



University of Tennessee, Knoxville
**Trace: Tennessee Research and Creative
Exchange**

UTK Geography Newsletter

Geography

2012

UTK Geography Newsletter 12 (2011-2012)

Department of Geography

Follow this and additional works at: <http://trace.tennessee.edu/utk-utkgeo>

 Part of the [Earth Sciences Commons](#)

Recommended Citation

Department of Geography, "UTK Geography Newsletter 12 (2011-2012)" (2012). *UTK Geography Newsletter*.
<http://trace.tennessee.edu/utk-utkgeo/4>

This Newsletter is brought to you for free and open access by the Geography at Trace: Tennessee Research and Creative Exchange. It has been accepted for inclusion in UTK Geography Newsletter by an authorized administrator of Trace: Tennessee Research and Creative Exchange. For more information, please contact trace@utk.edu.

UTK GEOGRAPHY

Newsletter of the University of Tennessee Department of Geography

2011-2012 Academic Year

Greetings from Carol Harden



This has been a year of both strategically planned and unexpected changes in the ranks of our geography department faculty. As we hired our newest faculty

member this year, we officially overturned our departmental demographic pyramid. For years, alumni could follow the achievements of the same, relatively senior, faculty members from year to year. Now, we are academically “younger,” with the number of assistant professors (6) exceeding that of either associate (2) or full professors (5). We suffered an unexpected loss this year in the senior faculty ranks. With great sadness, we report that John Rehder passed away suddenly last April. When he was last with us, at a faculty meeting that turned out to be in the last hours of his life, he seemed happy, energetic, and at the top of his game—we remember him from those moments, and greatly miss him (see obituary in this newsletter). Several months later, we gained a full professor when Dr. Henri Grissino-Mayer’s promotion to that rank became official.

The most recent addition to our tenure-line faculty, Dr. Hyun Kim, obtained his Ph.D. at The Ohio State University and taught at the University of South Florida before joining our faculty in August 2011. His expertise in GIS and transportation geography contribute well to our departmental strengths in those areas, and we are

very pleased to have him among us. His arrival closely follows those of Drs. Joshua Inwood and Madhuri Sharma, now in their second years; Drs. Yingkui (Philip) Li and Nicholas Nagle, in their third; and Dr. Micheline van Riemsdijk, in her fourth. Our newer faculty members continue to bring new ideas and new energy to the department—we are lucky to have been able to hire in the past few years and to have hired so well.

We remain short of faculty for the size of our programs, so we have three faculty members in non-tenure-track appointments this fall. Dr. Rajiv Thakur has joined us from the University of South Alabama as a visiting assistant professor, and Dr. Ben Shultz and Dr. Maria Caffrey (both 2011 Ph.D.s from UT) hold lecturer positions. In addition, Dr. Budhendra Bhaduri, group leader of the Geographic Information Science and Technology group at Oak Ridge National Laboratory, who holds a Joint Faculty Appointment with our department, is teaching a graduate course in Volunteered Geographic Information. We are fortunate to be conducting another search this year. This time, the search is for a senior colleague—an open, national-scale search is underway for a new department head. Next year, you can expect a new face in this column.

In this year of ups and down, there have been some very positive developments for our geography department. One is that our burgeoning GIS and spatial analysis program will be able to occupy additional research space next spring. The new space is one of a cluster of areas in the recently



Dept. of Geography
304 Burchfiel Bldg.
Knoxville, TN 37996

Continued on Page 2



Harden continued from Page 1

renovated Claxton Building to be occupied by computationally intensive research. We're looking forward to this expansion and to the interdisciplinary opportunities for interaction it will bring.

Another outstanding achievement of the past year is in the number of graduate students who completed their Ph.D. (eight, so far, with two more approaching the 'Phinished' line) and M.S. degrees (10). That was an all-time high number for this department.

Our departmental staff changed significantly this year. We added the position of Business Manager and were fortunate, indeed, to be able to hire the very Pam Sharpe who had worked in our department in previous years. Joy DuVoisin moved to a different department, and Denise Stansberry left UT, after 23 years, to re-marry and move to North Carolina. Tracy Branch has stayed with us through this transition and has taken on additional responsibilities in the process. We are in the process of a formal re-organization of office positions and expect to hire an additional staff member later this fall.

Beyond our own department, the university has entered the implementation phase of its new strategic plan. It's encouraging for us that most of the university's goals coincide with our own—increasing the size and quality of the doctoral program, which requires increasing the size of the faculty and increasing graduate student stipends; improving graduation rates of undergraduate students; involving more undergraduate students in research; and increasing our connections with alumni. We are hopeful that new resources will flow toward our efforts to meet these goals. In any case, we are on the move!

Carol Harden
Professor and Interim Head

You can now follow all the major (and some not so major) events of the Department of Geography on our Community Blog at:
<http://utkgeographyblog.blogspot.com/>

Sid Jumper Receives Outstanding Alumnus Award contributed by Bruce Ralston

At the department's awards ceremony in May 2011, Bruce Ralston honored the contributions of Sidney Jumper to our department, to the university, and to the field of geography. The department recently created the Outstanding Alumnus Award as a way of recognizing the professional accomplishments of our graduates. There is no one more deserving of such an honor as Sid.

Sid Jumper received his Ph.D. in 1960 for a dissertation entitled "A Geographical Analysis of the Production and Marketing of Fresh Fruits and Vegetables in Florida, Georgia and South Carolina." In the late 1960s Sid was teaching at Tennessee Tech when he was hired to return to his Alma Mater. Usually, hiring one's own graduates is frowned upon in academia, but this was an exception that proved most valuable to generations of students at all levels.

In 1977 Sid was named department head to succeed Edwin Hammond, who stepped down that year. For the next 18 years the administration, faculty, staff, and students of this university were blessed to work with Sid. It is fair to say that today's department was very much shaped by his leadership. During his period of leadership we added new faculty members, made strategic decisions on what we could and could not offer as specialties, put a new

Continued on Page 4



Bruce Ralston (L) and Sid Jumper (R), recipient of the Department's second Outstanding Alumnus Award.

Investment Opportunities in Geography

Gifts to the Geography Department may be designed for a specific purpose or fund or given to the Department's Enrichment Fund as discretionary funding. Be assured that it will make a difference! Existing funds are shown below. Please contact Carol Harden if you would like more information or if you would like to target your gift for a purpose not shown. The Development Offices of the College and University would be pleased to have you ask about other forms of giving, such as bequests, charitable lead trusts, and gifts of the remainder interest in a personal residence or farm, and they are set up to help you evaluate the tax benefits of different gift options. All contributors making gifts of a hundred dollars or more are eligible for University recognition via the Gift Club.

Stewart K. McCroskey Memorial Fund – Established by the McCroskey family after Stewart's death. This fund supports field research and professional travel by Geography students and faculty.

Sid Jumper Teachers' Scholarship Fund – Established in 1995 when Sid Jumper stepped down from the role of Head of the department, this fund supports graduate training for K-12 teachers.

Bill & Donna Cobble Geography Enhancement Endowment – Proceeds from this fund, established in 1995 by Bill & Donna Cobble in support of undergraduate education in Geography at UTK, are used to enhance the educational experiences of undergraduate students.

Edwin H. & Elizabeth H. Hammond Endowment Fund in Geography – Established to honor Professor Hammond, who retired in 1987. Gifts to this fund help bring a distinguished geographer, the "Hammond Lecturer" to the department each year.

Robert G. Long Outstanding Graduate Student Award Fund – The Robert G. Long Award, established to honor Professor Long who retired in 1979, honors one or two graduate students each year for superior scholarship and service to the department. The students are recognized on a plaque and receive checks of \$50.

The J. Harrison and Robbie C. Livingston Professorship Endowment - This fund was established in 1997 by J. Harrison and Robbie C. Livingston to further teaching and research on population problems. Proceeds from this fund supplement the salary of a faculty member who specializes in population issues.

Geography Department Scholarship Fund – This fund provides one or more tuition scholarships to outstanding undergraduate geography majors.

The Geography Department Enrichment Fund – This fund may be used to meet special needs as determined by the department faculty. In recent years, it has supplemented our operating budget and provided travel support to professional meetings for faculty and students.

The Geography Technological Enrichment Fund – Established in 1995 by two anonymous donors, the funds are used to provide our computer research labs and classrooms with up-to-date equipment and software.

Geography Endowment Fund – Donations are invested by the university. The principal generates quarterly interest to the Geography Enrichment Fund.

The Ralston Family Fund - This endowed fund was established in honor of Bruce Ralston's mother and father. It enriches a designated faculty member's research opportunities.



Please send your gift to: Department of Geography, 304 Burchfiel Geography Building, University of Tennessee, Knoxville, TN 37996-0925. **Make checks payable to: University of Tennessee, but also use the memo line on the check to indicate "Geography" and, if you wish, to indicate a specific fund.**



Jumper continued from Page 2

emphasis on research and scholarship, and perhaps most importantly, developed a culture of open management and civility.

In 1986 Dr. Jumper, along with Dr. Ted Schumde, established the Tennessee Geographic Alliance, one of seven pilot alliances in the US. From its humble beginnings the Alliance has grown to include nearly 5000 K-12 teachers, hosts a myriad of programs throughout the state, and is in many ways the epitome of what service and outreach are all about. Over \$3.6 million has been spent on improving geography education in our state.

Dr. Jumper's contributions have not gone unnoticed. In 2001, the National Geographic Society announced the establishment of the Sidney Jumper Grant for Teaching Research. At the announcement ceremonies, Gilbert Grovner, the Chairman of the Board of Trustees at NGS, not only praised the efforts of Sid, but he also praised the support and sacrifices of Mickey Jumper, Sid's wife. Several teachers have taken advantage of this scholarship to work in the field with Professors Sally Horn and Carol Harden.

In 2000, the Association of American Geographers presented Sid with the AAG Distinguished Service Honors. At the presentation Ronald Abler, the Executive Director of the AAG, stated "For over 30 years, the name Sidney Jumper has been synonymous with geography education in Tennessee."

In 1990 Jumper was awarded the Chancellor's Citation for Extraordinary Service. He was presented the Distinguished Service Award of the UT National Alumni Association. In 2005 the department had its 10-year program review. To say it was successful would be an understatement. At the end of the review Dean Riggsby stopped by my office to tell me that it was the best review he could remember. I immediately thought of Sid: his long hours, his dedication, and his vision. I wrote him an email telling him how much I wished he could have been there to hear the words of the dean. "We are walking in tall cotton these days.... Thanks for the investment in thought, hope, and courage you made in all of us." (I also told him not to expect any more sappy emails from me!)

Sid's contributions continue today. Without his leadership the department would not be as strong as it is. We may not have secured the generous funding of William Burchfiel for the Burchfiel Geography Building. Students in our state would have teachers who are much less prepared to teach geography than they are today. It is right that we honor him. Sid once confided in me that such honors made him uncomfortable. The hero worship was a bit too much to take. We can't help it. Sid is our hero.



