UCSB Geography is internationally recognized as one of the best Departments of Geography in the world, and we have been ranked among the top doctoral programs in the U.S. by a variety of indices for the last 15 years. Back in 1995, The National Research Council ranked us number 4 in the nation, based upon reputation by peer review. In its latest (2010) Assessment of Research-Doctorate Programs, the NRC used a new methodology designed to show the full complexity of the data and the difficulty of giving a unique ranking, and each program and department was given a range of possible rankings, depending on how much weight was given to the different components used in the ranking.

The 2010 NRC Assessment of Research-Doctorate Programs rates UCSB Geography as number one in the nation at best or number six at the very least, depending upon the weights given to the assorted criteria used. Ironically, our own Graduate Division rated us number 2 in the nation, a ranking based on a “sort by S-weight 5th, then 95th percentile rank,” while Cornell University concluded that UCSB Geography is number 1, using a ranking “sorted by R Mid.” In the same vein, phds.org ranked us the number 1 “large, prestigious program” among Departments of Geography in the USA” in 2009, and the Chronicle of Higher Education ranked us number two in the nation on its “Top Research Universities Faculty Scholarly Productivity Index” in 2008.

The current top 10 list of Departments of Geography, at least according to the UCSB Graduate Division, includes (in descending order) Boston University; UCSB; the University of Maryland, College Park; UCLA; the University of Colorado, Boulder; the University of Wisconsin, Madison; Penn State University; the University of Oregon; Clark University; and the University of South Carolina, Columbia. Congratulations to BU geographers, including some of our distinguished alumni, for their success: Curtis E. Woodcock (PhD 1986, Chair: David Simonett), Suchi Gopal (PhD 1988, Chair: Terry Smith), and Mark Friedl (PhD 1993, Chair: Frank Davis).

“UC Santa Barbara is very proud that among our 31 doctoral programs assessed by the NRC, 10 programs, or nearly a third, have a range of rankings reaching into the top five in the country; 14, or 45%, are in the range of the top 10; and 20, or nearly two-thirds, are in the range of the top 20,” said Chancellor Henry T. Yang. “These new rankings reflect UC Santa Barbara’s rapid rise in our world-class stature over the decades, and serve as a resounding affirmation of the quality and diversity of our doctoral programs, which form the fundamental basis of a strong research university. Our top-notch faculty, outstanding students, and dedicated staff are all to be credited and thanked for this highly interdisciplinary and collaborative achievement.”
Fall 2010 started with a bang, with a series of good things coming to the Department. Two developments deserve particular mention: the Jack and Laura Dangermond Chair and the newest rankings from the National Research Council’s Assessment of Research-Doctorate Programs. The first represents the first Chair for the Department, and I am pleased to announce that the first recipient of this honor is Dr. Michael Goodchild (who was also one of only two UCSB faculty elected as a Foreign Member of the Royal Society this year!). NRC rankings, while a bit complicated, place the department as high as number one and no lower than number six among U.S. Geography PhD programs, making the Geography Department the top ranked department in our campus Division and one of the highest ranked departments on campus (see the story on page one for more details). As I sat in one of our recent colloquia, listening to several of our second year graduate students present summaries of their research, I could not help but be impressed and think, as good as the rankings are, how they fail to capture how strong the program really is and how good the students really are. Furthermore, while the NRC Assessment does not speak of undergraduate education, a simple walk down the halls of Ellison, where undergraduate projects are displayed as posters, will reveal the high quality of a Geography education that runs throughout the program.

Geography has been, and remains critical to an improved knowledge of our planet. During my second year as Chair, I am, if anything, even more impressed by the quality of our faculty, students, and staff. I feel honored to have the opportunity to direct a department that is helping local, state, national, and international communities address critical issues, such as climate change and its impacts, habitat loss, reserve design, efficient transportation, improved urban design, renewable energy, and hazards. Recent events, such as the Gulf Oil Spill and Cholera in Haiti, further illustrate the critical need for accurate, time relevant geospatial data, where a multidisciplinary approach may be the only way to address the problem. Having recently navigated the streets of Toulouse, France, guided by Google maps on an iPhone, I have become even further impressed by the way Geography impacts our daily lives, in which tools that did not even exist 10 years ago are now considered a necessity (try driving in Toulouse and you will understand).

