan food and culture. Participants stay in the village of Fiesole, just up the hill from Florence. The School is held in the converted stables of an organic olive farm a few kilometers further into the hills. Classes run for five days from 8:30 to 5:00, with lectures dominating the program in the early part of the week, and a proposal competition taking a lot of time in the second part of the week. In 2004, all four UB IGERT participants included four women from the UB geography department: Jacquie Housel, LaDona Knigge, Wendy Miller, and Valerie Yakich; they were joined by four students from other IGERT programs around the country, and four others. In 2005, Chris Badurek and Seth Spielman represented UB Geography; there were also 4 IGERT students from other UB departments, and 5 from around the country. Mike Loranty was the only UB Geography Ph.D. student at Vespucci 2006, but there were five IGERTs from other UB departments and six from the rest of the US. David Mark was an instructor at the 2005 and 2006 Vespucci Institutes, and UB Anthropology Prof. Ezra Zubrow was along in 2005. The Vespucci Summer Institute has been a win-win-win situation, benefiting the UB participants, the others that we fund from around the country, and Vespucci Institute itself. The partnership will last at least three more years, and we hope to find funds to continue beyond that.

1 IGERT: Intergrative Graduate Education and Research Traineeships, a multidisciplinary Ph.D. program funded by the national Science Foundation (NSF)



Left to right, back row:  
Ben Kamphaus, Anthropology, UB; Nathaniel Trumbull, Geography, Washington; David Saab, Information Science and Technology, Penn State; Tho Nguyen, Electrical Engineering, Washington; Tracy Baldyga, Natural Resources, Wyoming; Justin Yates, Industrial Engineering, UB; Maureen Mayer, Environmental Engineering, UB; Mike Loranty, Geography, UB.  
Front row:  
Michelle Sunm, Industrial Engineering, UB; Zoua Vang, Sociology, Harvard; Lea Shanley, Land Information and Computer Graphics, Wisconsin-Madison; Dale Hess, Geology, UB; and one lucky dog!

Every September, we kick off the school year with our annual fall picnic. Watch for upcoming announcements! **The National Geographic's annual Geography Awareness Week will be November 12 – 18 this year.** Our club traditionally organizes activities and speakers for the event. We will also be organizing student / faculty coffee breaks and happy hours throughout the semester. Academically, we intend to formally establish a series of student / faculty roundtable colloquia this year, as this format has been well received by students and faculty alike.

Our meetings are held once per month and are open to all graduate students. Join us, and help us to continue building a strong graduate community within the geography department. Questions? Contact Anneliese Vance ([alvance@buffalo.edu](mailto:alvance@buffalo.edu)), 2005-2006 GGSA president.

### UB Geography and the Vespucci Summer Institutes

Each year, the Buffalo IGERT<sup>1</sup> Ph.D. Program in Geographic Information Science (<http://www.geog.buffalo.edu/giscience/>) sends a delegation of about a dozen US Ph.D. students to the Vespucci Summer Institute (<http://www.vespucci.org>) in the Tuscan hills above Florence, Italy. Graduate school can be tough sometimes! The UB collaboration with Vespucci results from a fortuitous coincidence. In the year that David Mark and other UB GIScience faculty were writing a proposal for 5 more years of IGERT, the National Science Foundation offered supplements of up to \$100,000 per year to support international experiences for students in the program. In the same year, UB Geography alumnus Michael Gould (Ph.D., 1993) and two European colleagues announced the formation of "Geospatial Partners" with the primary purpose of running a Summer Institute in Geographic Information Science. UB proposed to send every IGERT trainee in the new grant to Vespucci, and also to require each of them to do an extended research internship outside the US. And, to our delight and surprise, the project was funded for five more years (2003-

Applications are still being considered on a space-available basis for **Integrative Graduate Education and Research Training Program (IGERT)/fellowships.**

More information is available at: <http://www.geog.buffalo.edu/giscience/>

## HUGH W. CALKINS APPLIED GIS AWARD

### Background

The University at Buffalo has established the "Hugh W. Calkins Applied GIS Award" to be given annually to a graduate student from the Department of Geography at the University at Buffalo who demonstrates the principles that Prof. Calkins developed and taught for many years regarding the successful application of Geographic Information Systems (GIS) to real world issues. This award honors the career of Hugh W. Calkins in the fields of Urban Planning and Geography.