In Memorium: John B. Rehder, Ph.D.

When John Rehder died suddenly on April 19, 2011 he was the longest serving member of the UT geography department by far – 43 years. John earned his Ph.D. and



Masters degrees from Louisiana State University, where he studied under the eminent Fred Kniffen, and had been a member of the UT department ever since. During those years he was active in Appalachian and cultural-geography circles, and he

became one of geography's leaders in the study of southern and Appalachian landscapes. His two books, *Appalachian Folkways* and *Delta Sugar*, are his best known and most widely admired scholarly works. *Delta Sugar* is a brilliant eulogy for the vanishing Louisiana sugar landscapes that he had studied throughout his career. *Appalachian Folkways* is a tribute to mountain landscapes that he had come to love during his years at UT. Next year, UT Press will publish another book that he had just completed when he died. Over the years, John taught thousands of undergraduates in his courses on the geography of Appalachia, rural geography, cultural geography, and the geography of the South. He taught many more in his world regional geography courses.

John also led a full and joyful life outside the department. He was married to his wife, Judy for over 48 years. They had two children, Ken and Karen, and two grandchildren that he doted on, Allen and Emma. John was an enthusiastic golfer and he was known to attend the occasional UT football game. He was also a long time member of West Hills Baptist Church, where got great pleasure from singing in the choir.

John appeared to be in fine health in the days and weeks before he died. He was fully engaged with departmental affairs, with his teaching, and with his research. He was as ebullient, forward looking, and irreverent as ever. But he had had some heart trouble. On his doctor's advice he had given up his annual hike to the summit of Mount LeConte in the Great Smokey Mountains and had cut back on his hiking in that other favorite place of his, Big South Fork. But when the faculty meeting ended that Tuesday afternoon, none of us imagined that John's heart was ready to give out. Nor did we suspect that we were saying goodbye to our colleague and friend for the last time. He was a young 68 when he died, too young. We miss him.



In Memorium: Theodore H. Schmudde Ph.D.

The geography family lost another stalwart in October when Professor Emeritus Ted Schmudde died. Ted was a physical geographer who specialized in landforms and soil formation. Holistically inclined in an age of reductionist science, he insisted that the specific could not be understood without reference to its wider setting, an idea at heart of heart of modern ecological science and, arguably, the entire environmental movement.

Ted earned his Ph.D. from the University of Wisconsin in 1959. He came to UT from Southern Illinois University in 1971, having already attained the rank of full professor. Along with Ed Hammond, he was a mainstay of physical geography in the department for more than two decades; he bore much of the responsibility for teaching the basic physical geography sequence as well as advanced courses in his specialty. He was a popular and highly regarded graduate

advisor who directed many theses and dissertations. Ted's special gifts as an advisor included a knack for helping students turn a nebulous idea into a defined topic. He



also excelled at shaping a thesis or dissertation into a manageable project, a skill that left many UT geography grad students deeply in his debt.

One of the founders of the Tennessee Geographic Alliance, Ted ran several of its first workshops. Ted retired from his professorship in 1997 but served on the Alliance board of directors until his death, a responsibility that kept him in touch with the department. He would often drop in on us in our offices before or after Alliance meetings.

Originally from Missouri, he loved the colorful way of speaking that he heard growing up here, and thanks to him, the Missouri metaphor became a part of the department's lexicon. An unsatisfactory idea or proposal was a dog that wouldn't hunt. A satisfactory one would carry the mail. Ted died on October 24, at home and peacefully. He was preceded in death by his wife Pauline and is survived by four children, many grandchildren, and one great grandchild.





Your Business Card

You may recall that about five years ago in a previous issue we asked alumni to send to us their business cards for a poster “What Can I do with a Geography Degree from the University of Tennessee”. Due to your response forwarding numerous and interesting cards, the poster has been a huge hit and we want to create an updated version. One poster hangs on the main floor of the Burchfiel Building where it is seen by hundreds of students each day. It has also been featured at presentations by the Tennessee Geographic Alliance and at numerous recruiting events.

Alumni with any degree from our department, who are willing to be included on this poster, please send Kurt your business card. We want our current and potential future students to realize the many different career paths that former students have taken, so if your job title doesn’t seem very “geographical” to you, don’t fret — we want those, too!

Cards can be sent to Kurt at:

Kurt Butefish
304 Burchfiel Geography Building
Knoxville, TN 37996-0925

Joint Faculty Appointments between UT Geography and ORNL

The Geography Department has created three new Joint Faculty Appointments with personnel at Oak Ridge National Laboratory. Dr. Glen Harrison, who holds a Ph.D. in geography from our own department, is now Deputy Director, Center for Transportation Analysis at the Oak Ridge National Laboratory. He has been a frequent guest lecturer and contributor to courses in transportation geography.

Dr. Budhendra Bhaduri is the leader of the Geographic Information Science and Technology (GIST) group in the Computational Sciences and Engineering Group at the Oak Ridge National Laboratory and a co-leader of the lab’s initiative, “Emerging Science and Technology for Sustainable Bioenergy. He works with the LandScan Global Population Database at ORNL and is

internationally recognized for his leadership and work with innovative geocomputing methods. He has hosted UT students as interns in his research group at ORNL and, in fall 2011, is teaching a graduate course in Volunteered Geographic Information in our department.

Most recently, we appointed Dr. Robert Stewart, who works in the GIST group at ORNL. Dr. Stewart, who holds a UT Ph.D. from August 2011 (yes, we waited until the ink dried!), will collaborate with researchers at UT to continue to build and apply SADA, a spatial-analytical model that allows geospatial modeling for environmental remediation and other applications. He will also work on research projects with geography faculty members and graduate students, and might, at some point, teach a course.

Honors Physical Geography contributed by Sally Horn

The department added some new courses to the books lately in Geography – one of which is an honors version of our popular “Geography of the Natural Environment” course. High-achieving undergraduates who want to enrich their experience in Geography 131 can do so by signing up instead for Geography 137. The students attend regular 131 lectures and labs, and they meet weekly for additional activities led this term by Sally Horn. This year’s honors group of five students has been getting first-hand research experience studying evidence of fire and forest succession at UT’s Oak Ridge Forest and Arboretum (<http://forestry.tennessee.edu/ORForest.html>).

Graduate students Mathew Boehm and Joanne Ballard have helped lead field trips and lab activities.



Fall 2011 Geography 137 students collecting soil core samples at the Oak Ridge Forest and Arboretum.

The Initiative for Quaternary Paleoclimate Research contributed by Sally Horn

The Initiative for Quaternary Paleoclimate Research (IQPR), directed by Sally Horn and involving Geography faculty Henri Grissino-Mayer and Philip Li, had a great first year and is moving ahead to turn several seed projects into funded research. Geography graduate student Matthew Valente, an IQPR GRA in Spring and Summer 2011, helped Philip with initial analysis of a test sediment core from Tian Shan, China that was originally collected with the help of Philip’s Ph.D. student Nancy Li. Mathew Boehm, our Fall 2011 IQPR GRA, is now studying pollen assemblages in the test core.

Matthew Valente and Mathew Boehm are also working with cave stalagmites as possible sources of material for pollen analysis.



Dr. Zheng-Hua Li (left) and Mathew Boehm collecting stalagmites in Cherokee Caverns, Knoxville. The stalagmites were broken during the construction of a trail through the cave and have been kindly donated by the cave manager for scientific study.

Stalagmites, stalactites, and flowstones (together known as speleothems) are secondary mineral deposits formed by chemical precipitation in limestone and dolostone caves. The two Matts are investigating whether pollen in speleothems can be used to extend vegetation and climate reconstructions in the Appalachian region. Researchers more commonly study pollen in lake and bog sediments, but in our area, few such records reach beyond the last glacial maximum ca. 20,000 years BP. Cave stalagmites collected by IQPR faculty member Zheng-Hua Li for stable isotope analyses date to earlier periods of the Quaternary, including the last major interglacial period, and may provide a new source of pollen data in the region.





Project in Montserrat, West Indies, attracts four UT scholars contributed by Lydia Pulsipher

Lydia Pulsipher returned in late July from six weeks in Montserrat where she and her co-director, archaeologist Mary Beaudry of Boston University, completed the second field season of research at the Carr Estate site at Little Bay Montserrat. The project is a multi-disciplinary effort to understand the ways of daily life on this 17th century sugar plantation as well as the plantation's connections to the then emerging global economy. As the work proceeds, more and more mysteries are surfacing.

The first mystery is that although records show this plantation existed in the

17th century, we have not, as yet, found much of the 17th century in the archaeological record.

Beyond that, there are two 18th century mysteries. This was an early small, inelegantly equipped sugar estate in a dry coastal basin, yet the artifact assemblage

shows that by the mid 18th century the luxurious manor house furnishings were being obtained from a global trade network, and they suggest a *high life* that could hardly have been supported by the meager earnings of the plantation, itself. Where was the substantial income coming from? Secondly, the harsh environment suggests that the lives of the laborers would have been meager, yet in the hinterland surrounding the plantation, research is showing a complex set of strategies was developed for producing crops, procuring scarce water, and raising animals, possibly surreptitiously. Was all this activity in

the plantation hinterland just a late-occurring phenomenon, or did even the 17th and 18th century plantation laborers – indentured Irish and enslaved Africans – successfully manipulate the outlying landscapes to their own advantage?

The total project team included four graduate students from Boston University, two from universities in Slovenia and three graduate students from UT. Two of the UT students were from Geography (Kevin Russell and Peggy Jackson) and one was from Anthropology (Jesse Davis. The three UT students contributed their considerable professional skills to the project. Ms. Jackson, in her second year on the project, supervised systematic artifact collection from the excavations (this entails the dusty job of sifting dirt and hunting for tiny pieces of

ceramic, metal, etc.), and she also controlled the distribution of our precious equipment. Mr. Russell mapped the site and perfected the system for making satellite-assisted stone-by-stone drawings of the excavated buildings. Mr. Russell accomplished these two feats while also conducting



UT student, Jesse Davis, excavates the west wall of the Carr site manor house.

his thesis research in a new and growing field within geography: indigenous mapping (see entry under Kevin Russell). A third student, Jesse Davis, from UT Anthropology, contributed expertise to the project from his earlier experience in archaeology in Peru by playing a major role in training others to intelligently move dirt. The contributions of all three of these UT people to the project in Montserrat was nothing short of heroic. Archaeology and geography fieldwork in the tropics is hot and dirty, but after-hours life in Montserrat is a pleasure that is hard to convey unless one has been there. Future volunteers welcome.

Undergraduates Win Poster Competition Awards



The winners are, from left to right: Sarah Jones, Sean Baskin, Scott Basford, and David White. At this year's Exhibition for Undergraduate Research and Creative Achievement (EURECA) at the University of Tennessee, Geography was well represented with not one, not two, but three poster presentations!