The generous support of alumni and friends is important to the advancement of the Department in the face of continuing uncertainty in the economy and state budgets. External support is critical in providing the best education and training for our students and in maintaining the excellence of our world-class research. We hope you will consider a gift to support the education of our talented and deserving students in the Department. Whether you have a preferred gift fund, such as the Leal Anne Kerry Mertes Scholarship Award or the Jack Estes Memorial Fund, or would prefer an unrestricted gift to the Department, all are valued highly. Our Geography faculty continue to excel in research and teaching, our undergraduate and graduate students are impressive, and an education from the Department of Geography at UC Santa Barbara is one of the hottest commodities in town. Your help can make it even better.

Your ongoing support is vital to our undergraduate and graduate programs. One reason the Department of Geography at UC Santa Barbara is able to deliver on its promise to students is because of the support of alumni and friends like you, which is why I encourage you to consider making an investment in the Department. These gifts enable us to recognize our best students and support their educational and research expenses. You, as alumni and friends of the Department, have a lot to be proud of. We, in turn, are grateful for your continued involvement with our educational mission.

Sincerely,
Professor Dar Roberts
Chair, Department of Geography
Goodchild Elected Foreign Member of the Royal Society and Receives 2010 UCGIS Research Award

UCSB's Michael Goodchild, director of the Center for Spatial Studies at UCSB and a professor of geography, was elected as a Foreign Member of the Royal Society, and Craig Hawker, director of the Materials Research Laboratory and a professor of chemistry, biochemistry, and materials, was elected to the Fellowship of the Royal Society this year. They were among the 44 new Fellows, 8 Foreign Members and 1 Honorary Fellow elected in London on May 20, 2010. Having two members from the same U.S. University elected to the Royal Society in the same year is considered a rarity; they are among only seven scholars at U.S. universities elected by the society this year.

The Royal Society, the world's oldest scientific academy, was founded in 1660 and is celebrating its 350th anniversary. It is made up of 1,300 of the most distinguished scientists from the United Kingdom, other Commonwealth countries, and the Republic of Ireland. Fellows of the Royal Society are elected for life.

Chancellor Henry T. Yang called this important international recognition of two of his UCSB faculty colleagues “an extraordinary honor with 350 years of prestige and reputation.” He noted that the two scholars would be part of a society that has included among its members Isaac Newton, Charles Darwin, Ernest Rutherford, Albert Einstein, Dorothy Hodgkin, Francis Crick, James Watson, and Stephen Hawking. The current membership includes more than 60 Nobel Laureates.

In its official citations on the new members, the Royal Society praised their scientific creativity, dedication, and vision. The complete text of Goodchild's citation states that Professor Michael Goodchild, Foreign Member of the Royal Society, “is the unchallenged global leader of Geographic Information (or systems) Science. This seeks to conceptualize the complexities of field- and object-based geographic phenomena as manifested across both the traditional physical and ‘hard’ social sciences. Based on this, he has led research teams which have created new analytical methods for integration and analysis of very large spatial databases, leading to a $20bn+ industry. The quality and innovative nature of his work have led to him being elected as a member of the U.S. National Academy of Sciences and of the American Academy of Arts and Sciences, a Foreign Fellow of the Royal Society of Canada and a gold medalist of the Royal Geographical Society.”

