According to the University Consortium of Geographical Information Science web site, “since 2010, UC-GIS has acknowledged those individuals who have contributed to the advancement of geographic information science and technology. The grade of Fellow is bestowed on the recipient who has had an extraordinary record of accomplishments in any of the spatial disciplines and communities of practice that use spatial information to complement and support their business operations or personal activities.” Know anyone who fits that description? You guessed it, and, accordingly, the following is the UCGIS Fellow statement for the award to Mike Goodchild which was developed by Art Getis, read by Tim Nyerges, and accepted on Mike’s behalf by Don Janelle, Karen Kemp, Nina Lam, and Tom Cova at the UCGIS Winter Meeting in Washington, DC (3-4 February):

“Michael F. Goodchild is awarded University Consortium of Geographical Information Science (UCGIS) Fellow status in recognition of his leadership, contributions to UCGIS, and his remarkable impact on the field of GIScience. Goodchild is the Jack and Laura Dangermond Chair of Geography and Professor of Geography at the University of California, Santa Barbara (UCSB). He is a graduate of the University of Cambridge in physics (1965) and earned a Ph. D. in geography at McMaster University in 1969. He is recognized as the leading academic GIS practitioner in the world. He was elected member of the United States National Academy of Sciences and Foreign Member of the Royal Society of Canada and of the Royal Society of the British Academy. He has been awarded four honorary doctorates and France’s Prix Vautrin Lud. He serves on the editorial boards of ten journals and has had published 15 books and 400 articles. He was editor of the journal Geographical Analysis and of the “Methods, Models, and Geographic Information Sciences” section of the Annals of the Association of American Geographers. He was Chair of the National Research Council’s Mapping Science Committee. Currently, he is Director of UCSB’s Center for Spatial Studies which he helped establish. He is also the Director of the Center for Spatially Integrated Social Science at UCSB. In addition, he currently chairs the Advisory Committee on Social, Behavioral, and Economic Sciences of the National Science Foundation. He is a member of the International Expert Committee for

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Martin Raubal has formally accepted a Full Professorship at ETH Zurich. Consistently ranked the top university in continental Europe, ETH Zurich, the Swiss Federal Institute of Technology, is a leading player in research and education in Switzerland and worldwide. 21 Nobel Laureates (including Albert Einstein) have studied, taught, or conducted research at ETH Zurich, underlining the excellent reputation of the institute (http://www.ethz.ch/about/index_EN source).

The ETH Zurich Media Release of September 29, 2010 states: “Upon application of the President of the ETH Zurich, Prof. Dr. Ralph Eichler, the ETH Board has appointed the following individuals as full professors at the ETH Zurich: Prof. Dr. Martin Raubal, currently Associate Professor at the University of California in Santa Barbara (USA), as Full Professor of Geoinformation Engineering. Martin Raubal is an internationally leading researcher in the field of geoinformation sciences. His interdisciplinary approaches to research combine geoinformation sciences with information technology and cognitive sciences. One of his focal points is the development and personalisation of mobile geoinformation services.”

A total of five appointments to full professor were made at ETH Zurich in 2010. Apart from Dr. Raubal, they include two internationally acclaimed Swiss researchers in the fields of architecture and digital fabrication (Fabio Gramazio and Matthias Kohler); Dr. Nicola A. Spaldin, currently Professor and Director of the International Center for Materials Research at UCSB; and Dr. Rainer Wallny, currently Associate Professor of Particle Physics at UCLA. Martin is in good company: “I feel both honored and really excited, as you can imagine!”

Martin will take up his new position April 1, 2011. Sadly, we also will lose his wife Gwen who was a Computer Network Technologist for the department; indeed, we’ll miss all the Raubals, including their sons Eric and Ian, who have been part of our extended geography family since Martin joined the Department in 2006. While our loss will be ETH Zurich’s gain, we all agree that Martin made the right decision. Not only is his appointment a great honor, but he will be close to family and friends in his native Austria – and we know that he will stay in touch, if only to tell us how great the skiing is in Switzerland!