Congratulations to David White for his presentation titled "The Creative Metropolis in America"; to Scott Basford for his presentation titled "Putting Their Eggs in India's Basket: Church's Chicken in India"; and to Sean Baskin and Sarah Jones for their presentation titled "Spatial Dynamics of Climatic Response in Ponderosa Pines (*Pinus ponderosa*), El Malpais National Monument, New Mexico, U.S.A."

Ralston and Meyers' Excellent Adventure contributed by Bruce Ralston

During their recent trip to China, Bruce Ralston and Ph.D. student Mike Meyers met up with Dr. Shih-Lung Shaw who is spending his sabbatical at Wuhan University. Wuhan is the top GIS university in China and Dr. Shaw is working with the transportation and GIS research group. Bruce and Mike gave a presentation to Wuhan students and faculty that focused on opportunities and challenges in working with new products from the U.S. Census Bureau along with new mapping technologies. In order to illustrate some aspects of their work,

they presented the latest data available from the American Community Survey (2009 data) on the distribution of people of mainland Chinese descent in Tennessee.

In their meetings Bruce, Mike, and Shih-Lung discussed departmental business, including the search for a new department head and the possibility of a GIS Certificate program. These discussions were short because Dr. Shaw is just as much in demand in China as in the U.S. Two days after Bruce and Mike's arrival in Wuhan, Dr. Shaw had to leave for Beijing and meetings with Microsoft Asia and the Chinese Academy of Science. (Please see the photo of Bruce and Shih-Lung on page 10.)



Shih-Lung Shaw and Bruce Ralston at Wuhan University.



Degrees Granted Since August 2010

The following is a list of the degrees awarded by the Department since August 2010. The person granted the degree, dissertation or thesis title, and committee chair are included. It would not be possible to present this list without the efforts of Henri Grissino-Mayer, who maintains the master list of graduates and their degrees.

Masters Degrees

Angela Danovi

Phosphorus Distribution in Channel Bed Sediments in Beaver Creek, Knox County, Tennessee

Carol Harden

James Hartsig

The Effects of Land-Use Change on the Hydrophysical Properties of Andisols in the Ecuadorian Páramo

Carol Harden

Austin Judkins

The Shadow State and Refugees: The Role of Nonprofit Organizations in Refugee Participation

Micheline van Riemsdijk

Rusty Kirby

Motorbike Guide for Westerners: Entrepreneurial Development and the Creation of a Cultural Tourism Product in Transitional Vietnam

Micheline van Riemsdijk

Alice Schoen

A Sediment Record of Vegetation and Environmental History from Laguna Tortuguero, Puerto Rico

Sally Horn

James (Hunter) Terrell

Evaluating Substrate Metrics for Monitoring Impairment of Streams in East Tennessee

Carol Harden

Brian Watson

An Investigation of Stratigraphic Evidence for an Abrupt Climatic Event 8200 yr BP in Valle de las Morrenas, Costa Rica

Sally Horn

Yitu Xu

Using Volunteer Tracking Information for Activity-Based Travel Demand Modeling and Finding Dynamic Interaction-Based Joint-Activity Opportunities

Shih-Lung Shaw

Ziliang Zhao

Design and Implementation of an Object-Oriented Space-Time GIS Data Model

Shih-Lung Shaw

PhD Degrees

Kevin Birdwell

Wind Regimes in Complex Terrain of the Great Valley in Eastern Tennessee

Henri Grissino-Mayer

Maria Caffrey

Holocene Climate and Environmental History of Laguna Saladilla, Dominican Republic

Sally Horn

Dawn Drake

Geographies of Competitive Advantage: An Examination of the US Farm Machinery Industry.

Ron Kalafsky

John Sakulich

A Dendrochronological Approach for Analyzing the Geographic Range Structure of Tree Species.

Henri Grissino-Mayer

Ben Shultz
Handmade and DIY: The Cultural Economy
in the Digital Age
Ron Kalafsky

Robert Stewart
A Geospatial-based Decision Framework for
Extending MARSSIM Regulatory Principles
into the Subsurface
Shih-Lung Shaw

Zachary Taylor
Spatial Variation in Organic Carbon and
Stable Isotope Composition of Lake Sedi-
ments at Laguna Zoncho, Costa Rica.
Sally Horn

Ling Yin
Human Interactions in Physical and Virtual
Space: A GIS-based Time - Geographic
Exploratory Approach
Shih-Lung Shaw



Students and Faculty in Action



Grad students John Eads (on shovel) and Matt Valente retrieve soil moisture sensors from a high-altitude pine plantation in the Mazar Wildlife Reserve in Ecuador. Carol Harden's NSF-supported project investigates the effects of land-use changes, including tree plantations, on soil, water, carbon, diversity, and livelihoods in the Andean páramos.

Madhuri Sharma (3rd from left) with her research assistant, Krishna Anand, (tall gentleman in the back row) and Geography faculty at Sahid Bhagat Singh College, University of Delhi, India.



Continued on page 12



Undergraduate Ebony Lemons, supported by a Research Experience for Undergraduates grant from the NSF, cores a tree at the Pygmy Forest of El Malpais National Monument, New Mexico.

Alex Pilote (far right) collects tree cores for his master's project at Cerro Bandera, El Malpais National Monument, New Mexico. He was assisted by (l-r) Robert Bastik of the Park Service, Kristen de Graauw of Indiana State University, and M.S. student Niki Garland.



Students from Slovenia, China and the U.S. excavate the Carr Site manor house for Lydia Pulsipher's research at Little Bay Montserrat. The project is a multi-disciplinary effort to understand the ways of daily life on this 17th century sugar plantation as well as the plantation's connections to the then emerging global economy.

Faculty and Staff News

Tom Bell (Professor Emeritus) and **Peggy Gripshover** (Adjunct Assistant Professor). As we write this blurb for the *Newsletter*, it is hard to believe that we've been gone from Knoxville for three years. We love living in Bowling Green, but miss all our friends back at UT. As with everyone, we were shocked and saddened by the sudden passing of our friend and colleague John Rehder. We continue to hold his wife

Judy and children Karen and Kenny in our thoughts.



Tom has not slowed down in his professional life since retiring as a Professor Emeritus from UTK. Perhaps the biggest lifestyle change has been that he can now take naps anytime he chooses and not just during faculty meetings. He is still an active

writer and researcher. Tom continues to work with his UT grad student advisees and also taught a seminar on music geography for the Honors College at Western Kentucky University (WKU). Tom ventured down to the big city of Knoxville this past year for the defenses of Drs. **Ben Shultz** and **Dawn Drake** and hopes to do the same for his two remaining Ph.D. advisees at UT—**Joe Guttmann** and **Andy Baker**. He recently collaborated on a journal article with former UTK Master's student **James Baginski** based on James's thesis on microbreweries in the South. That article appeared in *The Southeastern Geographer*. Tom also wrote a review of a book on Chicago public housing that appeared in the *Bulletin of the Illinois Geographical Society* and another on Mississippian archaeological settlement patterns in Alabama for *The Southeastern Geographer*. He and Peggy have a forthcoming article on innovation in U. S. onion growing

areas during the early part of the 20th century that will appear next year in the journal *Material Culture*. Tom and Peggy plan to present aspects of that research at the forthcoming SEDAAG meeting in Savannah and the AAG meeting in New York City. In his copious free time, Tom has been involved with a multi-year research project funded by the Appalachian Regional Commission (ARC) through UT's Institute for a Secure and Sustainable Environment (ISSE). The study examines factors that contribute to distressed rural counties in Appalachia, and the report of that research will soon be presented to ARC for publication. Several articles in academic journals based on that research effort are planned. That project also involved Drs. **Tim Ezzell** of UT's Center for Community Partnership and **Dayton Lambert** of the Department of Agricultural Economics and several graduate RAs. Tom presented a paper from that research based on the experience of two Appalachian Kentucky counties at the AAG meeting in Seattle (2011).

Tom's most important recent research and teaching foci, however, have been and remain, music geography. Last November he presented a paper at the SEDAAG meeting in Birmingham (with UT grad Dr. **Ola Johansson**, University of Pittsburgh at Johnstown) dealing with recent trends in music geography. For this paper, Tom and Ola examined the arc of research presented on the subject over the past ten years of the AAG meetings. That paper was a follow-up to the book that he and Ola co-edited in 2009 (*Sound, Society and the Geography of Popular Music*, Ashgate Press) and an article that Tom wrote for the *Encyclopedia of Geography* (Barney Warf, ed. 2010) on the "Geography of Music and Sound." In addition to the class Tom taught on music geography in the Honors College at WKU, he is currently working with Dr. **David Keeling**, Professor and Head of the Department of Geography and Geology at WKU, on an article on teaching of music geography and will be team teaching a course on the Geography of Music that will be





offered in WKU's geography department next fall. Tom and **Ola Johansson** plan to submit a manuscript based on their research regarding the geographic nature of the touring circuits of the purveyors of various genres of rock music to the journal *Popular Music and Society*.

Peggy and Tom are in the second year of their three-year contract as co-editors of the international journal *FOCUS on Geography*, a journal of the American Geographical Society (AGS). So far, we have published articles and/or photoessays by the following persons with UT connections: **Lydia Pulsipher, Sara Beth Keough, Jerry Dobson, Criss Smith, Ola Johansson, James Baginski, and Christine Biermann**. We have also called upon several of you to review articles and we thank you for your valuable service to the discipline. We miss all of you in Knoxville.

Peggy has been very busy with teaching, research, and service. This past year, Peggy published an article in *The Baseball Research Journal (BRJ)* on the impact of weather on spring training of the 1914 Chicago Federal League team. The BRJ is published by the Society for Baseball Research. This article is an offshoot of her ongoing book project on Charles Weeghman, the man who later bought the Cubs franchise and built what is now known as Wrigley Field. Peggy also presented a paper based on her Federal League research at the AAG meeting in Seattle. She also has a book review forthcoming in the *Journal of Southern History* on Maryjean Wall's *How Kentucky Became Southern*. Peggy continues her interest in horses and was the recipient of a faculty grant to study the equine landscape and land use change in Kentucky. Her focus will be on the birthplaces of Kentucky Derby winners, a topic that she and a WKU colleague **Debbie Kreitzer** pursued in a poster session at the Seattle AAG meeting ("Spatial and Temporal Variations in Breeder and Ownership Characteristics for Kentucky Derby Winners, 1875-2010"). Following the Kentucky theme, Peggy presented a paper titled, "Digging Deeper into a Bowling Green, Kentucky Karst Legend: The Uncle Henry Story," at the International Conference on Karst Hydrogeology and Ecosystems.

"Uncle Henry" Jamison was born into slavery in Kentucky in 1843 and served as a substitute for a white draftee in the Union Army during the Civil War. He became famous as the only person featured in a 1921 *Popular Mechanics* article on Bowling Green, which highlighted the city's reliance on sinkholes and subsurface drainage as its sewer system (not a good idea for water quality or public health!). The article claimed that Jamison had a special talent for finding sinkholes into which city residents could straight-pipe their untreated waste. Peggy is preparing a journal article based on her "Uncle Henry" research and hopes to submit a manuscript in the coming year.