Mike also was recently contacted by alumna Professor Dawn Wright (Oregon State University; Ph.D. in UCSB Physical Geography and Marine Geology, 1994) in her role as Chair of the University Consortium for Geographic Information Science (UCGIS) Research Award committee: “It is my great pleasure and privilege to inform you that you have been selected as the recipient of the 2010 UCGIS Research Award. This award is given to the creator(s) of a particularly outstanding research work or series of works as published in a peer-reviewed medium, and that makes a significant contribution to geographic information science. Your professional and personal contributions to geographic information science research are highly regarded, and the award committee noted in particular your work on spatial data accuracy in GIS, based on measurement theory and visualizing error. We are therefore extremely pleased to recognize your important accomplishments and continuing contributions!” Needless to say, all of us at UCSB Geography also extend our sincere congratulations to Mike!
Geography was one of seven disciplines represented at the UCSB Zombie Debate, an event that took place May 13 at the University Center Hub. Sponsored by Associated Students, the event was something like a panel discussion by seven professors (and one graduate student playing the devil’s advocate) and was based on the premise that a zombie apocalypse had taken place and that UCSB students were part of a surviving community. This community had only enough supplies to accept one more person, and that would be a faculty member from one of the represented disciplines. The event was intended to allow faculty to argue for the value of their respective disciplines in a post-apocalyptic world. By analogy, the debate could be seen as providing a chance for professors to justify higher education and their particular disciplinary specialties, in the face of threats like rising tuition, dwindling budgets, and widespread anti-intellectualism. Not quite a zombie apocalypse but pretty traumatic. Besides geography, the debate featured 10-minute presentations from representatives of art history, education, film and media studies, mathematics, mechanical engineering, and philosophy. Geography was represented by Professor Dan Montello. He saw the premise as a little odd, given that the most critical knowledge and skills needed in a post-apocalyptic zombie world would not likely be academic knowledge. Farmers, builders, nurses, plumbers, tailors, and cooks anyone? Nonetheless, he played along and, in fact, naively thought the practical angle would seal the deal for geography.

Dan tried to capture the practical side of geography by titling his presentation “When Zombies Arrive, Geography Helps You Survive.” He was pretty confident he could make a strong case for the importance of geography, with its amazing breadth and multi-faceted real-world relevance. In a post-apocalyptic world, people would need clean air, water, food, and energy; shelter secure from animate and inanimate threats (zombies are sort of in the middle); affiliation with other people (friends, family, lovers); intellectual and emotional stimulation, and a sense of meaning and value. Dan proposed that geographic knowledge could help fulfill all of these needs.

Geography can be variously defined as “the study of Earth as the home of humanity” or, especially at UCSB, “the interdisciplinary study of human and natural structures and processes on Earth, organized spatio-temporally.” In other words, geography is not just knowing the capital of Burkino Faso ( Ouagadougou) or hog production in Iowa (recently neck-and-neck in the U.S. with North Carolina). Textbooks in geography cover topics ranging from the movement of the sun and seasonality, spatial coordinate and measurement systems, mapping and information display, climate and weather, salt and fresh water, soil, landforms, the distributions of plants and animals, the distribution of ethnic groups and cultural practices, the distribution and development of all types of economic activities, transportation and communication, the origin and development of cities, and spatial and environmental beliefs and values. Thus, geography would help with such specific post-apocalyptic problems as finding potable water and edible food, defending the community from zombies and escaping if need be, and finding other groups of people with desirable social and cultural traits. In response to another professor’s dismissive remark about the uselessness of knowing where the sun is, Dan pointed out that knowing the position and movement of the sun would help you know about seasonality and daily sun cycles, house design, clothing needs, agricultural practices, water availability, navigation, visibility, and where your cat would likely hang out at different times of the day.

Dan concluded by warning the audience that if they did not choose geography, he would have no choice but to join the zombies and use his geographical knowledge to help the undead get every last audience member’s brain. He admonished them to think carefully before they voted—Which discipline, he asked, would they least like to hand over to the zombies?

The crowd was very lively and a good time seemed to be had by all (including a couple of what were presumably students dressed like zombies). The faculty members all seemed to enjoy themselves as well. Unfortunately, Dan did not have a funny song like the mathematician did, nor a zombie head-crushing tool like the mechanical engineer did. Nor, he admits, was he as interesting and funny as the philosopher, who in the end was voted to take the remaining community spot by the student audience. Dan was left to take his geographic knowledge and join the zombie cause. He should have informed the audience that he can cook (and knows how to use a meat cleaver)!
Chadwick Uses Termite Mounds To Predict Ecological Shifts Due To Climate Change

The following is a September 7, 2010 UCSB Press Release by the Office of Public Affairs titled “Size, Distribution of Termite Mounds Foretell Ecological Shifts from Climate Change in Africa’s Savannas”:

“Scientists have discovered that the size and distribution of termite mounds in South Africa can be used to predict ecological shifts from climate change. The research is published in the advanced online edition of Nature Communications. “In Southern Africa, as in most parts of the world, soil properties strongly influence vegetation patterns — but most of the time we can only infer soil properties because we cannot dig everywhere,” said co-author Oliver Chadwick, professor of geography at UC Santa Barbara. “In this research, we were able to use the distribution of termite mounds to evaluate the controls on below-ground properties, and how their spatial differences affect plant distributions.”

