

# Geography Connection

University of Utah Department of Geography

Volume 7 ❖ Spring 2006

## Letter from the Chair



Dr. Harvey Miller



Well, it has been another exciting year for the department! So many things are happening, I really don't know where to begin...or end!

Our department faculty have been working very hard on their teaching. **Phil Dennison** created a new course on

"Environmental Optics," a nice addition to our already excellent remote sensing curricula. **Andrea Brunelle** is teaching a new course on "Pyrogeography: Fire, Humans and the Environment" (this hopefully does not have a "hands-on" component!). **George Hepner** is busy teaching his timely new course on the "Geography of Terrorism and Homeland Security." **Tom Cova** is developing a new Certificate Program in Hazards and Emergency Management as well as directing our highly successful Certificate Program in Geographic Information Science. **Bing Xu** is teaching a new course on "GIS & Environmental Health," and **Tom Kontuly**, newly refreshed after serving as department Chair, is teaching new courses in "Global Economic Geography," "Population Geography" and "Urban Geography." **Rick Forster** is enjoying a well-deserved sabbatical but nevertheless appears in the department every day to work with his students and (remarkably!) attend meetings.

You would think with all of these teaching activities that our faculty would not have much time for research! But all of our faculty members are nationally and internationally recognized scholars, and continue to publish papers in top-tier journals, as well as acquire support for their research and students. There are simply too many activities to list here, so I will just mention a few highlights. **Andrea Brunelle** published research on Holocene fire and vegetation along environmental gradients in the Northern Rocky Mountains. **Phil Dennison** developed a new method for retrieving fire temperature from remote sensing data. **Tom Cova** and **Phil Dennison** published research on using GIS to predict when an evacuation order should be issued for a community threatened by wildfire. **Bing Xu** published a paper on schistosomiasis transmission in our flagship journal, the *Annals of the Association of American Geographers*. **Rick Forster** received funding to study seasonal snowpack using ground-based radar and also to estimate the Greenland Ice Sheet's contribution to sea level rise. **George Hepner** continues as University of Utah Director of the Southwest Center for Environmental Research and Policy. **Tom Kontuly** is working on the development of his differential urbanization model of urban dynamics. Tom and George have also been appointed faculty

Fellows at the new Institute of Public and International Affairs at the U. Your humble Chair even had time to some write papers and book chapters on time geography theory and applications when he wasn't busy emailing, writing memos or attending endless meetings.

Our auxiliary faculty members contribute to our department's mission way beyond the call of duty. **Arthur "Spike" Hampson** and **Elizabeth Dudley-Murphy** teach online versions of our well-subscribed regional geography courses. **Elliott Lips** is a mainstay of our physical geography program, including popular field-based courses, and contributes to its development beyond his effective teaching. **Larry Coats** teaches physical geography courses as well as conducts research on paleoclimatology. **Clayton Brough** instructs our much-needed "teaching methods" course when he is not out in the rain and snow on the Channel 4 Weather Porch.

We also have new faculty joining our happy family. **Kathleen Nicoll** and **Ikuho Yamada** join us as our new Assistant Professors. Dr. Nicoll (PhD, University of Arizona) is a geomorphologist currently serving a post-doctoral fellowship at Oxford University. She has expertise in geomorphic, stratigraphic and geoarchaeological studies in arid lands, including the Sahara, the Namib, and the U.S. Southwest and Great Basin. Dr. Yamada (PhD, SUNY/Buffalo) has expertise in spatial analysis and GIS applied to social issues such as health care and transportation. We are also very pleased to welcome **Vincent Salomonson** who joins us as a Research Professor after a long and distinguished career at the NASA Goddard Space Flight Center.

The **Digitally Integrated Geographic Information Technologies (DIGIT)** Laboratory continues its excellent record in supporting the research and teaching mission of the department and university through its GIS, remote sensing, geospatial technologies and cartographic services. DIGIT is flourishing under the able and energetic leadership of **Adam Sobek**. And Tom Cova is always quick to remind us of the active publications and grants generated by the **Center for Natural and Technological Hazards**.

Last and far from least – our great staff! **Lisa Clayton** and **Maryann Golightly** keep the department purring like a Ferrari despite continuing pressures from administrators as well as our over-active faculty. And **Melissa Warner** keeps DIGIT on its winning trajectory despite her status as a Salt Lake rock star.

We did have one sad event this year. Associate Professor **Katrina Moser** and Research Associate Professor **Desmond Moser** left us to return to the Great White North and accept positions at the University of Western Ontario. We miss them and wish them the best of luck!

Alumni, former colleagues, friends – we want to hear from you! Tell us what you're doing and about your experiences. Give us feedback – how are *we* doing? What can we do better? Visit us at [www.geog.utah.edu](http://www.geog.utah.edu).