In her civilian life, Peggy is very active in the Bowling Green tennis community. She and partner Sue Parrigin have won two ladies' doubles championships in local tournaments this year and Peggy is currently playing on three USTA league teams. When she is not preparing for a run at the U.S. Open trophy, Peggy enjoys exploring blue highways with Tom and their Australian Shepherd Sophie in tow, cooking for friends, gardening, and keeping Tom out of his recliner and on the go. Since Tom needs to watch his sodium intake, he and Peggy vacationed this year along the sandy shores of Lake Michigan---which is salt-free!

Kurt Butefish. Kurt is in his twelfth year as coordinator of the Tennessee Geographic Alliance. The highlights of this past year included co-hosting a week-long summer workshop for teachers on *Educational Technology: With an Emphasis on Geospatial Technologies, Spatial Thinking and Web-based Lessons*. It was held at and co-hosted by the Earth Sciences Department at the University of Memphis. **Dr. Esra Ozdenerol** at the U. of M. was co-facilitator and, besides teaching sessions on geographic information systems, oversaw all of the administrative stuff through her institution that is necessary to make a workshop a success...and it was a great success.



The other main initiative for the TGA the last year is its involvement in a project called the *Geospatial Learning Model*. Tennessee is using much of the Race to the Top federal funds that it received to push STEM disciplines (Science, Technology, Engineering and Math) in school curriculums. The Alliance has partnered with Vanderbilt University and the State of Tennessee Office of Local Government to train teachers in the use of and effective incorporation of geographic information systems and geospatial technologies into their classrooms. Teachers were trained in Metro Nashville Public Schools this past summer as part of a one-year pilot project. We are hoping to provide more training in MNPS schools next summer and have begun discussions with Knox County Schools for another project there during the summer of 2012. Both of these school systems have STEM Academies in place and we are excited to be working with these innovative educational platforms. You can follow the progress of the program at: www.geospatiallearning.com.

On a personal note, Kurt and the former **Susie Fisher** (UTK Geography BA 1981 and MS 1985) will celebrate their 25th wedding anniversary in February 2012.

Will Fontanez. Things continue to go well in the Cartographic Services Laboratory. The lab's location in the Burchfiel

building has given us more visibility and interaction with students, faculty, and other campus offices. We still produce campus maps of various types for all of the UT system as well as maps for

faculty publication needs. Student geography majors are sometimes recruited to work in the lab and hone their cartographic talents. In the past they have helped with several major projects such as the textbook *World Regional Geography*, by Lydia Pulsipher. The past five editions of that project alone resulted in the creation of over five hundred high quality maps! The lab continues to produce newsletter, folding, and publication maps for the Great Smoky Mountains Association and



other off-campus groups or individuals in need of custom cartography.

We are equipped with the latest Mac and PC hardware and software used for producing maps. Our computers have wide screen displays and the ability to print large format proofs and meeting posters. The studio atmosphere in the lab mimics professional and government cartographic workplaces. This has led to employment and internships at National Geographic, the CIA Cartographic Division, and area county GIS offices for several of our students.

Will's work as director of the lab has been rewarding as he passes the 24-year mark. Professionally, he continues to be a member of the North American Cartographic Information Society. He also participates as a presenter at yearly area GIS conferences and Alliance teacher workshops.

On the personal side, Will married Susan seven years ago. She works at the Pilot Travel Center corporate office and has two boys, Greg and Ryan. Will's daughter Kara is in the 9th grade and son Garrett is a Marine lance corporal stationed at Camp David and a member of the presidential guard unit. Susan and Will have three grandkids from Will's daughters Liz and Allison (both in Nebraska). Hard to believe! Will continues to be president of the Tennessee Men's Gymnastics Judging Association and a National level official for USA Men's Gymnastics.

Ron Foresta. Ron continues to head up the human-geography working group and oversees the department's basic 101-02 sequence in human geography. As associate department head, he also has lead responsibility for long-term course planning as well as semester-by-semester course scheduling. His



book, *The Land Between the Lakes*, was accepted for publication by the University of Tennessee Press and will appear in print next year. Ron continues to teach the department's senior proseminar and served as a reviewer for several journals during the year.





Henri Grissino-Mayer. Perhaps more than anything else, Henri and his current and former students and colleagues enjoy publishing the results from their research in peer-reviewed outlets. In AY 2010–2011, articles appeared in such top journals as



Chemical Geology, Landscape Ecology, Tree-Ring Research (3), and Journal of Geophysical Research D–Biogeosciences.

Henri and his students and colleagues currently have eight manuscripts being reviewed for various journals as well as 11 manuscripts being finalized for eventual submission. Henri and his students have also recently established a collaborative research program with Dr. **Nesibe Kosë** of the Faculty of Forestry at Istanbul University in Turkey, who joined the department as a visiting Adjunct Assistant Professor and was hosted by the Laboratory of Tree-Ring Science between February and November of 2011. Henri and Nesibe recently submitted a manuscript for publication to the *Journal of Quaternary Science* about a high-quality reconstruction of precipitation they developed for western Turkey from tree rings.

Henri and his colleagues and especially his students stayed busy giving presentations, both oral and poster, at various meetings around the U.S. In AY 2010–2011, Henri was the senior presenter or co-presenter on 17 presentations at professional meetings, highlighted by six talks given at the AAG meeting in Seattle, Washington in April. Along with **Sally Horn** as lead organizer, Henri also co-organized a panel session at the AAG meeting on strategies for successful proposals submitted to such NSF programs as REU, PIRE, IGERT, and GK–12. Henri also was lead organizer (along with **Sally Horn**) for a panel session on teaching tree rings for ideas in outreach to GK–12 students and teachers. Both panel sessions were well attended. Henri also gave an invited talk to the National Advanced Silviculture Meeting held in Knoxville in March, organized by his colleague **Wayne Clatterbuck** in Forestry.

The highlight of the fieldwork during the year was yet another two-week long trip to El Malpais National Monument in west-central New Mexico, the fourth year Henri and his students have conducted fieldwork in this unique environment. Henri was accompanied by M.S. students **Alex Pilote, Sarah Jones, and Niki Garland** and Ph.D. student **Grant Harley**, who were later joined by new graduate student **Dorothy Rosene** and her colleagues Ross Alexander and Kristen de Graauw from Indiana State University. Upon arriving in Albuquerque in early June, they were greeted by smoke and particles falling from the sky caused by the Wallow Fire, the largest wildfire ever in Arizona history. The first few days of fieldwork often required bandanas across their faces to protect from the harsh effects of the smoke, but it eventually cleared up by the last week of the fieldtrip. The field crew were able to extract cores from 600 trees in areas where they've previously reconstructed fire history to better learn about the severity of past fires, and this will make up the M.S. project for **Alex Pilote**. In the second week of the fieldwork, the crew was joined by three members from the College of Engineering at UT, Ph.D. candidate Sally Rose Anderson and REU students Ebony Lemons and James Ensley. This crew collected 250 cores from various areas on the lava flows to learn more about the evolution of the “pygmy” forests that characterize El Malpais. This project will make up the M.S. research for **Sarah Jones**.

In August, Henri served as a Group Leader at the 21st Annual North American Dendroecological Fieldweek held at the scenic Mountain Lake Biological Station outside Blacksburg, Virginia. Henri was joined by Ph.D. student **Grant Harley** who also served as Group Leader for the Introductory Group and M.S. student **Niki Garland** who served as Assistant Group Leader in Henri's group. Henri and his students dated three structures from a historic farm site in Catawba, Virginia, to the exact year each was built (1829 for a cantilever barn and 1839 for a cabin and smokehouse), adding valuable new information that can be entered into the National Register of Historic Places documentation for the site. The results from this project have already been written

up into a manuscript that Henri and his students will submit for publication later in the fall to the journal *Southeastern Archaeology*.

Lastly, Henri is proud to report that he got married on July 9th to his girlfriend, the former Brandi Boggs! They were married at Patriarch Grove, high up in the White Mountains (at 11,000 feet elevation) of southeastern California, underneath a picturesque bristlecone pine that was about 3,000 years old (a “youngster” by the standards of this species). Together, they take care of their three children and 10 cats in a newly-remodeled home in south Knoxville!

Carol Harden. Carol completed her term as AAG past president in July 2011. Looking back over the three years of her AAG leadership, she reflects that the AAG is an amazingly well-run organization and that the geography students she met on her travels

around the country were inspiring. Among the highlights of her past-presidential year was the opportunity to present a major plenary address at the AAG meeting in Seattle in April.



Even in the past-presidential year, her travel was extensive: to Washington, DC, Savannah GA, Storrs CT, Macomb, IL, and Seattle, WA. She also attended the Royal Geographical Society and British Geomorphology Group meetings in London, presented a paper at the Global Land Project meeting (in Tempe, AZ), and gave invited talks at Illinois State and Kansas State Universities. In her role as a member of the Research & Exploration Committee of the National Geographic Society, she participated in a two-week site visit in various parts of India in January 2011. In her free time, she helped draft a white paper for NSF, submitted proposals to NSF and TDEC, became Editor-in-Chief of the journal *Physical Geography*, taught a new course (Geog 333: climate change and human response), continued to teach, advise graduate students, and conduct research, and helped edit a volume of the *Treatise on*

Geomorphology. Three of her M.S. students completed their theses and graduated: **Angela Danovi**, **James Hartsig**, and **James (Hunter) Terrell**.

Carol contributed the chapter, “Effects of vegetation clearance on channel change; an historical perspective” (Chapter 13.2) to the *Treatise on Geomorphology*, which will be published by Elsevier in 2012. With K. Chartrand and E. Henry, she published the paper, “Temporal Variability of Bank Erosion in East Tennessee Headwater Streams” (*Southeastern Geographer* 50(4): 484–502), and, with K. Farley (first author), W. Anderson, and L. Bremer, she has the paper, “Compensation for Ecosystem Services: an Evaluation of Efforts to Achieve Conservation and Development in Ecuadorian Páramo Grasslands,” in press in *Environmental Conservation* (38(4): 1–13).

Carol traveled to the Ecuadorian Andes again this year to wrap up a three-year NSF-funded project investigating the effects of land-use change on environmental services. Graduate students **Matt Valente** and **John Eads** joined her for the field portion of the research trip. Then, Harden and her research team presented their research results at a meeting they organized in Quito, Ecuador.

Sally Horn. Sally and her students continued research on climate and environmental history in the Appalachians, Florida Keys, and circum-Caribbean in 2011. A record number of students in her lab finished their theses and dissertations; Drs. **Maria Caffrey** and **Zachary Taylor** finished their Ph.D.s in May, and **Brian Watson** and **Alice Schoen** finished their



M.S. degrees in May and August, respectively. On the funding front, Sally received a \$229K research grant from NSF (funded by the Geography and Spatial Sciences and Population and Community Ecology programs) for collaborative research with **Tom Minckley** at the University of Wyoming on sediment records in the Cuatro Ciénegas Valley of Mexico. The new





project expands the scope of **Matt Valente's** ongoing dissertation work, and includes support for M.S. student **John Eads** and several undergraduates along with support for Matt.