Mound-building termites in the study area of Kruger National Park in South Africa tend to build their nests in areas that are not too wet, nor too dry, but are well-drained, and on slopes of savanna hills above boundaries called seeplines. Seeplines form where water has flowed below ground through sandy, porous soil and backs up at areas rich in clay. Typically, woody trees prefer the well-drained upslope side where the mounds tend to locate, while grasses dominate the wetter areas down slope.

Using airborne imaging and structural analysis, scientists mapped more than 40,000 termite mounds over 192 square miles in the African savanna. They found that their size and distribution is linked to vegetation and landscape patterns associated with annual rainfall. The results reveal how the savanna terrain has evolved and how termite mounds can be used to predict ecological shifts from climate change. “These relationships make the termite mounds excellent indicators of the geology, hydrology, and soil conditions,” commented lead author Shaun Levick of Carnegie Institution’s Department of Global Ecology. “And those conditions affect what plants grow and thus the entire local ecosystem. We looked at the mound density, size, and location on the hills with respect to the vegetation patterns.”

According to the scientists, the advantage of monitoring termite mounds in addition to vegetation is that mounds are so tightly coupled with soil and hydrological conditions that they make it easier to map the hill slope seeplines. Furthermore, vegetation cover varies a lot between wet and dry seasons, while the mounds are not subject to these fluctuations.”

Professor Oliver Chadwick

Faculty Kudos continued on p. 6
Raubal Wins Best Paper Award at AGILE

Professor Martin Raubal presented a paper at the 13th AGILE International Conference on Geographic Information Science 2010 in Guimaraes, Portugal 11th - 14th of May 2010 and won the best paper award. The paper in question is Martin Raubal and Stephan Winter, “A Spatio-Temporal Model Towards Ad-Hoc Collaborative Decision-Making.” The reviewers of the conference selected the top three submissions to be featured in the final day’s Best Paper Session. After the presentations, people in the audience voted on the best paper. The award was sponsored by ESRI and handed over by Michael Gould, ESRI’s director of higher education.

Wall Street Journal Quotes Keith Clarke Regarding Gulf Disaster

The April 26 online Wall Street Journal (U.S. News) quoted UCSB Geography’s Keith Clarke in an article titled “Oil Spills Into Gulf After Rig Disaster.” The April 20 accident on an oil rig in the Gulf of Mexico resulted in the loss of 11 crew members and an oil spill that threatened to become a major ecological disaster for the beaches, barrier islands, and wetlands of the Louisiana coast. The explosion aboard the semi-submersible Transocean Deepwater Horizon rig operated by British Petroleum caused it to capsize and sink on April 22, and it was estimated at the time that the equivalent of 1,000 barrels of crude oil per day was leaking from the damaged well cap which is nearly a mile below the ocean surface. The Wall Street Journal stated: “University of California Santa Barbara Prof. Keith Clarke, who studied a 1969 oil spill off the Southern California coast, said: ‘Worst-case scenario would be loss of sea life, especially sea birds and marine mammals. Fishing could be significantly impacted. A great deal depends on how long the site leaks.’” Prophetic words, indeed, considering the aftermath and size of the ongoing disaster months later...