### Remembering Hugh W. Calkins

Hugh W. Calkins served on the faculty in the Department of Geography at the University at Buffalo from 1975 until his retirement in 2002, and was department chair from 1999-2002. Prof. Calkins' professional forte was service to the department, to the University, to the community, to the State, to the Nation, and to the World. Hugh served on numerous national, state, and local advisory committees and boards playing a leading role in the development of information exchange standards for the emerging field of geographic information systems. Hugh led the development of guidebooks and standards for GIS adoption by local governments within the State of New York that have been utilized by GIS managers around the globe. His research and teaching was applied in other nations, including Ecuador, China, and India.

The greatest of Hugh Calkins' professional legacies is found in his students, who now play key roles in industry, government, and academia throughout the nation and the world. At a session in Prof. Calkins' honor at the annual meeting of the Association of American Geographers (AAG) in Denver in April 2005, ESRI's President Jack Dangermond stated "Hugh Calkins defined what it meant to be a GIS professional". What a true and perceptive statement! For more information on the Hugh W. Calkins Award please contact Diane Holfelner at [dh99@buffalo.edu](mailto:dh99@buffalo.edu).

## CANADA-U.S. TRADE CENTER (CUSTAC)

The Trade Center is currently working on a series of research projects spanning a much wider range of topics than has been true in the past. Anneliese Vance (PhD candidate) is exploring the post-9/11 economic impact of the hardening of the Canada-US border; David Pritchard (PhD, 2001) continues his work on the U.S. commercial aerospace industry, and recently advertised the Center's global research capability at the Farnborough Air Show (UK); Vida Vanchan (PhD, 2006) completed her Center-sponsored study of the competitive characteristics of the U.S. industrial design sector, and is now applying for a major NSF grant to further this work; Jim McConnell (supposedly retired) is running at full steam with regard to his ongoing research on cross-border trade and logistics security in the NAFTA trilateral area; Pauline Phao (MA, 2006) completed a detailed analysis of the Canada-US softwood lumber dispute; Ed Arnold (PhD candidate) is working on the geography of trade finance with respect to U.S. Export/Import Bank loans; and Alan MacPherson is currently working on an NSF proposal to examine the technological effects of large-scale outsourcing by US industrial firms. Other individuals associated with the Center have separate entries in the Newsletter to describe their research in more detail.

Other CUSTAC affiliates have been busy too. Renee Will (PhD, 2005) is fine-tuning her research on US State-level export performance. Renee is currently employed as a regional economist with the CIA in Washington, DC. Ron Kalafsky (PhD, 2002) is an Assistant Professor in the Geography Department at the University of Tennessee (Knoxville). Ron is one of only a handful of US scholars with expertise in the geography and organizational dynamics of the global machine tool industry. Finally, Mike Ziolkowski (PhD, 2005) is working on issues pertaining to 'neighborhood security' in cross-border communities such as western New York. Mike is a senior logistics manager with Ingram Micro. We would like to thank all of these individuals, and many others, for maintaining research-based linkages with CUSTAC. We also wish to thank Stephen Dunnett (Office of International Education, UB), Uday Sukhatme and Bruce McCombe (CAS Dean's Office), Lorraine Oak (Canadian-American Studies Committee, UB), and the Canadian Embassy (Washington, DC) for generous financial support. For further information on the Center please see: <http://www.custac.buffalo.edu/>

**Sue Roussie** won first place in the SkillsUSA national championship competition in Geospatial Technology. The SkillsUSA Championships, held June 18-24, 2006, is a showcase of career and technical education students. College/post-secondary students studying (GIS), (RS), and (GPS) from across the country were invited to participate in a qualifying test from which the top students with the highest scores were selected to compete in Kansas City. During the national competition, Ms. Roussie and other students, proved their expertise in occupations such as electronics, computer-aided drafting, precision machining, medical assisting and culinary arts. Sue received a gold medal and \$10,000 worth of ESRI software for the Department. She will receive her MA in Geography in September, and will continue with the PhD Geography program in the fall.