# Faculty Affairs

**Andrea Brunelle** (Assistant Professor) joined our department in 2003. Her research interests are in paleoecology, with specific interest in past insect infestations, human paleoecology and fire. Andrea is the director of the RED Lab (Records of Environment and Disturbance) where projects are underway reconstructing long-term environmental records across the west. The RED Lab is full of great students with study sites ranging from forests at >10,000 feet in Utah and New Mexico to deposits at low elevation in Utah and on the Arizona/Mexico border. Andrea taught Cartography and a Graduate Seminar on Western Climates in Fall 2005 and this spring is teaching Global Climate Change and Pyrogeography. In the summer of 2005 she was awarded a University of Utah Seed Grant to study spruce bark beetle infestation on the Wasatch Plateau. When she isn't working she enjoys playing with her sons Eddie and Cooper, reading and doing home improvement projects.

**Tom Cova** (Associate Professor) directs the Center for Natural & Technological Hazards and the Geographic Information Science Certificate Program. His research interests are in hazards, transportation and GIS. Last fall he taught the Introduction to GIS class and Spatial Algorithms seminar. Tom Cova, Paul Sutton (U of Denver) and David Theobald (Colorado State U) are co-recipients of the 2nd Place 2005 John I. Davidson President's Award and the 3rd Place 2005 Leica Geosystems Award presented by ASPRS for their paper, "Exurban Change Detection in Fire-Prone Areas with Nighttime Satellite Imagery." The paper appeared in the November 2004 issue of Photogrammetric Engineering & Remote Sensing (PE&RS) and was recognized for its practical and scientific value in demonstrating how nighttime city-lights data can be used to map and monitor exurban development in fire-prone areas, a growing issue in the West. In his free time he enjoys hiking, skiing and traveling.

**Philip Dennison** (Assistant Professor) joined our department in fall of 2004. In fall 2005 he taught Measuring Global Change from Space and The Earth from Space: Remote Sensing of the Environment. This spring he is teaching Environmental Optics and a Graduate Seminar on Wildfire Modeling. His research interests are in remote sensing of vegetation, remote sensing of fire and fuels, and fire spread modeling. Philip recently won a University Teaching Grant, awarded spring 2005, for developing a lab component for Environmental Optics.

**Rick Forster** (Associate Professor) is on sabbatical this year. His research interests are in remote sensing of snow and ice and hydrology applications of interferometric synthetic aperture radar (InSAR). Rick was awarded two NASA grants this year: "Understanding ice-sheet surface elevation change: How much goes to the ocean", NASA Cryospheric Sciences, and "Investigation of Spatial and Temporal Variation in Snowpack Properties and Their Microwave Radiative Response Using High Resolution Broadband (2-18-GHz) Active Microwave Radar Measurements", NASA Terrestrial Hydrology. In his spare time he enjoys skiing, hiking and biking.

**Spike Hampson** (Professor Lecturer) teaches Geography of North America and Geography of the Middle East almost every semester, including summer session. This coming summer he will also teach Earth's Surface Environments and by fall he hopes to have Historical Geography of the US prepared as a new listing. Almost all his teaching is done online, and the flexibility of the arrangement has left him free to pursue his interest in becoming a writer. So far, he has completed a travel book about Corsica and the Russian Caucasus, two thirds of a mystery novel set in Utah and Mexico, a short piece on bicycling in Costa Rica ("Pura Vida"), and a couple dozen essays about various aspects of North American Geography. Spike is in the process of doing a riverboat voyage from Wyoming to Buenos Aires. Last summer he got as far as Lake Michigan, where he stored his boat for the winter, and this coming summer he hopes to get far enough south on the eastern seaboard to carry on during the cold months. The log of the voyage is posted online ([www.spikehampson.com](http://www.spikehampson.com)), and as soon as he returns to his boat in early May, he will update it regularly.

**George F. Hepner** (Professor) grew up in Ohio. His research interests are in urban land use and hazards, geospatial analysis and the future of the US remote sensing industry. George taught World Regional Geography and Geographical Thought and Inquiry, a graduate seminar for new students,

last fall. This spring he is teaching Resource Management and Geography of Terrorism and Homeland Security. He was recently awarded funding from the Air Force Office of Scientific Research (AFOSR) for "An Integrated Field-based System for Fusion of Hyperspectral and Interferometric Radar," DURIP instrumentation award Principal Investigator, (2005-06) with R. Forster, P. Dennison and A. Sobek.