Frank Davis Heads Everglades Restoration Project

As chair of the Committee on the Independent Scientific Review of Everglades Restoration Progress, Bren School Professor of Ecology and Geography Affiliated Faculty member Frank Davis led the work that resulted in a new 348-page report issued by the National Research Council tracking the progress of a decade-long, multi-billion dollar project to restore the Florida Everglades. According to the National Academies News Office, a decade-long, multibillion dollar effort to restore the Florida Everglades has made tangible, albeit slow, progress, but additional projects need completion before substantial benefits are seen, says a new congressionally mandated report from the National Research Council. Challenges in achieving targets for both water quality and water flow have become more apparent, requiring further scientific analysis to determine the repercussions of trading off one for the other. Although important scientific advances have been made, continued decline of some aspects of the ecosystem, such as water quality and endangered snail kite populations, make it critical to accelerate ecological improvements.
Retirement Colloquium and Reception for Terry Smith

A special retirement event for Terence Smith, Professor Emeritus of both Geography and Computer Science, was held September 30, 2010. The event consisted of a colloquium presentation in Buchanan Hall by Terry titled “Some of the things I’ve learned about research, rivers, and people” and a following reception in his honor in the Ellison Courtyard. Dar Roberts, Chair of the Department of Geography, and Amr El Abbadi, Chair of the Department of Computer Science, took turns lauding Terry’s service to UCSB, and this was followed by the presentation of a gift to Terry from Geography and an open microphone opportunity for friends and colleagues.

Dar Roberts made the following comments: On behalf of the Geography Department, I am here to thank Terry Smith for 34 years of outstanding service to the University of California and to wish him the best for a well earned retirement. Terry Smith is one of the founding members of the Geography Department, having been hired by David Simonett in 1976 as part of what would become a wave of Geographers fleeing the University of Western Ontario, Canada to enjoy more hospitable winters in Santa Barbara. At that time, the department was very different, consisting of only 6 faculty members and no PhD program. Punk Rock music had invaded our shores (although some could argue the Ramones came first), carbon footprints involved dirty shoes, and high end computers had about as much computing power as an I-pad. Terry Smith first came to UC Santa Barbara as a Geomorphologist with an interest in drainage basin evolution, but rapidly demonstrated a wide range of interests. Over the next 20 years, Terry would explore such diverse topics as mental maps and spatial choice, migration and demography, spatial equity in the California tax structure, economic geography and housing markets, behavioral geography, artificial intelligence, neural nets and even wayfinding. Terry’s diverse research interests even found their way into the classroom, where Terry crossed over to the other side, and taught our human geography class Geography 5 for four years, starting in 1982. To my knowledge, he is the only physical geographer in the department to have done that. He followed this up by also acting as Chair of Computer Science from 1986 to 1990, a dual life that I am sure Amr will tell us more about. However, Terry may be best recognized for the major contributions he made with the Alexandria Digital Library Project, an NSF supported effort to revolutionize the way we store, browse, and utilize geospatial data. Terry’s interest in database design, modeling systems, and computational modeling, established in the early 1990s, I suspect were critical to the original success in obtaining this award and played a key role in the ultimate success of Alexandria today.

Over the past few years, Terry has refocused his energy on the classroom, where he brought novel digital learning concepts to Geography 3b and a dual-screen digital learning environment to Webb Hall as part of ADEPT. He has also gone back to his roots in Geomorphology, publishing what he described as “the first real analytical solution to the problem of river channel emergence,” in a sole authored paper published in the Journal of Geophysical Research-Earth Surface Processes that he is very proud of. I am pleased to say the department is proud of you, Terry Smith.

Terry enjoys painting, so the Department of Geography presented him with a wooden plaque with a gold artist’s paint brush mounted on it. The plaque had the UCSB wave logo engraved on a brass plate in the upper right hand corner, and, on a separate brass plate in the lower left hand corner, the following wording was engraved: “TERENCE SMITH: Professor in Geography and in Computer Science, 1976-2010. May your retirement be as colorful as the career you have painted.”
THANK YOU, DONORS!

The UCSB Department of Geography would like to thank the following people and institutions for their generous support for calendar year 2010 through October 2010:

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“You, as alumni and friends of the Department, have a lot to be proud of. We, in turn, are grateful for your continued involvement with our educational mission.”

Dar Roberts, Chair, UCSB Department of Geography
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Thank you for your generous support!
A NSF press release dated 4/25/10 and titled “Scientists Discover Underwater Asphalt Volcanoes: Impressive landmarks hidden for 40,000 years rise from sea-floor” pointed out that research by Geography’s Affiliated Professor Ed Keller led to the discovery of a field of asphalt volcanoes that formed 40,000 years ago from seafloor oil seeps in the Santa Barbara Channel. The complete NSF text follows:

About 10 miles off the Santa Barbara coast, at the bottom of the Santa Barbara Channel, a series of impressive landmarks rise from the sea floor. They’ve been there for 40,000 years, but have remained hidden in the murky depths of the Pacific Ocean—until now. They’re called asphalt volcanoes.