A farewell party for the Raubals was organized by Dan Montello and Kathy Davis and took place 3-9 pm on March 12 at the Mercury Lounge in Goleta. There was a good turnout, and Kathy’s husband Carl & his band, “Jump Drive,” provided entertainment. According to an online blog about local taverns, “The Mercury is one crazy, 60’s, retro bar filled with hipsters, craft beers, and tons of microwave popcorn”—in short, a very appropriate place from which to give Martin and Gwen a California send-off. Dan also presented the Raubals with a parting gift from the faculty and staff—a lavishly illustrated book, (“The Book of Santa Barbara,” photographs by MacDuff Everton, essay by Pico Iyer), about Santa Barbara—something for their coffee table perusal when snowed in by Zurich’s weather. Martin has promised to send regular “Letters from Zurich,” and he will be back in Santa Barbara fairly regularly in order to deal with academic commitments, so the Department will simply say auf Wiedersehen to the Raubal family for now - literally auf, “until” + Wiedersehen, “seeing again.”
Strategic Development of the Center for Earth Observation and Digital Earth of the Chinese Academy of Sciences. He has directed the Ph.D. work of over 50 students, many of whom have gone on to responsible positions in academic, industrial, and government GIS.

Dr. Goodchild participated in the founding meeting of UCGIS. He played an active role in the summer assemblies in which UCGIS’ research and educational priorities were developed. He was a leading presenter at the UCGIS 1998 Congressional Breakfast at which Senators Sue Collins and Pete Domenici in 1998 were in attendance. He has won the UCGIS Education Award in 2002 and the UCGIS Research Award in 2009.

Michael Goodchild has contributed a great deal to the way in which the GIS field has evolved and developed. As Director and active participant of several important NSF projects, he helped to make the National Center for Geographic Information and Analysis a focus for scientific and leading edge approaches to the careful analysis of spatial data, to innovative mapping programs, and to the intelligent management of geographic information. His writings are universally admired for their relevancy to current thinking in GIS and for their insightful suggestions for future emphases for the field. For all that he has accomplished UCGIS is pleased to honor Michael F. Goodchild with Fellows grade, and induct him among Fellows of the 2011 class.”

Research by Funk and Williams Links Indian Ocean Warming with East African Drought

In an article titled “A westward extension of the warm pool leads to a westward extension of the Walker circulation, drying eastern Africa,” published online in Climate Dynamics: Observational, Theoretical and Computational Research on the Climate System (DOI: 10.1007/s00382-010-0984-y) on February 4, UCSB Geography Researchers Chris Funk and Park Williams note that “Observations and simulations link anthropogenic greenhouse and aerosol emissions with rapidly increasing Indian Ocean sea surface temperatures.” Sid Perkins, writing for Nature Climate Change, provides the following summary in the journal’s research highlights—“Continued warming of the Indian Ocean could lessen rainfall over east Africa”:

Spikes in Indian Ocean sea-surface temperature have changed the region’s weather patterns and triggered more frequent droughts in east Africa in recent decades. Research now suggests this trend may continue, with dire implications for agriculture and food security. When climate scientists Park Williams of the University of California, Santa Barbara, and Chris Funk of the US Geological Survey in Sioux Falls, South Dakota, looked at climate data for the tropical Pacific and Indian Oceans from 1948 through to 2009, they found that the strongest year-to-year variations in climate occurred in the southern tropical Indian Ocean. In years when sea-surface temperatures (SSTs) were unusually high, evaporation was enhanced, boosting rainfall over the ocean. Consequent changes in atmospheric circulation brought dry air masses over eastern Africa, triggering drought. During the past few decades, each 1 °C rise in global average temperature boosted Indian Ocean SSTs by about 1.5 °C. Because global warming is expected to continue, east African rainfall will probably continue to decrease, threatening an area where 17.5 million people suffered food insecurity after severe droughts in 2008 and 2009.

Chris Funk works with the US Geological Survey in Sioux Falls, South Dakota, but is based in the UCSB Department of Geography’s Climate Hazard Group

Park Williams, currently a Researcher with the UCSB Department of Geography’s Climate Hazard Group, has recently accepted a Post-doctoral Research position with the Los Alamos National Laboratory in New Mexico
A collective noun is a noun that is singular in form but is used to define a group of people or things, like “a faculty of academics,” “a chain of islands,” or “a pride of lions.” While playing around with them in 2006 for an article titled “A Plethora of PhDs,” your editor tried to find a collective noun for geographers. Some serious googling came up with “a conglomerate of geologists,” “a nucleus of physicists,” and “a multiplicity of mathematicians,” but nada for geographers. So, I ran a departmental contest to see who could come up with the best collective noun for geographers. There wasn’t exactly “a surfeit of suggestions,” but here are the entries submitted back then:

- An agglomeration of geographers
- An aggregation of geographers
- An autocorrelation of geographers
- A cluster of geographers
- A collocation of geographers
- A continent of geographers
- A coordinate of geographers
- A glôb of geographers
- A global warm-ongering of geographers