Meanwhile, M.S. student **Desiree Kocis** and talented undergrads **Nathan Sharp** and **Alex Massey** continue to work with Sally on the analysis of charcoal records of fire history in the Florida Keys, funded by a grant to Sally and **Henri Grissino-Mayer** from the US Fish and Wildlife Service. Closer to home, Sally is working with M.S. student **Matt Boehm** and new Ph.D. student **Joanne Ballard** to develop pollen, charcoal, and isotope records of late Pleistocene and Holocene climate history in Tennessee and North Carolina. This work is funded by an NSF grant to **Zheng-Hua Li** (Earth and Planetary Sciences) on which Sally is Co-PI, and also involves UT Adjunct Assistant Professor **Chad Lane**. Sally is also continuing work on soil charcoal evidence of fire history in the Appalachians, together with **Henri Grissino-Mayer** and several students. The big project here is **Chris Underwood's** Ph.D. work (nearly complete!) in the Great Smoky Mountains National Park, funded by NSF, the Joint Fire Science Program, and the Great Smoky Mountains Conservation Association.

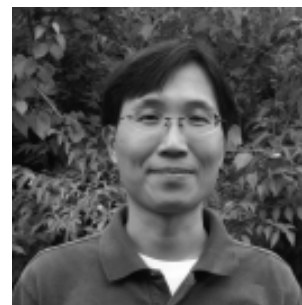
These and other projects in the works in Sally's lab are part of a broader effort to encourage more research at UT on the climates and environments of the present and past.

Sally gave a paper and participated in several panels at the 2011 AAG meeting (two co-organized with **Henri Grissino-Mayer**), and also presented at the Great Smoky Mountains National Park Science Colloquium (Gatlinburg) and the Developing International Geoarchaeology Conference (Knoxville). She completed two co-authored chapters for a forthcoming book on Ecosystems of Costa Rica edited by Adjunct Associate Professor **Maarten Kappelle**, and she co-authored a slew of manuscripts on research in the Florida Keys, Costa Rica, and the Dominican Republic, most with current and former UT students. Four papers appeared in 2011, and several others are in review.

In September, Sally spent a week in Costa Rica as a Visiting Professor in the School of Geography at the University of Costa Rica. A highlight was a three-day visit with a bus load of University of Costa Rica students to the La Selva Biological Station, where Sally lectured on her research with **Buck Sanford** (University of Denver) and former students **Lisa Kennedy** and **Chad Lane** on prehistoric agriculture and long-term human and natural disturbance in the "virgin" rainforests of this world-famous reserve.

On the teaching front, Sally helped develop and then taught for the first time in Fall 2011 our new honors section of introductory physical geography (Geography 137). She engaged the honors students in research projects at the UT Arboretum in Oak Ridge, assisted by graduate students **Matt Boehm** and **Joanne Ballard** (see video of the students in action posted on the UTK Geography blog at: <http://utkgeographyblog.blogspot.com/>).

Hyun Kim. Hyun joined the Department of Geography as a new faculty member in August 2011. He holds a Ph.D. in Geography from The Ohio State University in August 2008. Before joining UT Geography, he worked as a full-time instructor and



program director of the GIS certificate program in the department of Geography at the University of South Florida from 2008 to July 2011.

Hyun's research and teaching focuses on location analysis of urban transportation, security of transportation systems, facility location modeling, and GIS applications for health and crime. His dissertation, *Reliable P-hub Location Problems and Protection Models for Hub Network Design*, addressed new spatial location models that aim to enhance both a network's performance and its resiliency to the potential disruptions in urban transportation and telecommunication systems. Associated with his dissertation,

several papers are published in a diverse set of journals, including *Geographical Analysis*, *Journal of Geographical Systems*, *Environmental and Planning B*, and *International Journal of Applied Geospatial Research*.

Currently, Hyun's research expands and focuses on four topics. The first is geographical analysis of public transit systems of the U.S. and metro subway systems of other countries. This research addresses new methodologies to evaluate the resiliency of public transit systems, and the ways to enhance its system reliability in potential disruption scenarios. The second theme is a spatio-temporal analysis of urban transportation such as network autocorrelation in interregional commodity flows and space and time analysis of individual trips. The third topic focuses on location analysis of activities such as crime and health services. The final topic is to develop and apply hub location models for sustainable transportation using spatial optimization.

Hyun teaches graduate and undergraduate courses in Transportation and Geographical Information Systems, and plans to develop a course for GIS applications for urban issues including crime and health in the near future.



Hyun Kim and his family Eyrin and Eunjin, with Carol Harden at the Department's annual welcome reception in August.

Ron Kalafsky. Ron's research focuses on two main areas: 1) the strategies and challenges of Canadian firms entering the Chinese market and 2) the competitive issues of exporters from industrialized economies

such as the United States, Canada, and Japan. He has integrated findings from this research into many of his classes, including



Geography of the Global Economy. On the instruction front, he will also be an instructor in the Haslam Scholars program each spring semester, teaching the Perspectives on

Globalization course. Ron is also busy as the vice president of SEDAAG, currently helping to organize the program for this November's conference in Savannah.

Yingkui Li. It was another busy and productive year for Yingkui. He published several peer-reviewed articles in *Journal of Quaternary Science*, *Applied Geography*, *Quaternary international*, and *Quaternary Science Reviews*. He also co-



edited a special issue of *Physical Geography* that was published at the end of 2010. He received UTK Summer GRA funding for his master student **Zewen Liu** and was selected to

participate in the UTK Grant Writing Institute in the summer. He also received a Professional Development Award for his summer field work in Himalaya.

Li spent two months in China in the summer to conduct the field work in Himalaya supported by the UTK Professional Development Award and continued a project associated with Tibetan inland lake changes with the Center for Earth Observation and Digital Earth, Chinese Academy of Sciences. He also attended an international workshop in Kyrgyzstan and an international conference in Urumqi (China) to discuss further collaboration in glacial chronology and paleo-climate change in the Tibetan Plateau and in Tian Shan with colleagues from the U.S. (Purdue Univ.), Sweden (Stockholm Univ.), and China (Peking Univ.).





Li presented his work in Tibet and organized two sessions associated with environmental change on the Tibetan Plateau at the AAG annual meeting in Seattle. He also attended the American Society of Photogrammetry and Remote Sensing annual conference in Milwaukee to present his work on Tibetan inland lakes. During the summer, he also gave an invited talk at the Institute of Crustal Dynamics, China Earthquake Administration in Beijing.

In order to improve his performance in grant seeking, he attended the summer Grant Writing Institute organized by the UTK research office and is currently working on several proposals.

Lydia Pulsipher. Lydia retired from teaching at UT at the end of May. She will now use her time to continue research in Montserrat (see article on page 7 and the entry for Kevin Russell), pursue various projects related to Slovenia, and write a second college textbook for WH Freeman



Science Publishers, NYC. The world regional geography text is now in the planning stages for the 6th edition. The 5th edition came out in January 2011. For those who are wondering about such close timing, the dramatic

changes brought by the Arab Spring since January illustrate why frequent updating of world geography texts is necessary in this rapidly changing globalized world. Once the process starts, it takes 18 months to produce a new edition.

Lydia's first full year as Honorary Consul to the State of Tennessee for the Republic of Slovenia turned out to be so busy that the report to the Embassy in Washington D.C. is 18 pages long. Who knew?

Bruce Ralston. Bruce has been enjoying the reduced workload that comes with post retirement service by, umm, working. In particular, he has teamed with **Mike Meyers** and **Jiuyuan Liu** to build the Tennessee State Data Portal web sites

(<http://ctasgis02.psur.utk.edu/credapopulation/>). These sites allow users to explore data on a statewide and county-by-county basis and to download data tables derived from a variety of sources, including the American Community Survey, the Center



for Business and Economic Research, and the County Technical Assistance Service. This work builds on the Rich Internet Application tutorial Bruce built last year ([\[natlas2.geog.utk.edu/TutorHome/\]\(http://natlas2.geog.utk.edu/TutorHome/\)\). Mike and Bruce recently presented their work at the First International Workshop on Web-based Geographic Information Management. In addition to that conference, Bruce attended the Spatial Statistics 2011 conference in Twente, The Netherlands. In between these two international trips, Bruce and Mike presented their research at the AAG conference in Seattle.](http://</p></div><div data-bbox=)

During his trips, Bruce took advantage of the opportunity to study international transport and economic globalization. This included a tour of the port of Rotterdam-Europe's busiest port. In Shenzhen, China, Bruce met with local traffic experts (and UT Geography graduates) **Xiaohong Xin** and **Ling Yin**. The growth of Shenzhen and the development of its own port facilities (separate from Hong Kong) were quite impressive. In Wuhan, China Bruce met up with colleague **Shih-Lung Shaw** who is spending his sabbatical based at the transportation research center at Wuhan University. Bruce gave a presentation to that center.

Bruce plans to continue his work with Mike and Jiuyuan this coming year and to delve more deeply into the emerging area of HTML5 and online mapping.

You can now follow all the major (and some not so major) events of the Department of Geography on our Community Blog at:
<http://utkgeographyblog.blogspot.com/>

Madhuri Sharma. Madhuri joined the Department of Geography as a new faculty member (Assistant Professor) in August 2010 after securing her Ph.D. in Geography from The Ohio State University in August 2009. She completed her dissertation, *Spatial Integration and Neighborhood Diversity in US MSAs, 1990-2000: A Mixed-Method*



Approach under the supervision of Prof. **Lawrence A. Brown.**

Madhuri's research broadly focuses on examining spatial patterns of racial/ethnic residential segregation, the role of housing market elements in residential choices, intergenerational assimilation of immigrant population, and urban sustainability issues, particularly those occurring from a strong nexus of real estate and economic development across intra-urban spaces.

During the summer of 2011, she initiated new research in the metropolitan statistical area of Knoxville, Tennessee and in National Capital Territory of Delhi, India. In Knoxville, she is currently collecting data from homeowners and those who lost homes to foreclosures in the recent past so as to understand the reasons, perspectives, and complex relationships between the supply and the demand side of the housing market, as well as aspects of race, culture, and class that might be affecting Knoxville's socio-economic landscapes. In India, she spent five weeks in the National Capital Territory of Delhi to collect primary as well as secondary data on her research titled "Labor Segmentation in Informal Economy: A Case Study of New Delhi, India." She has come back with interesting findings and stories from her new research in Delhi that she is working on for compiling in several peer reviewed publications (see adjacent photo).