**Tom Kontuly** (Professor and Graduate Director) last fall taught Urban Geography and this spring is teaching Spatial Data Analysis and Population Geography. He has four projects going, the first with colleagues at the Center for Disease Control and Prevention (CDC), the Utah Department of Health (UDOH), and Cottonwood Pediatric Clinic in Murray Utah that evaluates the "Time impact of an immunization registry in a private pediatric clinic", the second is a project that is "Modeling statistically inter-regional migration in Germany", a third project that provides a historical perspective for the differential urbanization model, and a fourth project that examines new urbanization and suburbanization tendencies in Estonia during the 1990s. Tom organized a session on the Geography of Germany for the 2006 AAG meeting in Chicago and will also present a paper on the changing relationship between urban and rural places in Germany. In his spare time he enjoys racquetball, cross-country skiing and walking.

**Harvey Miller** (Professor and Chair) comes from Ohio but considers Utah home. His research interests are Geographic Information Systems for Transportation (GIS-T), Geographic Information Science (GISci), time geography, spatial analysis and geocomputation. In the fall he taught Spatial Database Design for GIS. Harvey recently published four papers: "Place-based versus people-based accessibility" in D. Levinson and K. J. Krizek (eds.) *Access to Destinations*, "What about people in geographic information science?" in P. Fisher and D. Unwin (eds.) *Re-Presenting Geographic Information Systems*, "Necessary space-time conditions for human interaction," in *Environment and Planning B: Planning and Design* and "A measurement theory for time geography," in *Geographical Analysis*. He also gave invited lectures at the Department of Geography, University of Iowa, in March 2005 and at the Huntsman Cancer Institute in Salt Lake City, UT in December 2005. Harvey visited Chulalongkorn University, Bangkok, Thailand in January 2005 as part of an exchange program with the University of Utah and was a guest professor at Institute for Geoinformatics, University of Münster, Münster, Germany in September 2005 where he taught a short course on "People-based GIS." Harvey is also the Co-chair of the Committee on Spatial Data and Information Science, Transportation Research Board, U.S. National Academies. I'm not sure when he has free time, but when he does he enjoys backpacking, bicycling, rock climbing, hiking, skiing, films and books.

**Bing Xu** (Assistant Professor) joined our department in fall of 2004. She is originally from Beijing/PRChina. Her research interests are in spatial epidemiology, hyperspectral and high spatial resolution remote sensing and medical geography. Bing taught Medical Geography and Aerial Photography last fall. This spring she is teaching GeoComputation and Spatial Data Analysis methods and in fall of 2006 will most likely teach the graduate level statistics class, GEOG 6000. Bing has also recently received a grant from the National Natural Science Foundation of China on modeling of infectious disease transmission and control.



Tom Cova, Bing Xu, Andrea Brunelle, Rick Forster, Harvey Miller, Tom Kontuly, Phil Dennison, George Hepner.

# Alumni News

**Angira Baruah** (MS 2004) is currently a PhD student and TA at the University of Maryland/College Park. She is involved in exciting coursework and research on coastal processes and remote sensing.

**Richard C. Company, Jr.** (MS 1972) received a PhD in 1984. He is living in Springfield, VA and working as a Senior Advisor to the Director, Counterintelligence Law Enforcement Center. Richard analyzes very interesting issues and occasionally uses GIS tools. He served 21 years in the USAF, mostly as a Special Agent in the Office of Special Investigations. Richard has traveled and been deployed throughout the world!

**Elizabeth Dudley-Murphy** (PhD 1996) was born in Chile but has been in the U.S. since 1971. Beth mixes teaching for Geography and CVEEN departments with doing research at the U of U's Energy & Geoscience Institute. In 1999 she taught for the Semester at Sea program (U of Pittsburgh) and says it was the "ultimate geography field trip"! In 2000, she received a NASA faculty fellowship and worked at Marshall Space Flight Center.

**Annjanette (Bohn) Esvelt** (MS 2000) lives in Rice, Washington where she is a farm-wife and expectant first-time mother! Annje is currently the GIS and Forest Inventory Analyst for a timber investment company. She plays on a volleyball team and enjoys hunting.

**Christopher R. Evans** (BS 1996) is working for the USDA Forest Service as a GIS and Web Development Specialist where he enjoys working with the latest technologies to create cutting edge interactive mapping sites. He has two beautiful daughters and his wife is a vice president at a local bank. They recently moved to Murray, Utah.

**Renee Gluch** (PhD 2003) is an Assistant Professor at BYU where she can keep learning and gets to do some traveling. Renee stays busy with four children and likes to camp, hike, and ski.

**Jeremy Goodwin** (BS 2004) started a study abroad business (Study Programs International, Inc.) for high school students who live with families while studying foreign languages and earning college credit. He enjoys lots of foreign travel while using his languages on a daily basis. Jeremy likes to ski in Utah and scuba dive in Mexico.

**Jonathan M. Heilman** (BA 1994) is living in Lancaster, Pennsylvania working as a planner/zoning/building code official for West Hempfield Township, PA. He enjoys being able to interact with a wide variety of people in his job.