Scientists funded by the National Science Foundation (NSF) and affiliated with the University of California at Santa Barbara (UCSB), the Woods Hole Oceanographic Institution (WHOI), University of California at Davis, University of Sydney and University of Rhode Island, have identified the series of unusual volcanoes. The largest of these undersea Ice Age domes lies at a depth of 700 feet (220 meters), too deep for scuba diving, which explains why the volcanoes have never before been spotted by humans, says Don Rice, director of NSF’s Chemical Oceanography Program, which funded the research. “They’re larger than a football-field-long and as tall as a six-story building,” says David Valentine, a geoscientist at UCSB and the lead author of a paper published on-line this week in the journal Nature Geoscience [doi:10.1038/ngeo848]. “They’re massive features, and are made completely out of asphalt.”

Valentine and colleagues first viewed the volcanoes during a 2007 dive on the research submersible Alvin. Valentine credits Ed Keller, an earth scientist at UCSB, with guiding him and colleagues to the site. “Ed had looked at some bathymetry [sea floor topography] studies conducted in the 1990s and noted some very unusual features,” Valentine says.

Based on Keller’s research, Valentine and other scientists took Alvin into the area in 2007 and discovered the source of the mystery. Using the sub’s robotic arm, the researchers broke off samples and brought them to labs at UCSB and WHOI for testing.

In 2009, Valentine and colleagues made two more dives to the area in Alvin. They also conducted a detailed survey of the area using an autonomous underwater vehicle, Sentry, which takes photos as it glides about nine feet above the ocean floor. “When you ‘fly’ Sentry over the sea floor, you can see all of the cracking of the asphalt and flow features,” says Valentine. “All the textures are visible of a once-flowing liquid that has solidified in place. That’s one of the reasons we’re calling them volcanoes, because they have so many features that are indicative of a lava flow.”

Tests showed that these aren’t your typical lava volcanoes, however, found in Hawaii and elsewhere around the Pacific Rim. Using a mass spectrometer, carbon dating, microscopic fossils, and comprehensive, two-dimensional gas chromatography, the scientists determined that the structures are asphalt. They were formed when petroleum flowed from the sea-floor about 30,000-40,000 years ago. Chris Reddy, a scientist at WHOI and a co-author of the paper, says that “the volcanoes underscore a little-known fact: half the oil that enters the coastal environment is from natural oil seeps like the ones off the coast of California.”

The researchers also determined that the volcanoes were at one time a prolific source of methane, a greenhouse gas. The two largest volcanoes are about a kilometer apart and have pits or depressions surrounding them. These pits, according to Valentine, are signs of “methane gas bubbling from the sub-surface.” That’s not surprising, he says, considering how much petroleum was flowing there in the past. “They were spewing out a lot of petroleum, but also lots of natural gas,” he says, “which you tend to get when you have petroleum seepage in this area.” The discovery that vast amounts of methane once emanated from the volcanoes caused the scientists to wonder if there might have been an environmental impact on the area during the Ice Age. “It became a dead zone,” says Valentine. “We’re hypothesizing that these features may have been a major contributor to those events.” While the volcanoes have been dormant for thousands of years, the 2009 Alvin dive revealed a few spots where gas was still bubbling. “We think it’s residual gas,” says Valentine, who added that the amount of gas is so small it’s harmless, and never reaches the surface.

UCSB Department of Geography: Grad Student Kudos

Amy Lerner and Ed Pultar Awarded Continuing Student Fellowships - and More

UCSB graduate student fellowships range from quarterly to 1-year awards, for which the Graduate Division provides a stipend and payment of fees and health insurance (nonresident tuition is not included in the award package). Students may receive the fellowship twice during their academic careers but must be re-nominated; central fellowship awards for continuing graduate students are based on nomination by department and review by a central faculty fellowship committee. Two of our grads have been granted continuations of these prestigious awards.