Five years later, Trevor Jennings emailed to say: “I was looking on Google for the definitive answer as to the collective noun for geographers, since many of my contemporaries at my Durham college were geographers. I notice that your interesting results did not include a ‘gazetteer’ of geographers.” Accordingly, your editor reposted the original article February 14, 2011 and asked for new contributions - here are the latest results: an atlas of geographers (Stella Larson), an autocorrelation of geographers (Keith Clarke), a cart o’ [geo]graphers (Greg Mohr), a cluster of geographers (Keith Clarke, Dan Gauldin), a gaggle of geographers (Terry Smith, Helen Webre), a gazetteer of geographers (Trevor Jennings), a jumble of geographers (Helen Webre), and a mountain of geographers (Todd Webre).

Helen Webre commented that other obvious possibilities could be a world, a range, a sea or an ocean, a landing, a topography, or a grid, and she concluded by saying “There are just too many possibilities.” Tom Cova took Helen’s comment a step further by saying: “I read your piece, and I think the problem is that Geography is too broad to find just one. Here are few suggestions for some sub-specialties: regional scientists (an agglomeration), spatial analysts (a cluster), GIScientists (a union), location scientists (an allocation), biogeographers (a patch), political geographers (a coalition), cartographers (a compendium), demographers (a crowd), and urban geographers (a parcel).

The conclusion? Clear as mud, but it covers the ground. Your editor is partial to “a cart o’ [geo]graphers” or “a ‘l’attitude’ of geographers” because he likes the word play, but “a cluster of geographers” had the most submissions. Your call!
Gautier Elected Fellow of the AAAS

Professor Catherine Gautier has been elected a Fellow of the American Association for the Advancement of Science (AAAS). Election as a Fellow of AAAS is an honor bestowed upon members by their peers in recognition of their significant efforts to advance science or its applications. Eight UCSB scholars received the award this year; UCSB now has 55 AAAS Fellows, 8 of whom are/were in Geography: Oliver Chadwick, Rick Church, Frank Davis (Affiliated Faculty), Jeff Dozier (Affiliated Faculty), Reginald Golledge (deceased), John Melack (Affiliated Faculty), David Siegel, and, now, Catherine Gautier.

The AAAS Section of Geography and Geology awarded Professor Gautier the distinction of Fellow “for distinguished contributions to the fields of atmospheric radiation physics, climate science, and climate science education.” “We are tremendously excited and proud to have a record eight faculty members from UC Santa Barbara elected as AAAS Fellows this year,” said Chancellor Henry T. Yang. “This prestigious honor is a testament to their pioneering achievements in their fields, their dedication to teaching and inspiring others, and their commitment to making a positive contribution to our society. I join with our campus and community in congratulating our distinguished colleagues.” “I am very proud of the distinction being bestowed on our faculty,” said Pierre Wiltzius, Susan & Bruce Worster Dean of Science, Division of Mathematical, Life, and Physical Sciences of the College of Letters and Science. “I am particularly pleased by the breadth of research areas covered by these researchers, covering the sciences, social sciences, and engineering.”

Frank Davis Elected as Google Science Communication Fellow

Bren School Professor of landscape ecology and conservation planning and Affiliated Geography Faculty member Frank Davis has become one of the first 21 scientists to be named Google Science Communication Fellows. The scientists, chosen from universities, NGOs, and scientific entities across the U.S. and Canada, were selected for their perceived ability to communicate climate science (source). The following is from “Making sense of science: introducing the Google Science Communication Fellows,” dated 2/15/2011 (Cross-posted on the Official Google Blog):

“In an effort to foster a more open, transparent and accessible scientific dialogue, we’ve started a new effort aimed at inspiring pioneering use of technology, new media and computational thinking in the communication of science to diverse audiences. Initially, we’ll focus on communicating the science on climate change. We’re kicking off this effort by naming 21 Google Science Communication Fellows. These fellows were elected from a pool of applicants of early to mid-career Ph.D. scientists nominated by leaders in climate change research and science-based institutions across the U.S. It was hard to choose just 21 fellows from such an impressive pool of scientists; ultimately, we chose scientists who had the strongest potential to become excellent communicators. That meant previous training in science communication; research in topics related to understanding or managing climate change; and experience experimenting with innovative approaches or technology tools for science communication.”