During 2011-12, Madhuri had several manuscripts published (or accepted). Her research titled "A Geographic Perspective on Intra-Urban Racial/Ethnic Diversity, Segregation, and Clustering in Knoxville, Tennessee: 1990-2000" was published in *Applied Geography*. 2011. Vol. 32,

p. 310-23; another refereed chapter titled "Asians and Hispanics in the American South: The Case of Tennessee" has been accepted for publication in an edited volume *Race, Ethnicity and Place in a Changing America*. Second Edition. Albany: SUNY Press, 2011 (Eds. John W. Frazier, Joe T. Darden, and Norah F. Henry). A third paper co-authored with Lawrence A. Brown (Madhuri Sharma as the lead author) titled "Racial/Ethnic Intermixing in Intra-Urban Space and Socio-Economic Context: Columbus Ohio and Milwaukee Wisconsin" was submitted to another refereed journal and is currently under review. She is working on several other manuscripts that will soon be submitted to peer refereed journals.

Madhuri is professionally active with Ethnic Geography, Population Geography, and Urban Geography specialty groups of the AAG; she serves as a Board Member for Ethnic Geography Specialty Group and on various student paper/best



Madhuri with an informal laborer engaged in scrap metal sorting whom she interviewed during her summer field work in the National Capital Territory of Delhi, India.

dissertation award committees. During the annual meeting of the AAG at Washington D.C., in April 2011, she presented her new research "Intra-Urban Residential Intermixing in Knoxville, TN: A Preliminary Analysis", and a paper titled "Residential Intermixing in Columbus and Milwaukee: People and Perceptions" at the annual meeting of the

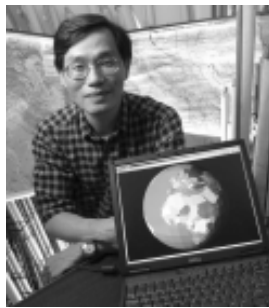




South Eastern Division of AAG held at Birmingham, Alabama in November 2010. Her co-authored paper "Racial/Ethnic Intermixing in Intra-Urban Space and Socio-Economic Context: Columbus Ohio and Milwaukee Wisconsin" was presented at the Third Global Conference on Economic Geography, organized by the IGU Commission on The Dynamics of Economic Spaces. Madhuri he also serves as a reviewer of various refereed journals.

Concerning teaching interests, Madhuri offers graduate and undergraduate courses on urban, economic, and urban social geography, including regional geography courses. A new course on Regional Geography of South Asia (Geog 375) is being offered in Fall 2011. She will be offering a seminar on Urban-economic/social Geography (Geog 541) in Spring 2012, and she plans to offer courses on urban sustainability in the near future.

Shih-Lung Shaw. Another busy year passed by quickly. Shih-Lung graduated two Ph.D. students (Dr. **Ling Yin** and Dr. **Robert Stewart**) and two master's students (**Yitu Xu** and **Ziliang Zhao**) this year. On funded projects, Shih-Lung currently works on the Tennessee One Road project funded by the Tennessee Department of Transportation, a Joint Directed Research and Development (JDRD) grant



ment (JDRD) grant funded by UT Science Alliance, and a research grant funded by the National Natural Science Foundation of China (with Dr. **Zhixiang Fang** who was a visiting scholar in our department in 2008). In addition, Shih-Lung has seven refereed journal articles that are published or accepted for publication since January of 2011:

2011. Fang, Z., Li, Q., Zhang, X., and Shaw, S-L. A GIS data model for landmark-based pedestrian navigation, *International Journal of Geographical Information Science*, accepted for publication.

2011. Yin, L., Shaw, S-L., Eric Carr, Wang, D., Berry, M., Gross, L. and Comiskey, J. A framework of integrating GIS and parallel computing for spatial control problems – a case study of wildfire control, *International Journal of Geographical Information Science*, accepted for publication.

2011. Shaw, S-L. Guest Editorial - Geographic information systems for transportation: an introduction, *Journal of Transport Geography*, 19(3), 377-378.

2011. Chen, J., Shaw, S-L., Yu, H., Lu, F., Chai, Y. and Jia, Q. Exploratory data analysis of activity diary data: a space-time GIS approach, *Journal of Transport Geography*, 19(3), 394-404.

2011. Yin, L., Shaw, S-L. and Yu, H. Potential effects of ICT on face-to-face meeting opportunities: A GIS-based time-geographic exploratory approach, *Journal of Transport Geography*, 19(3), 422-433.

2011. Wong, D. and Shaw, S-L. Measuring segregation: an activity space approach, *Journal of Geographical Systems*, 13(2), 127-145.

2011. Yu, H. and Shaw, S-L. GIS designs for studying human activities in a space-time context, in T. Nyerges, H. Couclelis, and R. McMaster (eds.), *Handbook of GIS and Society*. Thousand Oaks, CA: SAGE Publications, 251-268.

Shih-Lung also travelled extensively this year to give presentations and to conduct collaborative research. He delivered an invited presentation at a *Specialist Meeting of Spatio-Temporal Constraints on Social Networks* held in Santa Barbara, California on December 13-14, 2010. In March and May of 2011, he was invited to visit Wuhan University and the Chinese Academy of Sciences to conduct collaborative research. In April of 2011, Shih-Lung organized (with **Hongbo Yu**) two time geography sessions and delivered several papers with his students at the Annual AAG Meeting held in Seattle. In June of 2011, he was invited to attend a workshop in San Diego, CA and served as the Committee Chair to review a major NSF grant.

On professional services, Shih-Lung continues to serve on the editorial boards of *Journal of Transport Geography*, *Journal of Geographic Information*

System, and *Southeastern Geographer*. He also serves on the Membership Committee of the Association of American Geographers (AAG). He has reviewed manuscripts for *Annals of the AAG*, *Environment and Planning A*, *International Journal of Geographical Information Science*, *Journal of Transport Geography*, *Journal of Geographical Systems*, *Geografiska Annaler B*, *Journal of Geographic Information System*, *Transactions on Intelligent Systems and Technologies* in 2011. In addition, Shih-Lung served as the Guest Editor of a Special Issue on GIS for Transportation for *Journal of Transport Geography*. He now serves as the Guest Editor of a Special issue on Time Geography for *Journal of Transport Geography*. Shih-Lung also co-organized (with **Feng Lu** at the Chinese Academy of Sciences and **Xing Xie** at the Microsoft Research Institute Asia) a Trajectory Data Mining and Analysis Workshop at the 13th ACM International Conference on Ubiquitous Computing held in Beijing, China on September 17-21, 2011.

Finally, Shih-Lung is honored to receive the Betty Lynn Hendrickson Professorship from the College of Arts and Sciences and a Professional Development Leave (i.e., sabbatical leave) award from UT. He currently conducts collaborative research at Wuhan University in China. Additionally, Shih-Lung is invited to give a seminar on time geography and space-time GIS at the Stockholm University in Sweden. He also is invited to give a seminar at the Swedish Road and Traffic Institute and to visit the "Hägerstrand Room" at the Linköpings University in Sweden that has a collection of papers, books, and manuscripts donated by Torsten Hägerstrand. After his visit of Sweden, Shih-Lung is invited to give a presentation at the 5th ICT Expert Group Meeting in Berlin, Germany. Shih-Lung plans to return to Knoxville before the spring semester of 2012.

Rajiv Thakur. Rajiv's research interest centers on regional economic development as exhibited by the literature on regional innovations and cluster-based economic development. While engaging in causal explanation(s) of the emergence or persistent presence of spatial variability in



regional economic development his current research examines spatial dynamics of the science and technology indicators, the shipbuilding industry clusters and foreign direct investment in peripheral regions of the U.S. More specifically, this research abounds with policy relevant questions. He currently teaches World Regional Geography and Economic Geography.

The 99th Indian Science Congress Association (ISCA) has invited Rajiv as an invited speaker to present his research on *Science and Technology Indicators in India: Policy Geography* at Bhubaneswar in India from January 2-7, 2012. Rajiv will be one of the few invited foreign delegates to attend the ISCA meeting. The Indian Science Congress Association (ISCA) is a premier scientific organization of India, started in 1914, with Headquarters at Kolkata or Calcutta. It meets annually in the first week of January.

While in India, Rajiv will also present a paper at The 11th Asian Urbanization Conference being hosted by the Department of Geography, Osmania University Hyderabad, India in association with The Asian Urban Research Association (AURA). AURA was established in January 1986 and is housed in the University of Akron, Ohio. Rajiv's paper is titled "Hierarchic Structures of Polycentric Urban Development in India".

Rajiv is the Chair of the Regional Development and Planning Specialty Group of the AAG. He has attended every annual meeting of the AAG since 2004. He is also engaged in an edited book project (with Ashok K. Dutt, Allen G. Noble and Frank G. Costa) titled *Spatial Diversity and Dynamics in Resources and Urban Development* to be published by Cambridge University Press, India.

Liem Tran. Liem has continued his collaborative work with the U.S. Environmental Agency (EPA)'s Regional Vulnerability Program (ReVA) and the Future Midwest Landscape (FML) project. He has served as an expert for EPA on regional assessment





and modeling since 2009 and has been reappointed for the year of 2012. Several regional integrated assessment methods developed by Tran

have also been used extensively by ReVA. His research has been continuously funded by EPA through the USGS to support a full-time research associate and a couple of graduate assistants for several modeling activities.

Tran has developed a hydrologic model called Regional Hydrologic Modeling for Environmental Evaluation (RHyME2) for quantifying annual nutrient loads in stream networks and watersheds. RHyME2 is a cross-scale statistical and process-based water-quality model. The model quantifies the direct impact of flow on annual nutrient load in a non-linear fashion and estimates transport and transformation of nutrient sources in the terrestrial and aquatic ecosystems to predict nutrient load associated with long-term balanced flow at the regional scale in a regional module. EPA has discussed with Tran the possibility of implementing RHyME2 at national scale and using it in the EPA's National Atlas.

As for teaching, Tran and his students are having fun with various environmental modeling issues in his GEOG 511 class – GIS & Environmental Modeling – in Fall 2011.

Micheline van Riemsdijk.

Micheline traveled with her spouse Kevin Durand to Bangalore, India in December 2010. They interviewed human resource



(HR) managers and information technology (IT) specialists about the IT industry in India. This trip was funded by a Ready for the World grant from the University of Tennessee to create

course materials that promote intercultural awareness. Micheline created a course module about India for her Population and Environment course, and she will submit an

article about talent recruitment in the IT industry in India to *Global Networks*.

In June 2011, Micheline was a visiting member of the Industrial Relations and Labor Market Policy group at FAFO, the Institute for Labor and Social Research in Oslo, Norway. She interviewed HR managers, union leaders, and representatives for professional organizations about their strategies to influence international skilled migration policies at various scales. The fieldwork data were incorporated into a grant proposal for the National Science Foundation. Dr. van Riemsdijk's research on the European Blue Card is forthcoming in *Population, Space and Place*, and an article on the ethnic valuation of skill has been accepted by the *Journal of Ethnic and Migration Studies*.