**Seth Horm** (BS 2005) is a surveying and mapping technician for ASWN+ where he does some field work then designs topographic maps. He enjoys camping, hiking, backpacking, snowboarding and snowshoeing.

**Jan Husdal** (PhD) returned to Norway before graduating but is still working on his PhD. He is a research scientist at the Molde Research Institute currently assessing the socio-economic impact of four major airports in Norway. He is able to work both at home or from his office (just a 5 minute walk away). Both have the same breathtaking view!

**Kory D. Iman** (BS 2003) is currently a GIS Specialist for Layton City, where he enjoys seeing geography in action and making positive impacts on society. He likes hiking, camping, being in the outdoors and spending lots of time with his wife and son.

**John James** (BS 2002) is a GIS Analyst for DynamicCity, Fiber Optic Telecommunications Consulting Firm. He enjoys skydiving, traveling, snowboarding and recently moved back to Salt Lake City, Utah.

**Lora Koeing** (MS 2002) is currently a Ph.D student in the Department of Earth and Space Sciences at the University of Washington. She enjoys traveling, biking, running and swimming.

**Matthew Liapis** (BS 1999) is the Mapping Director for Commerce CRG and Adjunct Faculty in the College of Architecture and Planning Teaching GIS to Urban Planning students. He enjoys showing people the many uses of GIS and how to apply it to new fields.

**Karl Lillquist** (PhD 1994) is an Associate Professor and Chair for the Geography and Land Studies Department at Central Washington University. He enjoys hiking, cross country ski touring, coaching his kid's sports teams, exploring historically significant places and yard sales.

**Joel Paterson** (BS 1981) is currently working as a Planning Programs Supervisor for the Salt Lake City Planning Division. He attended graduate school at Western Washington University, Bellingham, WA. He enjoys skiing, cycling, hiking and camping. He is living in Salt Lake City, Utah.

**Greg Schlenker** (MS 1998) is currently working as a Project Engineering Geologist and GIS Manager for Kleinfelder, Inc. Salt Lake City Office where he enjoys working on a variety of projects and managing his project locations. He received his Ph.D at Texas A&M University in 1995. Greg likes skiing, sailing, and whitewater. He lives in Huntsville, Utah.

**Joel Siderius** (MS 2004) is currently working for the National Park Service as a biologist, where he enjoys many different jobs. He likes running, hiking, skiing, and gardening. He is living in Seattle, WA with his wife, Lora Koenig (MS graduate from the Department in 2002).

**Ben Teran** (BS 2003) is currently working as a GIS Specialist at Commerce, CRG. There he enjoys designing and developing maps that create a new perspective when looking at commercial real estate and helping people use geography to sell property. Ben likes traveling, sports, and home improvement projects. He recently moved back to Murray, Utah.

**Scott White** (PhD 2001) is an Associate Professor for the Department of Geosciences at Fort Lewis College in Durango, Colorado where he teaches geography. He enjoys traveling, philately, reading, 80s music and living on a small farm with his wife Daphne White (PhD graduate from the Department in 2006).

**David Wilkins** (PhD 1997) is an Assistant Professor of Geosciences at Boise State University, where he teaches the intro physical geography classes and does new and fun research. He enjoys cycling, trail running and is biking in his 3<sup>rd</sup> MS 150 event this year.

For more details about these alumni or to add/edit your information, visit: <http://www.geog.utah/alumni/>

## Emeritus Faculty

Donald R. Currey (Deceased)  
Albert L. Fisher  
James W. King  
Chung-Myun Lee  
Roger M. McCoy  
Merrill K. Ridd  
Leroy H. Wullstein

## Auxiliary and Associate Instructors

We would like to thank our auxiliary and associate instructors for all the hard work they do for our department.

Clayton Brough	Shaunna Burbidge	Larry Coats
Matt Galland	Tom Hale	Val Halford
Elizabeth Dudley-Murphy	John Jarnagin	Elliott Lips
Desmond Moser	Greg Nash	Ralph Patterson
Vincent Salomonson	Gary Tackman	Dave Wilkins

# Graduate Students



*Entering Graduate Students - Fall 2005*

**Franz Amussen** (M.S.) is interested in remote sensing. He is the CEO for Amussen Hunsaker & Assoc., Inc. Franz is also a member of the Utah Committee of Consumer Services, appointed by Governor Leavitt for a 4-year term. He enjoys sailing, skiing, chess, biking, hiking, and traveling. Franz is from Salt Lake City, Utah.

**Mark Beaty** (M.S.) has two bachelors' degrees, one in Meteorology and another in Geography. He is currently working as a GIS/Remote Sensing Technician at the USDA Forest Service's Remote Sensing Applications Center. He and his wife welcomed their third child in February.