Frank Davis joined the UCSB Department of Geography as an Assistant Professor in 1983 and is currently a Professor in the Donald Bren School of Environmental Science and Management (1996-present) and a Professor (Affiliated Faculty) in the Department of Geography (1994-present). He has been a member of the National Research Council Committee for the Independent Scientific Review of the Everglades Restoration Program since 2006 and has served as Chair of that committee since January 2009. Concerning his Google Fellowship, Davis commented: “They were trying to balance across different areas of expertise in the climate change arena, so perhaps my focus on conservation planning was attractive,” adding, “The opportunity to learn from the experts at Google about new tools and approaches to communicating science was simply irresistible. I’m excited about the training and looking forward to interacting with the other fellows as well”
ESRI Press has just announced the publication of a new edition of Notes and Comments on the Composition of Terrestrial and Celestial Maps by J. H. Lambert: “A historically significant work on modern map projections and their mathematical underpinnings. The original German edition introduced several distinct map projections still in use today and revealed the cartographic genius of author J. H. Lambert (1728-77). In 1972, on the 200th anniversary of this seminal work, noted geographer Waldo R. Tobler published an English translation of Lambert’s writings, but it has been unavailable for several years. This new edition of the translation includes an expanded preface and reference section and a new biographical sketch of J. H. Lambert.”

To quote Professor Emeritus Tobler: “You’ve heard of Lambert’s equal area azimuthal map projection, chosen by the European Union as the best map for statistical data? No? Then perhaps his equal area conic projection or the Lambert cylindrical equal area projection? No? Well now you can read all about these in my translation of the eighteenth century classic just published by ESRI Press. Follow along as Lambert glides smoothly between the stereographic map and the Mercator to discover the conformal conic, used by aviators worldwide. Heard of Lagrange’s projection? Lambert invented it. The Transverse Mercator projection? Lambert was the first to use it. Do you measure the luminance of light in Lamberts? Guess who it’s named after. Sensational? Perhaps, but all true. A biographical sketch and publication list of this enlightened polymath by H. Maurer and a modern reference list are included as appendices.”

A recent CNN article, “Protecting villagers from deadly mudslides” by Ebonne Ruffins (February 10, 2011) pays tribute to research by the UCSB Department of Geography: “There are plenty of natural reasons why Guatemalans are vulnerable to mudslides: frequent earthquakes, hurricanes and heavy rains oversaturate Guatemala’s mountainous terrain and muddy the soil. But...there’s another mudslide trigger to consider. ‘Deforestation -- or the absence of trees -- causes mudslides to occur,’ said Hallum, co-founder of the Alliance for International Reforestation, a nonprofit trying to help the villagers protect themselves from mudslides. ‘Trees are cut for firewood and to make room for the crops, and without realizing it...they’ve taken away their protection. Where it used to be rainforest becomes an open space for the mud to come right on through. Nearly 373 square kilometers of trees are destroyed each year in Guatemala, according to the University of Santa Barbara’s Department of Geography.’

The UCSB Geography statistics alluded to are derived from Professor David López-Carr’s research into Guatemalan forest change from 2001-2009. His NIH-sponsored research in Population and Environment, “Migration, demographic factors and deforestation in Guatemala,” had three aims: “1) Examine demographic factors at the household and community level on forest conversion in Petén’s agricultural frontiers. 2) Investigate factors associated with the primary underlying demographic force behind forest conversion: rural-rural migration. 3) Apply statistical techniques to address shortcomings in current methods used to investigate the determinants of frontier Land-Use and Land-Cover Change and rural-rural migration.”

López-Carr expanded upon this research by stating: “The primary cause of deforestation worldwide is agricultural expansion, much of it by colonists to forest frontiers. Yet, in studying forest clearing and land use, scholars of human-induced environmental change have focused almost exclusively on land use on the agricultural frontier, without considering why settler families end up there in the first place. Conversely, virtually all research on migration has focused on rural-urban migration and international migration, phenomena peripheral to deforestation. The project goal is to investigate the determinants of rural out-migration, which underlies dramatic forest conversion in Guatemala’s Maya Biosphere Reserve.”
UCSB Develops World’s First Academic Minor in Spatial Studies

Students at UCSB now have the unique opportunity to complement their academic majors with a minor that features scientific and humanistic perspectives about space, place, spatial reasoning, and spatial analysis. The minor, administered through the Department of Geography, draws on courses across 26 departments and programs. Students who opt to complete the minor choose from one of three focus areas: Spatial Thinking, Space and Place, or Spatial Science. Spatial Thinking relates to and draws on courses from psychology and behavioral geography, with options to choose courses from eight other departments. Space and Place exposes students to regional geography and to courses in art and the history of architecture, drawing from courses in nine departments, primarily in the humanities. Spatial Science is concerned with the spatial reasoning and spatial analysis that accompanies the scientific search for patterns and processes in diverse knowledge domains as illustrated in courses from more than twenty departments and programs.