Grad Student Updates

Joanne Ballard is a first year Ph.D. student concentrating in Quaternary Paleoenvironments, co-advised by Dr. Sally Horn and Dr. Zheng-Hua Li (Earth & Planetary Sciences). She is a Graduate Research Assistant for a project funded by the National Science Foundation focusing on developing isotopic and other proxy records of paleoclimate from lakes and wetlands in the southeastern U.S. She received her B.A. in Geoscience from Indiana University in 2007. She completed her M.S. in Geology at the University of Cincinnati in 2009, conducting paleofire research on four lakes in Michigan. She was advised by Dr. Thomas Lowell (glaciologist), and spent two weeks in Iceland learning glacial field methods. She also spent a week in Dr. Cathy Whitlock's Paleocology lab in Bozeman, Montana in 2008 to strengthen her charcoal methodology. Joanne comes to UTK from the United States Census Bureau, where she worked as a Cartographic Technician in the Geography Branch.

Melanie Barron is a second year M.S. student. Her advisor is Dr. Joshua Inwood, for whom she also works as a

research assistant. Her broad research interests include geographies of community organizing, social justice, racism, and violence. She is currently researching a truth and reconciliation project being organized in Boston, MA that seeks to address the harmful legacies surrounding the violent desegregation of schools in the 1970s. In addition to being funded by Dr. Inwood's NSF grant, her research was funded by a grant awarded by the AAG's Qualitative Research Specialty Group. She currently serves as president of the Graduate Association of Research Geographers, and she is also coordinating a series of professional development workshops for graduate students. She is grateful to be surrounded by a supportive group of friends and colleagues, and is looking forward to the year ahead.

Mathew Boehm is a third year M.S. student working under the direction of Dr. Sally Horn. He received his Bachelor of Arts in Anthropology, with a minor in Geography, from the University of West Georgia in Spring 2009. Mathew's thesis research focuses on reconstructing the vegetation and fire history of a Southern Appalachian Bog in western North Carolina. His research interests include environmental reconstruction and human-environment interactions.

Charlynn Burd is a fifth year Ph.D. student. She received her A.A. degree from Florida College, Temple Terrace, Florida, and a B.S. in Geography from Western Kentucky University in 2001. She received her M.A. degree from the University of North Carolina – Charlotte in 2005. Her current focus is on regional economic development, migration, and the creative class. She is currently working on her dissertation which examines the migration of the creative class at a sub-metropolitan scale. She also has a keen interest in GIS and cartography. She continues to work for the University of Tennessee's Center for Business and Economic Research (CBER) with Dr. Nicholas Nagle on various projects. Outside the department, she takes advantage of every opportunity to travel.

Jiaoli Chen is a first year Ph.D. student. She received her master's degree in

cartography and geographical information system at Wuhan University, China. Her present research interest is GIS for transportation and capturing patterns of moving objects.

Neil Conner is a first year Ph.D. student studying with Dr. Joshua Inwood. He received his B.A. in History and Education from the University of Arizona in 2004 and his M.A. in International Studies from Old Dominion University in 2011. From 2004 to 2009 he taught World Geography, AP Human Geography and U.S. Government at Bayside High School in Virginia Beach, Virginia. Neil's broad area of study is in Cultural and Political Geography. Specifically, he is interested in contested notions of identity (nationalism, ethnicity and religion). Neil's M.A. Thesis was titled *You'll Never Walk Alone: The Scales of Identity of Celtic Football Club Supporters*. In this ethnographic study, he examined the various identities attached to the global fan-base of Celtic Football Club through the use of several qualitative research methods. He is currently a graduate teaching assistant in World Regional Geography and is in the process of finalizing his dissertation topic.

Matthew Cook is a second year M.S. student studying with Dr. Micheline van Riemsdijk. He received a B.S. in Geosciences with a concentration in Geography and a B.S. in Communications from the University of Tennessee at Martin in May 2009. Cook's major foci are European, cultural, urban geography, and critical theory. His Master's thesis focuses on memorialization of the Holocaust in Berlin, Germany, and its effects on the urban landscape. Specifically, he is researching a memorialization project called the Stolpersteine, or "stumbling stones." In May, Cook conducted ethnographic observations and interviews with Berliners and the memorial project's creator, Gunter Demnig. This fall, Cook was named a graduate teaching associate, teaching Geography 101 for the department. In addition, he has taken the lead on the department's grad student reading group, the Semi-Required Reading Collective, after developing the group in spring 2011 with Melanie Barron. Outside the walls





of Burchfiel, Cook sings with the Knoxville Choral Society, Knoxville Chamber Chorale, and the Adult Parish Choir at Church Street United Methodist Church.

Amy Davis is a second year M.S. student working under Dr. Shaw. She received her B.A. in Geography from the University of Tennessee in Fall 2005. Her current focus is on GIS for transportation.

After receiving her B.A., she worked for a year as an intern at the Knoxville/Knox County Metropolitan Planning Commission. She is currently working as a GIS technician at the First Utility District of Knox County.

Maja Djorcev is a first year M.S. student from Slovenia where she obtained her B.S. in the Geography of Contact Places from the University of Primorska in the spring of 2010. During her undergraduate studies she became interested in environmental issues, specifically the environmental conservation of endangered ecosystems and global climate change. In her final thesis she compared the ecological processes of organic and biodynamic viticulture (winemaking) in Slovenia. Since writing her undergraduate thesis she has continued her viticulture research, but has since transitioned to the social, economic and anthropological aspects of grape and wine production. In April 2011, along with Conrad M. Goodwin, she was the senior author of an article on Slovenian organic viticulture that was presented at the Wine Specialty Group's sessions at the Association of American Geographers' annual meeting in Seattle. Her research is currently focused on economic and cultural aspects of small and unique organic wineries and how they cope with globalization.

Alex Dye is a first year M.S. student. He moved to Knoxville from Indianapolis, IN, where he received a B.A. in Geography from Indiana University-Purdue University Indianapolis. Dye is currently working as a teaching assistant for Geography 131 while narrowing down a topic for his Masters research. His interests include biogeography and physical geography.

Brenna Elrod is a first year M.S. student. She received a B.A. in Historic

Preservation and Community Planning from the College of Charleston in 1999. Her research interests are broad, but primarily include urban and rural development in Knoxville and Chattanooga. She is also interested in using her previous experience with graphic design software to present research data in visually intriguing ways.

Drew Gaskins is currently finishing up his M.S. thesis entitled "The Social Ecology of Downtown Revitalization: The Case of Asheville, North Carolina." He received his B.A. in Geography at the University of Tennessee in the spring of 2008. His research interests include urban geography, with particular focus on social ecology, downtown revitalization, and urban planning and design. Drew is currently employed as a planner with the civil design firm Gresham Smith & Partners in Nashville, Tennessee. When he is not busy working, Drew enjoys spending time with his daughter, playing disc golf, and navigating Nashville's burgeoning food truck scene. He also has a soft spot in his heart for craft-brewed beer.

Kassie Hauser is a first year M.S. student. She received her B.A. in Geography and Sociology from the University of Wisconsin-Madison in the spring of 2008. Before attending graduate school, Kassie worked as an executive director for a downtown revitalization non-profit and at Klondike Gold Rush National Historical Park in Skagway, Alaska. Her current research focus is on climate change mitigation and adaptation planning in public land management. Specifically she is researching the Climate Change Scenario Planning Project for the Alaska Region of the National Park Service. She will be attending a workshop in Juneau, Alaska to gather the bulk of her qualitative data for the study. This past summer, Kassie interned with the Geographic Information Sciences and Technology Group at Oak Ridge National Laboratory to expand her knowledge of geographic information systems.

Gengen Friday is a first year Ph.D. student working with Dr. Shaw focusing on time geography and the telecom industry. Gengen was born in Beijing China,

but grew up in Washington D.C. and Shanghai. He has also lived in San Francisco, Harbin, Paris and Cusco. Gengen graduated with a Bachelors and Masters degree from Georgetown University in 2007 and has worked as a medical volunteer in Peru, for a biotech company in China, for USAID, the IMF, Apple, the Microbiology Department at UTK, and Calhoun's on the River. He speaks Chinese, French and Spanish and enjoys travelling. Gengen has a two year old daughter named Valeria.

Sarah Jones is glad to be back at UT, this time as a graduate student! She received her B.A. in Geography in May 2011 from the University of Tennessee, and is now a first year Masters student studying physical geography focusing on Dendrochronology under Dr. Henri Grissino-Mayer. After spending two years as a research assistant in the Laboratory of Tree-Ring Sciences, Sarah went to New Mexico this summer to collect samples for her own research project. Her thesis looks at stand dynamics of a unique pygmy forest growing on the volcanic landscape of El Malpais National Monument in New Mexico.

Jason Kaufman is a first year M.S. Student. He received his B.S. in Earth System Sciences from the University of Alabama in Huntsville in the Fall of 2009. He came to the department by way of past GIS work while finishing up his B.S. degree. His current focus is on GIS and he is progressing from this broad topic to specifics with the help of his adviser, Dr. Tran.

Kevin Krivacsy is a second year Ph.D. student working with Dr. Shaw. He received the Newton W. and Wilma C. Thomas Graduate Fellowship in the Humanities and Social Sciences to pursue a doctoral degree in the department. He received a M.S. in Geography from the University of Georgia, where he worked under the direction of Dr. Xiobai Yao. His academic interests include transportation/land use interactions, urban geography, quantitative methods in geography, network analysis and transportation/land value interactions. His current research focuses on the extent to which urban accessibility contributes to long term,

local economic stability. He is also excited about working on other projects including an article concerning the implications of virtual location and activities to the discipline of geography as well as a project with a colleague from UGA about small area estimations in commuting patterns. Outside of the department, Kevin enjoys following the NBA, listening to music and reading.

Yanan (Nancy) Li just started her Ph.D. program this semester (fall 2011). Climate change, geomorphology, and glaciology are her main academic research interests. She received her B.S. degree from Beijing Normal University in 2008 with a major in Geography. Then she came to the U.S. to begin her master's program at the University of Tennessee and earned her M.S. degree in December 2010. Her master's focus was in dendroclimatology, and her thesis was titled *Dendroclimatic Analysis of Climate Oscillations for the Southeastern United States from Tree-Ring Network Data*. For her Ph.D. research, she expects to extend climate change studies through a perspective of glacial change, with GIS techniques applied. Her study area will be Tian Shan in China, which is close to her hometown. Yanan has been a graduate teaching assistant in the department for Geography 101, 102 (World Regional Geography I, II), 131 (Physical Geography), 320 (Culture Geography), and 331 (Natural Hazards).

Sumang Liu is a second year M.S. student. He got his B.S. in Geographic Information Science (GIS) at Wuhan University. His research includes time-geography, agent-based activity modeling, and spatio-temporal analysis on social networks. He is especially interested in leveraging high performance computation to explore the geographic and sociological phenomena with large agent-based datasets. In his undergraduate study, he won the "Mr. Wang Zhizhuo" Scholarship, which is one of the highest academic awards for students majoring in land survey, cartography, remote sensing and GIS in China. He also won the second prize for the "Challenge Cup" National College Student Business Competition. As a graduate student, he interns at the Environmental Science Division





at Oak Ridge National Lab, focusing on integrating the strength of spatial analysis of GIS and the computational capacity of super computers for bio-fuel modeling and visualization. He is also the head teaching assistant for the GIS lab at the University of Tennessee. He is now under the supervision of Dr. Shih-Lung Shaw and is working to extend his research on individual tracking analysis and online social network analysis.