**Nick Britton** (M.S.) is researching natural hazards; both the physical aspects and the emergency management issues surrounding hazards. Specifically, he is interested in dam failures and the specific risks and emergency management issues related to dams. He enjoys hiking, camping, photography, and traveling. Nick is from Richmond, Virginia.

**Robert Bunkall** (M.S.) is researching rock glaciers. He enjoys hiking and snowshoeing. Rob is from Salt Lake City, Utah.

**Lina Cao** (Ph.D.), is interested in remote sensing and GIS applications, agent-based modeling in infectious disease transmission, and ecosystem management. She is currently working as a Research Assistant in our department. Lina enjoys traveling, hiking, swimming, and watching movies. Lina is from China.

**Will Clark** (M.S.) is interested in physical geography, GIS and remote sensing. Will is an active member of the US Army. He is an active player for the geography clubs intramural athletic teams. Will enjoys mountain biking, hiking, skiing, and running, fly fishing and camping. He and his wife Amy have a 17 month old daughter named Erin. They moved here from Torrington, Wyoming.

**Stephanie K. Cobabe** (M.S.) is interested in palynology, paleoecology and paleoenvironmental reconstruction. She is the president of our chapter of Gamma Theta Upsilon International Honor Society and will teach Ocean environments this summer semester. Stephanie enjoys backpacking, running, traveling, and spending time with her family. She is from Murray, Utah.

**Elias Deeb** (Ph.D.) is interested in remote sensing of snow and ice. Eli won the R.S. Tarr Student Paper Competition award from the Cryosphere specialty group of the Association of American Geographers during the AAG 2005 spring meeting in Denver, CO. He enjoys skiing, mountain biking, and camping. Eli is from East Greenwich, Rhode Island.

**Tim Edgar** (M.S.) is interested in remote sensing, the cryosphere and Andean South America. Tim is currently the Shoreline Ridge Community President. He enjoys traveling, and climbing mountains. Tim is from Torrance, California.

**Tina Gillman** (M.S.) is interested in time geography and transportation. She enjoys mountain biking, ultimate frisbee, and racquetball. Tina is from Salt Lake City, Utah.

**Deanna Halseth** (M.S.) has recently moved to San Antonio, Texas. Her research interests are in remote sensing, diatoms, water quality and physical geography. She enjoys hiking, swimming, reading good books, hanging out with her boys and traveling.

**Matt Hansen** (M.S.) is interested in geomorphology, water resources and flood hazards. Matt is the secretary of GTU, an active member of the geography club and a member of the LDS Institute. He enjoys hiking, flying, traveling, soccer, snowshoeing, cross-country skiing, and music. Matt is from Salem, Utah.

**Sarah Jenson** (M.S.) is interested in GIS, hazards and evacuation planning. Currently she is working in her field as a GIS/Physical Science Tech. for the USGS. She enjoys camping, hiking, and running. Sarah is originally from Amalga, Utah.

**Tetsuo Kobayashi** (Ph.D.) is interested in spatial-temporal analysis and human behavior modeling in space and time. Tetsuo is involved in the Japanese Association at University of Utah. He enjoys shopping. Tetsuo is from Aichi, Japan.

**Jeremy Larsen** (M.S.) is interested in earth surface processes, hazards, and modeling them within GIS. He works in the DIGIT Lab and is the vice president of the geography club. Jeremy likes to climb rocks, bike the trails, snowboard, play chess, discuss politics, and homebrew. He is from Spokane, Washington.

**Phoebe B. McNeally** (Ph.D.) is interested in geographic visualization, data uncertainty, spatial modeling and snow science. Phoebe works part-time for the DIGIT Lab. She enjoys skiing, rowing, hiking, anything in the great outdoors, and traveling. She is from Gorham, Maine.

**Richard Medina** (Ph.D.) is interested in spatial analysis and environmental geography. Richard won the Martin Harris Hiatt Memorial Graduate Scholarship and is a member of the geography club and GTU. He enjoys snowboarding, mountain biking, music, golfing. He is from Temple City, California.

**Jessica Mordecai** (M.S.) is living in Pocatello, Idaho and currently working on a Masters in Education at Idaho State University as well. Jessica enjoys climbing, skiing, snowshoeing, hiking, and reading. She is from Mechanicsburg, Pennsylvania.

**Jesse Morris** (M.S.) is interested in biotic response(s) to climate change, wildfire and paleoecology. Jesse plans to continue his research in our Ph.D. program. He enjoys playing music, backpacking, and snowboarding. Jesse is from Atlanta, Georgia.

**Stacy Randolph Morris** (M.S.) is interested in human paleoecology and past climate change with regard to Native American settlement patterns. Stacy is a teaching assistant for Geo-Excursions and an assistant to the SAC chair. She enjoys yoga, hiking, skiing, backpacking, traveling, and spending time with her family. She is from Salt Lake City.