The minor is open to students from all disciplines. For students in dozens of programs, the new minor provides an opportunity to build a niche of expertise structured around general concepts for understanding the role of place in society, mastering methodologies for representing information and data in a spatial context (including geographical context), and engaging spatial principles for solving problems and creating new works of art or interpretive insights. To reinforce the multi-disciplinary character of the minor, no more than one upper-division course can overlap those credited to a student’s major(s) or other minors, and no more than three courses can be from a single department or program. Using geography as an example, majors might consider developing expertise in spatial cognition by taking psychology courses in the Spatial Thinking focus. Courses in history of architecture or public art may enhance the understanding of urban landscapes or approaches to regional analysis. In the Spatial Science focus, geography majors can explore a number of themes built around courses in statistics or mathematics that add substantive insight to spatial analytical methodologies; courses in economics or environmental studies may expand a student’s background for a career in planning. For the geography student who is prepared for the challenge, an introductory course in materials science might feed the cross-disciplinary transfer of technologies and concepts from the nano-scale to the geographical scale. In principle, the minor in spatial studies can spark original insights that have the potential to transform a student’s career path and his or her contribution to knowledge and society.

In essence, the new minor provides new opportunities for innovative programs under the umbrella of spatial studies; this imposes a responsibility on students to think deeply and carefully about customizing their minor to their greatest academic and career advantage. Dr. Don Janelle and Karen Doehner in the Center for Spatial Studies are the primary advisors for the minor and welcome opportunities to work with students in designing a meaningful set of courses in relation to their major(s), career interests, and intellectual curiosity.

The minor draws upon areas of acknowledged research innovations and academic strengths long associated with UCSB. These include UCSB’s role in the development of geographic information systems (GIS) through the National Center for Geographic Information and Analysis (NCGIA); applications of spatial and spatio-temporal thinking across disciplines, as exemplified by the AlloSphere—an original, virtual immersive environment for information visualization; the use of brain imaging in neuroscience; the integrative use of quantitative methods, spatial statistics, and simulations of space-time interactions to understand ecological and behavioral processes across a wide range of disciplines; pioneering developments in the uses of satellite imagery and remote sensing; and innovative applications of spatial principles and practices in the creative arts.

The common core course for the minor in spatial studies is Geography 12, Maps and Spatial Reasoning, currently taught by Dr. Keith Clarke. Highlighting the science of maps, Geography 12 is required of all geography majors, but it is a course that aims at the broader spatial literacy needed for both science and citizenship in the information era. This need has intensified in the past decade in association with the rapid increase in public recognition of maps and geo-referenced data in the media, as well as the expansion of new public services associated with geo-browsers (e.g., Google Earth), the advent of location-based services in a world of ubiquitous cell/smart phones, and even the embedding of GPS transmitters in material resources. Geography 12 provides essential background in geospatial literacy to ensure that those who use these tools understand the underlying spatial and scientific concepts to support problem solving and spatial reasoning. It also offers preparation for courses in GIS and image analysis, allowing students from the sciences and humanities to complement their majors with advanced computer-based skills for spatial information analysis and representation.

The development of the proposal for the minor was carried out by the Center for Spatial Studies under the direction of Dr. Don Janelle. The process included consultation with department chairs and curriculum committees to identify courses that featured aspects of spatial reasoning. Detailed information about the spatial minor, including requirements and information on seeking advice, are available at http://geog.ucsb.edu/undergraduates/minor-spatial-studies/.
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Dar Roberts, Chair, UCSB Department of Geography
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Scientists Find that Debris on Certain Himalayan Glaciers May Prevent Melting

UCSB Office of Public Affairs Press Release, January 24, 2011: A new scientific study shows that debris coverage—pebbles, rocks, and debris from surrounding mountains—may be a missing link in the understanding of the decline of glaciers. Debris is distinct from soot and dust, according to the scientists. Melting of glaciers in the Himalayan Mountains affects water supplies for hundreds of millions of people living in South and Central Asia. Experts have stated that global warming is a key element in the melting of glaciers worldwide.