Amy Lerner has received a continuation of her Graduate Opportunity Fellowship from the UCSB Graduate Division; only 15 of these awards were available for all departments on campus. Amy is finishing her fourth year of her PhD program, focusing on rural-urban transitions, Mexico maize production, household food security, and peri-urbanization. She came back spring quarter from being in Mexico for a year, conducting interviews and household surveys in the Toluca Valley, outside of Mexico City.

Ed Pultar received a continuation of his President’s Dissertation Year Fellowship; only 6 of these awards were available for all departments on campus. His dissertation title is “The Role of Space in Social Networks,” and his research examines travel behavior using Internet-based websites that provide free lodging with local inhabitants. Users of such systems utilize an amalgamation of transportation networks, social networks, and communication networks. This research focuses on how the geographical spread of people in a modern Internet-based social network influences the travel choices of each individual in the network.

Ed (or Edward or “call me anything but late for dinner”) is on a roll. He is also one of five students awarded a UC Transportation Center dissertation grant for the Spring 2010 cycle. The $20,000 grants are open to students at any campus of the University of California, and “the dissertation research must be on topics with direct relevance to U.S. surface transportation, with a focus on systems analysis and policy. Applicants must have advanced to candidacy for their Ph.D. degree prior to the application deadline.” Ed’s dissertation title is “The Synergy of Transportation, Social, and Data Networks.” Ed also won this year’s Jack and Laura Dangermond Graduate Fellowship, and, to top it off, he was accepted as a summer intern by Google. Hat’s off to Ed!

Mike Marshall Awarded USGS Fellowship

Grad student Michael Marshall has recently been awarded a prestigious U.S. Geological Survey (USGS) Mendenhall Research Fellowship. This two-year fellowship gives recent PhD graduates the opportunity to work closely with senior researchers at the USGS. Michael was one of just three students chosen in a national competition for this honor. The title of his proposal was “Water productivity mapping for irrigated crops in California using farm-level assessments and remote sensing,” and he intends to use the latest approaches in field methods and remote sensing modeling techniques to estimate water productivity for California’s primary crop producing region. In his dissertation work under Joel Michaelsen, Michael is modeling evapotranspiration to inform crop and seasonal rainfall forecast models. Evapotranspiration will be a key input to the water productivity model as well. A map of water productivity and a cost benefit analysis will be used to aid farmers and state and federal government mitigation efforts to improve water-use efficiency. Michael received two other major awards last year as well, including the Switzer Environmental Fellowship and the Graduate Research Mentorship Fellowship. “Not just a pretty face,” to quote a geog staff member!

Continued on p. 12
Chen Takes Top Honors at AESS

Geography PhD candidate Cheryl Chen won the competition for Outstanding Graduate Student Conference Presentation at the Association for Environmental Studies and Science Conference in Portland, Oregon, held June 17-20 on the Lewis and Clark College campus. Cheryl’s talk was entitled: “Mapping Fishermen Vulnerability: Unraveling the impact of marine protected areas across California.” Cheryl states: “My research aims to empower and give voice to local people. Across global and local scales, I work to understand the political, cultural, and socio-economic factors that influence socio-ecological systems and successful marine conservation in the developing world. Specifically, I am interested in the social sensitivity of marine protected areas and its implications on equitable resource use, access, and control. I am also interested in ways to break out of the paradigm of ‘expert’ knowledge by developing participatory research methods, which engage local communities and enable ownership of management processes.”

Susan Tran Wins Excellence in Teaching Award

Susan Tran won the annual Department of Geography Excellence in Teaching Award. This award is presented to Geography graduate students who have outstanding course evaluations as TAs and/or instructors, outstanding written comments from students, outstanding evaluations of TA work by the course instructor, and outstanding design of course or lab syllabi or outstanding design of lab or section activities.

Stacy Wins Excellence in Research Award

The Department’s Excellence in Research Award was awarded to Stacy Rebich Hispanha. The award is made annually to a graduate student whose national conference presentations, publications, research, and lab or field experiments are deemed exceptional. The competition was particularly keen this year, and Dar commented that any one of the entrants would have won in a previous year. Stacy, however, was one notch above the rest, with 8 peer-reviewed publications, including a paper in the Annals of the AAG.