**Lee Nuckolls** (M.S.) is interested in GIS in education and medical geography. Lee is working as a College Counselor at Rowland Hall-St. Mark's School. She enjoys skiing, baking, backpacking, and boating. Lee is from St. Louis.

**Shela Patrickson** (M.S.) is interested in Lake Bonneville, climate change, paleoecology and environmental science. Shela is secretary of the African Student Union (ASU) and currently works as a lab technician in the Biology Department. She enjoys paragliding, hiking/backpacking, swimming, and yoga. Shela is from Pretoria, South Africa.

**Edward Pultar** (M.S.) is interested in dynamic GIS, spatial modeling, agent-based modeling and wireless network geography. Edward is the winner of The American Association of Geographers (AAG) & National Council for Geographic Education (NCGE) Award for Excellence of Scholarship and the Hiatt Supplemental scholarship. He enjoys juggling, playing soccer, competing in triathlons, and dance. Edward is from Houston, Texas.

**Laura Siebeneck** (M.S.) is interested in natural hazards and reentry processes after an evacuation. She is the Student Advisory Committee Chair, a member of the geography club and the graduate representative for the College of Social and Behavioral Sciences Academic Misconduct and Appeals Committee. She enjoys playing basketball, volleyball, geocaching, and running. Laura is from Philadelphia, Pennsylvania.

**Greg Smith** (M.S.) is interested in GIS applications in hydrology, remote sensing in operational hydrology, utilizing GIS to assess flash flood threat areas and remote sensing of snow pack for seasonal water supply forecasting applications. He enjoys fishing, hiking, backpacking, mountain biking, blues festivals, downhill skiing, photography, and traveling. Greg is from Kearns, Utah.

**Adam Sobek** (Ph.D.) is interested in human movement in urban space. Adam recently won the ESRI: Best Practices in Science Modeling Challenge. He is currently the director of our DIGIT Lab. Adam enjoys spending time with his family and being in the outdoors. He is from Billings, Montana.

**Carrie Spruance** (M.S.) is interested in paleoecology and climate change. Carrie enjoys snow sports, fly fishing, swimming, dancing, knitting, and reading. She is from Salt Lake City. Carrie recently performed in the University of Utah's production of *The Vagina Monologues*.

**John Turley** (M.S.) is interested in urban sprawl into environmental areas and water resources. John is a member of GTU and Phi Kappa Phi. He enjoys exercising, golfing, and playing music. He is from Ogden, Utah.

**Jeff VanLooy** (Ph.D.) is interested in glacial geomorphology and remote sensing. He is the Undergraduate Academic Advisor and also works in the DIGIT Lab. He enjoys skiing and backpacking. He is from Grand Forks, North Dakota.

# Sandra Sheets Denman Nature Conservancy Internship

## Summer 2005



*Tara Merrill*

The Geography Department would like to thank Richard W. Denman, a past University of Utah Alumni, for the Sandra Sheets Nature Conservancy Internship opportunity he made possible. His donation, made in his wife Sandra Sheets Denman's memory, helped a University of Utah student, The Nature Conservancy, and The University of Utah Geography Department. This internship involved 300 to 400 hours of summer work to do GPS mapping of the Nature Conservancy's 4,000 acre Great Salt Lake Shorelands Preserve during the summer of 2005. Tara Merrill, a Geography/Environmental Studies major, received a monetary award and a tuition scholarship for the 2005-2006 academic year. In addition, the Geography Department received a donation because a Geography student was selected.

Tara was able to explore the wetlands surrounding the Great Salt Lake to collect field data and map various vegetation types, water sources, and various natural preserve features. Also, by applying her classroom knowledge of GIS and resource conservation, she was able to gain a better understanding of the critical issues facing this unique environment. Tara helped to establish a point of reference for mapping change over time at the Preserve and established a base data set to document the condition and location of 13 noxious weed species and many water diversion structures, culverts, and wells.

Heidi Mosburg (The Nature Conservancy) administered the internship, and Gen Green, GIS Specialist, supervised Tara. The scientific information that Tara gathered will help the Nature Conservancy plan future management actions at the Great Salt Lake.

### Donald R. Currey Graduate Research Scholarship Update

We would like to thank everyone who has donated to the Donald R. Currey Graduate Research Scholarship. In addition, we would like to extend a special thank you to Stanley R. Currey for his sizeable donation and his help setting up this scholarship in the memory of his brother, Donald R. Currey. Donations we have received to date total \$15,723.00. Wonderful! However, we still need your help to reach our goal of \$30,000. Any donation, no matter the size, will make a huge impact.

## Gifts to the Department

We wish to thank the following individuals for the generous donations made to the Geography Department over the past year. Every gift, no matter how small, has a positive impact.