Bodo Bookhagen, assistant professor in the Department of Geography at UC Santa Barbara, co-authored a paper on this topic in Nature Geoscience, published this week. The first author is Dirk Scherler, Bookhagen’s graduate student from Germany, who performed part of this research while studying at UCSB. “With the aid of new remote-sensing methods and satellite images, we identified debris coverage to be an important contributor to glacial advance and retreat behaviors,” said Bookhagen. “This parameter has been almost completely neglected in previous Himalayan and other mountainous region studies, although its impact has been known for some time.”

The finding is one more element in a worldwide political controversy involving global warming. “Controversy about the current state and future evolution of Himalayan glaciers has been stirred up by erroneous reports by the Intergovernmental Panel on Climate Change (IPCC),” according to the paper. “There is no ‘stereotypical’ Himalayan glacier,” said Bookhagen. “This is in clear contrast to the IPCC reports that lumps all Himalayan glaciers together.” Bookhagen noted that glaciers in the Karakoram region of Northwestern Himalaya are mostly stagnating. However, glaciers in the Western, Central, and Eastern Himalaya are retreating, with the highest retreat rates — approximately 8 meters per year — in the Western Himalayan Mountains. The authors found that half of the studied glaciers in the Karakoram region are stable or advancing, whereas about two-thirds are in retreat elsewhere throughout High Asia. This is in contrast to the prevailing notion that all glaciers in the tropics are retreating.

Bookhagen explained the difference between debris and coverage by soot and dust on glaciers: “The debris cover has the opposite effect of soot and dust on glaciers. Debris coverage thickness above 2 centimeters, or about a half an inch, ‘shields’ the glacier and prevents melting. This is the case for many Himalayan glaciers that are surrounded by towering mountains that almost continuously shed pebbles, debris, and rocks onto the glacier.” Thus, glaciers in the steep Himalaya are not only affected by temperature and precipitation, but also by debris coverage, and have no uniform and less predictable response, explained the authors. The debris coverage may be one of the missing links to creating a coherent picture of glacial behavior throughout all mountains. The scientists contrast this Himalayan glacial study with glaciers from the gently dipping, low-relief Tibetan Plateau that have no debris coverage. Those glaciers behave in a different way, and their frontal changes can be explained by temperature and precipitation changes.

Bookhagen described results of another of his recent studies on this topic. He said that one of the key findings was that the Western Himalaya, including the Indus catchment and regions in Northern Pakistan and Northwestern India, depend heavily on seasonal snow and glacial melt waters, while Central Himalayan regions — Western India and Nepal — mostly depend on monsoon rainfall. The smaller seasonal water storage space in the Central Himalaya, which has only steep glaciers and no large snow fields, makes this region much more vulnerable to shifts in monsoonal strength and to glacial melting, explained Bookhagen. River discharge in these regions is crucial to sustain agriculture, hydropower, and drinking water. If the Indian monsoon season is weaker because of global atmospheric changes such as El Niño, then Central Nepal must primarily rely on water coming from the seasonal melting of glaciers and the small amount of snowmelt that is available. “Retreating glaciers, and thus a reduction of seasonal water storage in this region, have a large impact on hundreds of millions of people living in the downstream section of these rivers,” said Bookhagen. “The mitigation and adaptation strategies in the Himalaya Mountains thus need to take into account the spatial climatic and topographic variability. There is no regional solution, but only different local strategies to the future water shortage. The geographic setting of High Asia poses political difficulties as future water treaties need to be carefully evaluated.” (The full text of the article in question can be found here.)

Editor’s notes: Professor Bookhagen’s findings also were reported in a New York Times article on February 1: “Filling In the Blanks on Himalayan Glaciers” by Elisabeth Rosenthal. For more on this subject, see the January 19, 2010 Geography Department News article, “Bookhagen Quoted in NY Times Article on Glacial Retreat.”
UCSB Department of Geography: Grad Student Kudos

Congrats To Our Latest PhDs!

As of December, it became appropriate to address Karl Grossner, Ting Lei, Michael Marshall, and Seo Youn Yoon as “Doctor.” Yep, they all made it through their respective PhD defenses with flying colors, and the Department is justifiably proud of them.

Karl Grossner’s committee consisted of Michael Goodchild (Chair), Helen Couclelis, Keith Clarke, Martin Raubal, and Ruth Mostern (UC Merced, History), and his dissertation was titled “Representing Historical Knowledge in Geographic Information Systems” In January, Dr. Grossner began working as a postdoc researcher for our Center for Spatial Studies (spatial@ucsb) on a one year NSF grant to extend and enhance the TeachSpatial.org web site. He will be developing a portal to those existing teaching resources within the National Science Digital Library (NSDL) that can aid instructors and students in all STEM subjects on topics related to spatial thinking.