Nate Royal Wins Mertes Scholarship

Nate Royal won this year’s Leal Anne Kerry Mertes Scholarship Award which supports UCSB students who are planning or are engaged in field research. The Mertes Scholarship is awarded to talented and deserving UCSB students enrolled in any UCSB department where scientific fieldwork is conducted. Nate spent six months in Niger, West Africa, collecting data on the nomadic movements of people with Guinea worm and working on a predictive model for the spread of Dracunculiasis, the disease caused by the parasite.
The Jack and Laura Dangermond Endowed Chair in Geography

According to the Development Office, “At UC Santa Barbara, private philanthropic support is central to maintaining the quality of teaching, research, and public service. One of the most important types of gifts to higher education is an endowed chair, for an endowed chair ensures faculty excellence. Created by a philanthropic gift, these highly prized academic positions are supported by earnings from invested funds. While the state budget pays for the faculty member’s salary, the proceeds from the endowment provide enrichments—such as research money and support for instruction—that are important to the recruitment and retention of the world’s greatest scholars.” The Jack and Laura Dangermond Endowed Chair in Geography, the first endowed chair in the history of the department, has recently been established through a generous gift from Jack and Laura Dangermond, and Professor Michael F. Goodchild has been appointed to the prestigious position for 2 years. The Dangermonds have established this chair because of their interest in geography, geographic education, and the development of advanced spatial-analytic methods and GIS (geographic information system) technology in an academic environment. They have had a long relationship with UC Santa Barbara in supporting student research in the field of GIS and its application to human and environmental problems.

What Happened To the Santa Barbara Summer of 2010?

“We have an almost-rhyming term of endearment for that gray time of year just before summer explodes: June Gloom. But the low-lying clouds have endured well past their namesake month and, save for a smattering of sunup-to-sundown stunner days of pure beach weather, the fog has remained through much of July and early August, eating into our solar index ratings and shrinking the number of “sunny” hours to such a degree that many in our seaside hamlet are claiming the summer of 2010 to be perhaps the gloomiest of their lives. And, according to experts, they may be right.”

The above is quoted from an August 12 Independent article about Santa Barbara weather titled “Gloomiest Ever? This Summer Without Sun Is Not Normal” by Ethan Stewart who contacted Associate Specialist Dr. Park Williams regarding the matter: Park, who has a particular interest in the intersection between climate and biogeography, provided the following material for the Independent article:

“It turns out there is something to the complaints about the gloominess in town this year. June was much cloudier/foggier than average, and July was also cloudier/foggier than average, but not as extreme as June. So far August has been very heavy on the fog, but it is too early to tell how things will end up looking statistically. The data I use are hourly measurements of the height of cloud bottoms above Santa Barbara Airport. No matter the season, Santa Barbara Airport has clouds overhead about one third of the time. Along the coast of California, the clouds get much lower to the ground during summer months. It is the low height of the clouds that makes Santa Barbarans feel like the weather gets so gloomy during the summer. So, in my data analysis, I only consider clouds that lie within 1,200 ft off the ground at Santa Barbara Airport. Considering only low clouds (called stratus clouds), this past June was the third gloomiest June among 52 Junes of data. July was the 18th gloomiest July among 52 Julys. June had stratus clouds 35% of the time and July had stratus clouds 26% of the time. Looking over the course of the day, the foggiest times are always at night and in the early morning. Peoples’ impression of gloominess, however, probably comes from what’s going on during the day when the sun is supposed to be out. If we just consider morning hours between 6am and 12pm, we are on pace this summer to set a record for % of hours with stratus clouds. Stratus clouds were present above SBA 50% of the time between June 1 and August 8, while the 52-year average is just 30%.”

EDITOR’S NOTE: The articles included in this newsletter are only a sampling of the ~95 Department News postings made since the Spring Newsletter of March 5, 2010; please see http://www.geog.ucsb.edu/events/news-archive/ for complete listings. BTW, do a Google internet search for “Best University Geography Website” and you’ll get several million hits. Guess what department pops up as number one on the list? UCSB Geography, of course!