### Gifts to the Department 2005

Jay K. & Francis M. Banta	Lora Koenig
Dane R. Boggs, Jr.	Robert B. & Suzanne E. Larson
Margo & Larry Bonnette	Elliott Lips & Hazel Coffman
Michael & Patty Brimley	William D. McCoy
Deborah J. Callender	Harvey & Susanne Miller
Richard C. Campany	Bud D. & Joan D. Pate
Albert J. Copley	Norbert P. Psuty
Stanley R. Currey	Michael S. Rafferty
Karl C. Dean	Richard G. Reider
Richard W. Denman	Newell K. Roberts
Glen J. Ellis	Susan C. Savage
Teri L. Gee & Michael J. Stoker	Kimberly J. Stevens
Stuart Preston Gregory	Melissa E. Tuller
Hal R. Johnson	

# Alumni Spotlight: Dale A. Quattrochi (Ph.D., 1990)

Since graduating in 1990 from our Department of Geography with his Ph.D., Dale A. Quattrochi has compiled an impressive resume. NASA has employed Dr. Quattrochi since 1980. Following the completion of his doctorate, he relocated to NASA's Stennis Space Station in Mississippi, where he worked for two years before transferring to the NASA George C. Marshall Space Flight Center in Huntsville, Alabama. Dr. Quattrochi's research focuses on the urban heat island effect (UHI) through the analysis of remotely sensed data. He has worked on UHI projects using aircraft thermal infrared remote sensing data in Huntsville, Alabama; Baton Rouge, Louisiana; Sacramento, California; Salt Lake City, Utah; and most recently, Atlanta, Georgia.

Dr. Quattrochi's team at MSFC analyzes how Atlanta's UHI has affected air quality over the city. They've used remote sensing data to derive land cover characteristics that have been incorporated into air quality models of the metropolitan area to assess how UHI mitigation techniques, such as increased tree planting and installing highly reflective surfaces (e.g., roofs and pavement) can potentially diminish the UHI. Ozone is one of the prime constituents of the "bad air" that presides over Atlanta, primarily on hot, humid summer days. They have also been developing spatial growth modeling to evaluate what the Atlanta urban landscape may look like through 2030 and how UHI mitigation strategies could potentially bring down the overall "signature" of the UHI to help improve air quality over the region.

To his amazement, Dr. Quattrochi's research has attracted a great deal of media attention, appearing on ABC, CBS, NBC Nightly News, CNN, The Discovery Channel, PBS, as well as many local and regional television programs. Recently, National Public Radio aired a feature entitled "The Pulse of the Planet" which included a segment on his UHI research. Dr. Quattrochi states that he is very flattered by the publicity, but he prefers to remain "media anonymous" and out of the limelight.

In addition to his research endeavors, Dr. Quattrochi has published numerous journal articles on his UHI research and two books. He co-edited his first book with Dr. Michael Goodchild in 1997 entitled "Scale in Remote Sensing and GIS." Most recently, he co-edited "Thermal Remote Sensing in Land Surface Processes," with NASA colleague, Dr. Jeffery Luvall. Also, Dr. Quattrochi has two co-authored books that are due out next year. (For more details, visit: [www.geog.utah.edu/alumni/](http://www.geog.utah.edu/alumni/))

Dr. Quattrochi has been very busy since leaving the University of Utah, and he hopes that even as a NASA "old guard" (which is how he refers to himself), he still has many years left to research some really interesting things!

## Scholarships

2005-2006

### Undergraduate – Continuing Student

Victor Dokukin

Jefferson Lee Searle

Tara Merrill

Deborah Walters

### Graduate

Hiatt

Richard Medina

Honor Roll

Laura Siebeneck

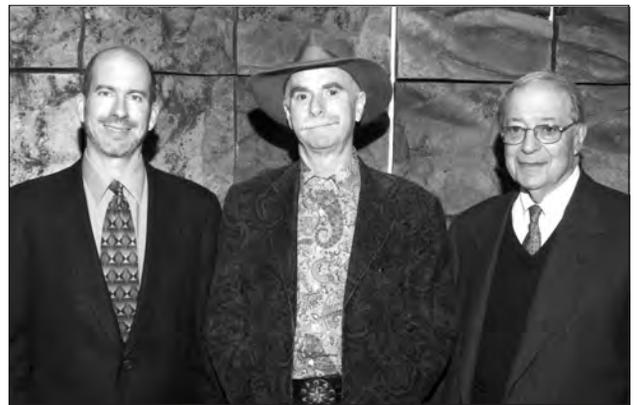
Hiatt Supplemental

Edward Pultar

## Department Hosts International Symposium on "Societies and Cities in the Age of Instant Access"

We are on the verge of what many are calling the "second information revolution" based on ubiquitous access to both computing and information. Handheld communication devices will become portable and wearable remote control devices for both the social and physical worlds. The technologies of instant access have the potential to transform dramatically our lives, cities, societies and economies much like the automobile changed our world in the previous century.