Mike Marshall’s committee consisted of Joel Michaelson (Chair), Christopher Still, Dar Roberts, Christopher Funk, and Christopher Williams; his dissertation was titled “Modeling Actual Evapotranspiration in sub-Saharan Africa with Implications for Food Security.” Dr. Marshall now works with the USGS. He was awarded a Mendenhall Research Fellowship which provides an opportunity for postdoctoral fellows to conduct concentrated research in association with selected members of the USGS professional staff, often as a final element to their formal career preparation. The Program is also intended to provide research experiences that enhance their personal scientific stature and credentials.

Seo Youn Yoon’s committee consisted of Kostas Goulias (Chair), Rick Church, Martin Raubal, and Ram Pendyala (external, Arizona State University), and her dissertation was titled: “Impact of time-space prism accessibility on time use behavior and its propagation through intra-household interaction.” Dr. Yoon is now a Research Associate Specialist II, working under the direction of Professor Kostas Goulias in the UCSB Department of Geography’s GeoTrans Lab.

Kate Deutsch Strikes Gold Again

Kate Deutsch was awarded a University of California Transportation Center dissertation grant of $20,000 in the Spring 2011 award cycle competition. This is one more success in the long list of research awards that Kate has received for her graduate work at UCSB; others include UCTC Fellowships in 2006/7 and 2007/8, the Eisenhower Fellowship (twice), the AAG Student Paper Competition (2009), and the 2009-10 Brython Davis Endowment Graduate Fellowship.

Ting Lei’s committee consisted of Richard Church (Chair), Kostas Goulias, Keith Clarke, and John Current (external), and his dissertation was titled: “Location Modeling Utilizing Closest and Generalized Closest Transport/Interaction Assignment Constructs.” Dr. Lei is currently working with Professor Kostas Goulias as a research specialist studying accessibility issues of the region on the SCAG project (SCAG Activity Based Travel Demand Model Development. Development of SimAGENT. In collaboration with UT Austin [C. Bhat] and Arizona State University [R. Pendyala]. Funding provided by Southern California Association of Governments, April 2009 to June 2011). Ting’s long-term goal is to find a job in academia.
Elisa Frank Shares Her Research Experience

Alumna Elisa Frank (MA 2009) has had an article she developed from her MA thesis published in the prestigious journal *Global Environmental Change*. Elisa shares both her research and her research experiences with us, as follows:

While a master’s student of Dr. Hallie Eakin and Dr. David Lopez-Carr, I became interested in Hallie’s work on human adaptation to climate change. She and some of her colleagues were working on a project relating to coffee producers in Mexico and gave me the opportunity to conduct a related case study in Chiapas, as well as use some of their survey data.

Upon my return, I began analyzing my interview data along with selected variables from the survey data provided by Dr. Eakin and her colleagues. My aim was to explore social identity theory and motivation theory in the context of farmers’ decisions to adapt or not adapt to climate impacts and climate change. I noted significant themes relating to social identity and hypothesized that this, in turn, influences perception and, ultimately, motivation to adapt. I completed my thesis and received my master’s degree in Fall 2009, after which my co-advisors encouraged me to develop the thesis into a journal article. I was happy to have their input, and, after many drafts (but, thankfully, relatively painless reviews), the article titled “Social Identity, Perception and Motivation in Adaptation to Climate Risk in the Coffee Sector of Chiapas, Mexico” was accepted for publication in the journal *Global Environment Change*.

It is increasingly acknowledged that social and cognitive aspects of human adaptation to environmental change deserve attention in addition to economic and resource factors. With this consideration at its core, our paper offers an enhanced theoretical framework with which to approach work in this field. It is very exciting and rewarding that my research will be shared at this scale and, hopefully, be a constructive reference for those in related areas of research. I am very grateful to Hallie and her colleagues for the fieldwork opportunity and access to their data, the UCSB Geography Department, and all those who helped me along the way.

Dawn Wright Selected as Leopold Leadership Fellow

The Executive Director of the Leopold Leadership Program at the Stanford Woods Institute for the Environment recently informed us that alumna Dr. Dawn Wright has been selected as one of twenty Leopold Leadership Fellows for 2011. The Leopold Leadership Program is a competitive fellowship for outstanding academic environmental scientists who are also actively engaged in outreach to decision-makers and the public about their work. The program was created in recognition of the fact that, with the elevation of environmental issues in the public sphere, environmental scientists are increasingly called on to contribute their knowledge to decision-making. The fellows receive two weeks of intensive training and networking to help them enhance their capacity as leaders and communicators about their work with audiences outside academia.