### Geography Graduate Student Association (GGSA)

The Geography Graduate Student Association (GGSA) is a social and academic club for graduate students in the geography department. As part of the university's GSA community, we provide a link for geography grad students into the larger UB graduate community. University-wide GSA activities include social mixers, sponsorship of guest speakers and discounted tickets to events throughout the year. The GSA also offers academic support in the form of conference funding and grant opportunities.

Over the course of the year, the GGSA is responsible for a number of activities designed to build the geography graduate community, and to bring students and department faculty together socially and academically.

During the spring semester, 2006, the GGSA co-hosted a party at the Association of American Geographers (AAG) meeting in Chicago, and co-sponsored the annual career fair here within the department. We also organized a department colloquium that brought students and faculty together academically to discuss topics related to career development, as well as a colloquium for students to share research and rehearse presentations prior to the AAG. Both colloquia were a great success. Thanks to all who participated. We concluded the semester with our always-successful annual spring picnic.

**Gerald Bové Jr.**, a post-doctoral research associate, whose interests include spatial analysis of environmental factors related to human health and development of systems to monitor such factors in fresh water environments, spoke on “Drinking Water, Cancer and the Great Lakes”. He was one of several lecturers in the Newman Center Lecture Series held during the summer.



Matthew J. Cascarino B.A. receives his award

**Matthew J. Cascarino** was one of 28 students honored for being the outstanding graduating senior in departments within the College of Arts and Sciences at the University at Buffalo's 160th general commencement ceremony held on May 14. Each outstanding senior received a medal and a personalized certificate.



Bo Ae Chun (center) the 1st Hugh Calkins Applies GIS Winner

We are pleased to announce that the first Hugh Calkins Applied GIS Award has been given to Geography PhD student **Bo Ae Chun**. In addition to the \$1,000 award that was presented to Ms. Chun during this year's graduation ceremony, her name will be placed on a perpetual plaque that is located in the Geography Main Office. Ms. Chun will be using the funds to support her PhD study that investigates the potential use of GIS as a means for teaching environmental study to secondary school students.

**Christine Lai, Byoungjae Lee, Tatyana Schoenberg and Anneliese Vance** were all awarded CAS/PhD dissertation fellowships for 2006. Congratulations to these PhD students and their advisors!

**Li Li** received a travel award from UCGIS (University Consortium for Geographic Information Science) for its 2006 Summer Assembly. At the Summer Assembly Li was awarded Second Runner-Up for a Winning Paper & Oral Presentation.

As many of you know, the National Center for Geographic Information and Analysis (NCGIA) was established in 1987 to promote and coordinate GIS-related research and education at UB. NCGIA is a community of GIScience researchers at UB, with 36 members in 15 departments from 5 different Schools or Colleges. We maintain collaborations with the two other NCGIA sites, at UC Santa Barbara and at the University of Maine.

In September 2004, Pat Shyhalla left the NCGIA staff to join the office of the UB Vice-Provost for International Education. In September 2005, Sunita Gupta joined Diane Holfelner and Linda Doerfler to complete the NCGIA staff. The NCGIA currently manages the IGERT Doctoral program in Geographic Information Science, and in 2005/2006 assisted Center members with post-award paperwork on 15 other external grants. NCGIA also supported the submission of about a dozen external proposals. In June, we were pleased to learn that the UB Vice President for Research has decided to continue base funding for NCGIA at least through June 2006. For further information about the Center, please see <http://www.ncgia.buffalo.edu/>

# GRADUATION

From September 2005 through June 2006, 74 students graduated.