Ingrid Luffman is a Ph.D. candidate working under the direction of Dr. Liem Tran. She received her B.Sc. in Math-Science and her M.Sc. in Earth-Sciences from the University of Ottawa in Canada, and spent 10 years in the workforce prior to beginning her doctoral studies. Her dissertation research focuses on the relationship between land use, water quality, socioeconomic factors, and disease in East Tennessee. Other research and service activities focus on stream restoration projects for impaired streams in the Tri-cities region of Northeast Tennessee. Ingrid has received grants from Tennessee Department of Environment and Conservation (TDEC), Tennessee Department of Agriculture (TDA) and the Tennessee Valley Authority (TVA) to complete land use assessments for nine streams in the Boone Watershed. She currently serves as Secretary for the Boone Watershed Partnership and is a lecturer in geography at East Tennessee State University.

Maria Martinez is a first year M.S. student. She received her B.S. in Natural Resources Conservation with a focus on GIS from the University of Florida in Spring 2001. After receiving her B.S., she worked as a Senior GIS Analyst and Project Manager at an environmental engineering firm with projects focusing on the application of GIS in water resources, LiDAR and overall data management tasks. She is currently working as a GIS Analyst at Oak Ridge National Laboratory assisting in data discovery, data processing, and QA/QC of spatial information to be used by researchers in climate science.

Kenric McCay is a second year M.S. student studying under Dr. Ron Foresta. He received his B.A. in

Geography from the University of Tennessee in Spring 2008. He is currently organizing and gathering data on his thesis involving the Third Creek Greenway in Knoxville, TN. His research interests are GIS, urban geography, and transportation geography.

Feng Pan is a second year M.S. student from Shanxi province, China. He earned his B.S. in Agricultural Resources and Environment from Nanjing Agricultural University, China in spring 2010. His background includes work in soil science, plant nutrition, and remote sensing. His main research interests include GIS, environmental modeling, and GIS application in hydrology and agriculture. His current focus is on hydrologic modeling and he is using the physical hydrologic model AnnAGNPS and GIS technology to deal with the problem of PUB (Prediction of Ungauged Basins). His advisor is Dr. Liem Tran. Currently, Feng works as a teaching assistant for Geography 411 and Geography 101.

Jesse Piburn is a first year M.S. student. He completed his B.A. in geography at the University of Tennessee in December 2010. Since receiving his B.A. he has held a GIS internship at the Knoxville Utilities Board (KUB), as well as a four-month post-bachelors research appointment at Oak Ridge National Laboratory in the GIST group. He is interested in economic geography and GIS. He is newly married and originally from Gallatin, TN.

Alex Pilote is a second year M.S. student working in the Laboratory of Tree-Ring Science with Dr. Henri Grissino-Mayer. He received his B.S. in Conservation Biology from Tennessee Technological University in the spring of 2010. Alex's thesis research involves using dendrochronology to better understand the relationship of fire and stand structure in El Malpais National Monument in New Mexico. Currently, Alex is the head teaching assistant for the introductory physical geography course.

Dorothy Rosene is a first year M.S. student working under Dr. Henri Grissino-Mayer. She received her B.S. in Earth and Environmental Systems with a

concentration in Atmospheric and Surface Processes from Indiana State University in Spring 2011. Dorothy's undergraduate thesis focused on using GIS and dendrochronological techniques to create a habitat model for Pandora moth outbreaks in Ponderosa pines of the western United States. Her research interests include dendrochronology, biogeography, ecology, and climatology. Her current research is concentrated on phenology of three tree species in local ecosystems. She is working as a teaching assistant in the introductory physical geography course.

Kevin Russell is a second year M.S. student. He received his B.A. in Geography at the University of Tennessee in the fall of 2010. During the spring of 2011 he was awarded the McClure Scholarship through the Center for International Education and the McCroskey Scholarship for research towards his thesis, "Visualizing the Historic Landscape of Montserrat: Social Justice through Community Mapping in a Post-Colonial Environment". Kevin travelled to the Caribbean island of Montserrat during the summer of 2011 to perform topographic surveys using differential GPS of the archaeological dig at the Cpt. Wm. Carr Estate, a 17th century sugar plantation, and ethnographic interviews of local community members familiar with the social and environmental history of the regions surrounding the Cpt. Wm. Carr Estate. While on Montserrat, Kevin participated in a radio interview regarding his research with the local BBC station and gave a presentation of his preliminary results to local community members at the Montserrat National Trust. During the fall 2011 semester Kevin is working to create an interactive map application of his research data and will participate in the poster and dynamic map competitions at the North America Cartographic Information Society held in Madison, WI.

Nicole Samu is in her final year as a M.S. student. She received a B.A. in Psychology from UT in 2005 and completed her B.A. in Geography at UT in May, 2008. Her current focus is finishing her thesis titled "Spatial Discrepancies between Stream Network Datasets and their Effects on Hydrologic Applications: A Comparative

Analysis between NHDPlus and LIDAR-Derived Networks." Nicole has also been involved in GIS-based population distribution and dynamics research under Oak Ridge National Laboratory's (ORNL) HERE program as an undergraduate, post-bachelor's, and graduate student.

Chris Underwood is a Ph.D. candidate working under the direction of Dr. Sally Horn. Together, they are reconstructing the long-term fire history in Great Smoky Mountains National Park. His dissertation research, supported in part by the University of Tennessee GK-12 Earth Project, the Joint Fire Science Program, and the Great Smoky Mountains Conservation Association Carlos C. Campbell Memorial Fellowship, focuses on the use of soil charcoal to reconstruct forest-fire histories. In spring 2009, Chris was awarded a Doctoral Dissertation Research Improvement grant (\$10,550) by the NSF. He recently co-authored a paper, soon to be published in the *American Midland Naturalist*, titled "Age-Related Changes in Pitcher Characteristics and Prey Capture of Seasonal Cohorts of *Sarracenia alata*." After two years of work with the NSF-funded GK-12 Earth Project and a year of teaching Geography 131 and 132: Geography of the Natural Environment, Chris moved on to the College of Arts and Sciences Office of Academic Services where he served as an academic advisor. He is currently a lecturer in the Department of Geography and Geology at the University of Wisconsin-Platteville.

Michael Vanderlan is a first year Ph.D. student. Before coming back to the University of Tennessee he attained his B.S. in Business Administration in 2005 from the University of Tennessee. After three years of various positions with local companies he decided to re-enroll in the university in the college of engineering. Michael earned his B.S. in Industrial Engineering in 2010 and his M.S. in Industrial Engineering in 2011. His advisor is Dr. Shih-Lung Shaw and his research interests are GIS applications, transportation and energy modeling and visualization.





Yang Xu is a first year Ph.D. student. He received a B.E. in Photogrammetry and a B.A. in Business Administration from Wuhan University in China in 2009. In summer 2009, he served as an intern at the Wuhan Land Resources and Planning Bureau. In 2011, he earned a M.S. in Cartography and GIS from Wuhan University. His current research interests are tracking data analysis and time geography. He will study transportation GIS and space-time GIS under the guidance of Dr. Shih-Lung Shaw.

Ziliang (Ray) Zhao is a first year Ph.D. student. He received his master's degree in Geography at the University of Tennessee in August 2011. He focuses on space-time GIS and GIS for transportation. Specifically, he is developing a space-time GIS framework which supports the storage, manipulation, analysis and visualization of spatial data which vary over time. This

framework would be able to handle point, polyline, polygon and raster data. Ray is a graduate research assistant for a project led by Dr. Shaw, with a joint effort from Oak Ridge National Lab. In this project, the goal is to integrate large temporal remote sensing datasets and find out the potential impact of historical climate change events.

Yicong Zhong is a first year M.S. student. He received his B.S. in Statistics and Actuarial Science from the University of Minnesota Duluth in spring of 2011. His research interests include Intelligent Transportation Systems (ITS), spatio-temporal database and analysis. In recent years, Yicong has gained experience working with GIS including internships at ESRI, ESRI China, and local GIS companies in China. Yicong is working under the direction of Dr. Shih-Lung Shaw.

Alumni Seen at the AAG Meeting



The esteemed Drs. Martin Lafrenz (Portland State) and Jenny Rogalski (SUNY-Geneseo)

James Baginski and Christine Biermann, now Ph.D. students at Ohio State.



Alumni Updates

If you would like to provide an update for the '12/'13 newsletter, just email it to Kurt Butefish at kbutefis@utk.edu or complete the form below and mail it to Kurt in care of the department.

We were saddened to learn from his wife, Joy Goldberg, of the passing of Alumnus, Dr. Paul Goldberg (M.S. Geography 1971).

GOLDBERG , PAUL ELKIN - age 64, of Kingston, died Saturday, May 30, 2009, in The Bridge at Rockwood after a year-long battle with cancer. Although born in Texas, he truly called Roane County his home.

He worked tirelessly in the community to promote education, industry, the arts, and leadership. He established Leadership Roane County, was active in Harriman Rotary Club and Roane County United Way and worked at Roane State Community College for 36 years. He was also active in East Tennessee Leadership Association, Nine Counties One Vision, Tennessee Community Education Association and the Tennessee Alliance for Continuing and Higher Education. He won several distinguished awards, such as the Barbara Beeler Award for Outstanding Service, the Roane County Chamber of Commerce Distinguished Service Award, and the Robert M. Smith Outstanding Tennessee Leadership Educator Award.



Please Keep Us Up To Date

Please share your news with us, and other alumni, *especially if you have a new address*. Return this form to Kurt Butefish, 304 Burchfiel Geography Building, Knoxville, TN 37996-0925, or email to kbutefis@utk.edu. We'll update our alumni database so you continue to receive the Newsletter and include your news in the next edition.

Name: _____

Degree(s) if any; and Year(s): _____

Address: _____

Email: _____

NEWS... (employment, career activities, family, achievements, awards, publications, travel, other... please attach additional sheets as necessary):



This fall we said goodbye to Denise Stansberry who had been the accounting specialist for the department and who had worked at UT for 24 years. Denise left Tennessee to marry and begin the next chapter of her life in North Carolina. Pictured left to right at Denise's going away reception are Gary Phillips, Denise, Tracy Branch, and Carol Harden.

The Newsletter of the University of Tennessee Department of Geography

Department of Geography
University of Tennessee
304 Burchfiel Geography Building
Knoxville, TN 37996-0925

E01-1038-001-12

2011/2012

The University of Tennessee is an EEO/AA/Title VI/Title IX/Section 504/ADEA institution in the provision of its education and employment programs and services. All qualified applicants will receive equal consideration for employment without regard to race, color, national origin, religion, sex, pregnancy, marital status, sexual orientation, gender identity, age, physical or mental disability, or covered veteran status.