Distinguished alumna Dawn Wright received Interdisciplinary PhDs in Physical Geography and Marine Geology in 1994. An Oregon State University faculty member since 1995, Wright is a marine and coastal geography expert so passionate about her subject that she’s known as “Deepsea Dawn.” In 2007, she won the Raymond C. Smith Distinguished Alumni Award, was the Commencement Speaker for the Division of Science and Mathematics, and was elected U.S. Professor of the Year for the State of Oregon; she became a Fellow of AAAS in 2008.

Dawn will join a network of 153 past fellows who are actively working to infuse the best research into public and private sector discussions about the environment. The fellows were chosen for their outstanding qualifications as researchers, demonstrated leadership ability and strong interest in communicating beyond traditional academic audiences. Each fellow participates in two weeklong training sessions where fellows take part in mock media interviews and meet with policymakers in Washington, D.C. The fellowship also offers peer networking and mentoring through the Leopold Leadership Network of program advisors, trainers and past fellows.
A Geographer’s Notes from India, January 2011

Editor’s note: Professor Keith Clarke has been an “expert” member of the National Geographic Committee for Research and Exploration (CRE) since 2006. The CRE funds hypothesis-based scientific research in many scientific fields, and past recipients include such famous names as Goodall and Fossey, Peary and Amundsen, and Beebe and Cousteau. The following notes and photos are from Dr. Clarke while he was participating in a CRE field inspection in India.

(January 6) Greetings from Mysore, India. It is 6:30am here, 5:00pm yesterday in Santa Barbara, and, from my hotel room, I can look across the hazy dawn landscape as the light filters back into the lush gardens of the former British Raj mansions, filled with coconut palms, surrounding the city train station now just coming to life in the middle distance.

I left Santa Barbara on New Years day, overnighted in New York, and then flew directly to Mumbai, where we stayed in the Trident Oberoi, one of the two hotels attacked by terrorists in 2008. Early the next morning, departing from the Gateway to India in front of the Taj Mahal Hotel (center of the attacks), we took a boat ride out to see the 7th century carved basalt caves on Elephanta Island, where the mountain has been carved into a temple to Shiva.

In the afternoon, with guides from the local community, I toured Mumbai’s most persistent “informal settlement” or slum called Dharavi. Here, the inhabitants take waste materials and recast, shred, and grind them down for recycling, living, and eating where they work under dire conditions.

Yesterday, we flew to Bangalore, where we were greeted on the highway by a massive Yahoo! sign, truly showing the new India. A four hour drive brought us to Mysore, where today we visit Bandipur National Park. India is hot, dirty, busy, overcrowded, and unpredictable. On the other hand, it is a unique and wonderful place I would not have missed for the world.

(January 13) After quite a day’s travel and quite a three day stay in Assam, I’ve just arrived in Delhi for a formal National Geographic dinner tonight. While the 3 a.m. wake up call this morning was excruciating, and the drive from Kaziranga to Guwahati a classic bit of India travel (bumpy, slow, truck heavy, cold, misty, and with a roof vent in the bus stuck open), my day was made by having a clear view during the flight here of the front range of the Himalaya all the way from Bhutan across Nepal.

Also a once-in-a-lifetime experience was Kaziranga National Park. In four trips into the park, I saw Hog deer, Swamp deer, a pair of Hornbills, very many elephants and wild buffalo, and, of course, the famous Great One-horned Rhinoceroses. The CRE visit to the site is a result of the August 2010 feature article about Kaziranga in National Geographic Magazine. Enforcement against poaching is thorough; there are 600 rangers, dispersed in remote raised platform camps, and they are authorized to shoot to kill, as they did twice last month.

Two highlights stand out. First, a dawn trip through the elephant grass on elephant back. The park animals have no fear of the elephants, and you can get very close to the fauna. Second, and one of the highlights of the whole trip for me, was seeing a Bengal Tiger in the wild. A freshly woken and irritated tiger’s roar from 10m away sure gets the adrenaline pumping!

I’m looking forward to Varanasi tomorrow, and we have both sunset and sunrise cruises on the Ganges to witness the famous Hindu cremations first hand. While I’ll be glad to get home, I must say that the advertising campaign “Incredible India” really hits it on the head. This place is full of surprises, friendly people, exciting customs, and historical richness. I’m quite sure I’ll be back some time soon.