## **Bachelor of Arts (34)**

Alex Adewale Adepoju	Michael George Kinlsey	Erin Kathryn Tambs
George G. Atallah	Sharon Yvonne Korchowsky	Mario Tlatenchi
Kathryn Michelle Billanti	Andrew Thurston Lawniczek	Hsiao-Ching Wei
Matthew John Cascarino	Wendy Marie Lazarski	Zachary Jacob Wilmore
Matthew Joseph Casciano	Brian James Lindsay	Paul Hammons Wilson
Jeffrey Jorge Chou	Robert M. Lucciano	Jeffrey Paul Winzenried
Ryosuke Esaki	Nebiha Said Mohammed	Gregory Lawrence Witul
Charon Francis	Eric Charles Montz	Dae Man Yoon
Takara Marqui-Deyona Gray	Ana Raquel Moronta	
Justine Helen Hoechst	Demetrios Demetrios Pantelis	
Hyon-Jun Im	Randal Michael Rocchio	
Nayoung Kil	Raymond Stevens Romero	
Deanna Niccole Kimbrel	Kirk Lee Stafford	

## **Bachelor of Arts/Master of Arts (1)**

Stephanie Lynn Frank

## **Masters of Arts (30)**

Shannon Nicole Azzarelli	William Edward Gunter Jr.	Amanada M. Moritz
Sol-Hyon Baek	Merissa Dawn Harvey	Jennifer Lynn Mussell
Christopher H. Barlow	Gary Allen Hoerle	Chukwumerije Bryson Okeoma
Paul Andrew Breier	Shu-Min Hsu	Joanna Barbara Rogalski
Elizabeth C. Cahill	Fan Jiang	Jeffrey Paul Stephens
Bo Ae Chun	Yu-Cheng Kuo	Taylor Hanks Sims
Michael James Clements	Mark George Larussa	Chi-Hsuan Sun
Darrell Keith Copeland	Jonathan Ka-Shun Li	Brian James Tait
Charles Dowd	Matthew Samuel Malinowski	Edwin Taylor
Stephen Charles Fritschi	Martin William Minkowski	Wei Xu



LaDonna Knigge accepted a position at California State University-Chico. She will be an Assistant Professor of Human Geography in the Department of Geography and Planning



Professor Bian congratulates Sharon Korchowsky, B.A.

## **Ph.D. (9)**

Christopher Badurek, Advisor Dr. Flewelling  
 “Measuring Change Similarity of Spatial Entities: The Case of the Criminal History of Place”

Gerald E. Bové, Jr., Advisor Dr. Rogerson  
 “The Effects of Disinfectant by-products on the Risk for Urinary Bladder and Rectal Cancers”

Eric Delmelle, Advisor Dr. Rogerson  
 “Optimization of Second-Phase Spatial Sampling using Auxiliary Information”

Daniel Howard, Advisor Dr. Mark  
 “Online Public Participation GIS: Shaping the Scales and Spaces of Comprehensive Planning”

Sungsoon Hwang, Advisor Dr. Thill  
 “The Effect of housing Market Segmentation on Commuting: A Geographical Analysis”

Scott Rayburg, Advisor Dr. Abrahams  
 “Three Dimensional Morphologic And Hydraulic Characteristics of Pools, Riffles and Pool-Riffle Sequences”

Vida Vanchan, Advisor Dr. MacPherson  
 “Competitive Characteristics of United States Industrial Design Firms”

Renée Will, Advisor Dr. MacPherson  
 “Specialization, Exports, Economic Performance, and Employment: An Empirical Analysis for U.S. States, Regions and Industry”

Jun Xu, Advisor Dr. Mark  
 “Natural-Language Representation and Query of Linear Geographic Objects in GIS”

The Department of Geography recognized the outstanding academic performances of the following students in our program for the 2005/2006 academic year. These students each received a certificate of achievement and a cash award. We truly appreciate their dedication, commitment and hard work during their tenure here at UB, and we wish them all the best in their future endeavors.

**Christopher A. Badurek, Ph.D., Elizabeth Cahill, M.A., Matthew J. Cascarino B.A., Sharon Korchowsky, B.A. and Jeffery Winzenried, B.A.**



Christopher A. Badurek, Ph.D. receives diploma from Professor Bian



Sungsoon (Julie) Hwang accepted a tenure position at DePaul University in Chicago. She is an Assistant Professor in the Department of Geography