The Department of Geography, in conjunction with the Ninth Annual Rocco C. and Marion S. Siciliano Forum and the University of Utah Institute for Public and International Affairs, hosted an international symposium on Societies and Cities in the Age of Instant Access in November 2005. The symposium started with a keynote lecture on November 10th by Howard Rheingold, one of the world's gurus of cyberspace and digital culture. Mr. Rheingold addressed an overflow crowd in the Dumke Auditorium at the Utah Museum of Fine Arts on the topic of "Smart Mobs: The Impact of Ubiquitous Instant Access on Social Networks and Social Relations." Following this keynote were plenary addresses by Michael Batty (University College London), Helen Couclelis (UC-Santa Barbara), Anthony Townsend (Institute for the Future) and Susan Hanson (Clark University). Over the next two days, invited participants from diverse backgrounds presented papers on topics such as the impact of instant access on cities and the built environment, transportation, mobile information technologies and the individual, social and economic networks, education, and community.



*Harvey Miller, Howard Rheingold and Rocco Siciliano at the symposium on Societies & Cities in the Age of Instant Access.*

The symposium was a great success, and organizer Harvey Miller is working on an edited book based on select papers from the meeting.

Gamma Theta Upsilon Honor Society and The Geography Club are active and sponsor a variety of activities. Last fall members learned how to Geocache (a game in which individuals with GPS devices use latitude and longitude coordinates to find caches hidden by other players). Students created their own Geocache here on campus: The Geography Club / GTU Cache. They also held Ultimate Geography Trivia night, which truly tested their knowledge in the various areas of geography. The October Hike-or-Bike was a Saturday event in which members either hiked or biked the Millcreek Pipeline Trail. Members of both organizations also donated their time to work the various display tables at GIS Day. This spring the department's co-recreational basketball team, Harvey's Hoopstars (named for our department chair), suited up for some basketball fun. Gamma Theta Upsilon also sponsored a very successful rose sale for Valentine's Day. The Geography Club welcomes all geography students to attend activities and meetings.



*The Harvey's Hoopstars Geography Club intermural basketball team.*



*Andrea Brunelle, Tim Edgar, and Stacy R. Morris extruding a sediment core in Range Creek, UT.*

## New and Exciting Field Seminar for Summer 2006

Plans are in the works for a Geography class cross-listed with the Archaeological Field School (ANTH 5712) focused on paleoenvironmental / paleoecological field methods for geographers and archaeologists. Students will complete field studies in Range Creek Canyon designed to reconstruct environments that may have affected Fremont populations and settlement patterns in the region. The four sessions of the Field School run from June 5th to July 26th, and most likely the Geography class will take place during Session 1 (June 5-14) and/or Session 2 (19-28). Look on the Geography webpage for future details and information [www.geog.utah.edu](http://www.geog.utah.edu).

## GIS Day/Geography Week 2005

The Geography Department celebrated GIS Day / Geography Week 2005 on Wednesday, November 16th. This year's event featured various geographers from all over the Salt Lake community who shared their career experiences with our students. Various activities included GIS demonstrations by the DIGIT Lab; class project displays; Hot Topic Presentations by students, faculty, and alumni; and a career panel discussion in which students were able to ask questions and receive advice about various geography-related careers. Presentations were given by DynamicCity's John James, Aero-Graphic's Forrest Gladding, DIGIT Lab's Jeremy Larsen, RED Lab's Jesse Morris, and faculty members Larry Coats and Spike Hampson. Career Panelists included Dave Doepner (SLCPD Crime Analysis), Ben Teran (Commerce CRG), Eric Bernkopf



*GIS Day Career Panel.*

(SLC Corporation), Jeni Siebeneck (West Valley City Corporation), Forrest Gladding (Aero-Graphics), and Val Halford (Wasatch Regional Front Council).



# Geography Connection

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## Department Alumni We Want to Hear from You!

The Department of Geography web site is the host of all the information one needs to keep up with departmental happenings.

**[www.geog.utah.edu](http://www.geog.utah.edu)**

The primary purpose of this newsletter is to inform our alumni about recent developments in the Department and what individual faculty members have been doing over the past year. In return, let us know what you are up to—your latest career changes, research topics, any personal news or suggestions. You can send a letter or a postcard to:

Geography Department  
260 South Central Drive, Room 270  
Salt Lake City, Utah 84112.

Phone(801) 581-8218  
Fax(801) 581-8219

Subscribe to the alumni email list for news and job opportunities at <http://lists.csbs.utah.edu/> and select Geog-alumni.

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