Prof. Dickey Selected for Secretary of the Navy/Chief of Naval Operations Chair of Oceanographic Sciences

Professor Tommy Dickey is one of just 12 ocean scientists to become a Secretary of the Navy/Chief of Naval Operations Chair of Oceanographic Sciences since the inception of the program in 1984 when the Secretary of the Navy (SECNAV), John Lehman, and the Chief of Naval Operations (CNO), Admiral James Watkins, developed a program to reinvigorate Naval oceanography. This program included the creation of SECNAV/CNO “Chairs” in Oceanography in order to recognize distinguished academic ocean scientists and facilitate interactions between the academic community and the operating fleet. Recipients of Chair awards are internationally known leaders with collaborations across many science areas and sponsoring agencies. The Chairs are awarded to two oceanographers every 4 years.

This year’s awards were made to Professor Tommy Dickey of UCSB and Professor Tom Sanford of the University of Washington. Professor Dickey is the first Chair recipient with a specialty in Ocean Optics, as well as the first in the history of UCSB Geography. Past chairs are Professor Robert A. Holman of Oregon State University; Professor William A. Kuperman of Scripps Institution of Oceanography; Professor Walter Munk, Scripps; Professor Robert Ballard, Woods Hole Oceanographic Institution; Professor James O’Brien, Florida State University; Professor Carl Wunsch, Massachusetts Institute of Technology; Professor John Orcutt, Scripps; Professor Mike Gregg, University of Washington; Professor Arthur Baggeroer, MIT; and Professor Robert Weller, Woods Hole.

Each award is granted for life and provides support to the Chairs for four years in the amount of $1.2 million, including funds for at least two graduate students. The Chairs serve as advisors and make recommendations to the Chief of Naval Research and various Navy departments. Professor Dickey will be focusing his research as a SECNAV/CNO Chair in the areas of ocean responses to hurricanes, mesoscale eddies, and optical variability forced by ocean dynamics. The latter topic will involve Office of Naval Research (ONR) field experiments in the Santa Barbara Channel in 2008 and off Hawaii in 2009.

Tommy describes his research into optical variability, known as Radiance in a Dynamic Ocean (RaDyO), as follows: “Twinkling stars are fun to view, but the twinkling effect is a blurring problem for astronomers who attempt to view...”

continued on page 4
The Winds of Change Are Blowing on many literal and figurative levels. As I write, hot Santa Ana winds are blowing in Southern California, and we know what that can lead to on the local scale. This July’s “Gap Fire” grew from 300 to 3000 acres in 36 hours, got within 4 miles of the UCSB campus, and forced the evacuation of thousands of people in the Goleta and foothill areas adjacent to the inferno. Firefighters and ancillary personnel (and pure luck regarding the weather) saved us at the end of the day, but the geographic information they used to such good effect was provided by experts in GIS, remote sensing, and environmental research. Yes, Geography is important.

On an academically global level, Professor Catherine Gautier has co-authored a new book: Facing Climate Change Together. Co-edited with Jean-Louis Fellous, Executive Director of the Committee on Space Research, and written with 24 co-authors, the book contains chapters on aspects and impacts of climate change, the greenhouse effect, clouds, the carbon cycle, atmospheric aerosols and chemistry, the water cycle, and the human dimension in relation to such phenomena. Also notable is a recent article in the Proceedings of the National Academy of Sciences, co-authored by Dr. Chris Funk (lead author) and Professor Joel Michaelsen of our Climate Hazards Group, which links warming of the Indian Ocean with an alarming drop in African rainfall and consequent food insecurity. The article has received major press coverage. I also would like to applaud Professor Hugo Loaiciga who has been selected by the Water Resources Planning and Management Division of the American Society of Civil Engineers as the recipient of the 2008 Julian Hinds Award. The award was made for “notable performance, long years of distinguished service, or specific actions that have served to advance engineering in the field of planning, development, and management of water resources.”

Change has also swept through departmental personnel. After three years in our Department, Assistant Professor Hallie Eakin has accepted a position at Arizona State University. We will miss her and wish her the best of luck in her upcoming change. Hallie will be finishing students here for several years and we appreciate her help and commitment to her (our) students. On a brighter note, we have added three new members to our faculty. Dr. Leila M. Véspoli de Carvalho has joined the Department as an Assistant Professor specializing in Climate Science. Dr. Carvalho received her PhD in Meteorology from the Institute of Astronomy and Geophysics, Department of Atmospheric Sciences, University of São Paulo, Brazil. Leila’s research interests include regional and large-scale climate variability and modeling, global climate change, Antarctic climate, tropical climate, monsoon systems, and scaling processes in geophysics. Dr. Jennifer Y. King began her appointment as an Associate Professor of Geography on July 1. She hails from the University of Minnesota where she was an Assistant Professor in both the Department of Soil, Water, and Climate and the Department of Ecology, Evolution, and Behavior. Dr. King was recruited into the Earth System Science departmental emphasis area; her research focus is on biogeochemistry, earth system science, global change, ecosystem ecology, and plant-soil-atmosphere interactions. I would also like to extend a welcome to Dr. Joe McFadden who also comes to us from the University of Minnesota’s Department of Ecology, Evolution, and Behavior where he was an Assistant Professor from 2002 to 2008. Joe received his PhD from UC Berkeley in 1998; he was a Postdoctoral Research Fellow in the Institute of Arctic Biology at the University of Alaska, Fairbanks from 1998 to 1999; and he was a Research Associate in the Department of Atmospheric Science at Colorado State University from 1999 to 2001. Dr. McFadden’s research interests include global ecology, biosphere-atmosphere interactions, and Earth system science.

“It’s an ill wind that blows nobody any good” (The Economist, November 23, 1929). Needless to say, the current economic maelstrom has impacted all levels of society, from global to local levels. One hopes that economists will finally learn that their models must reflect the real world rather than ideal assumptions about never ending growth (they would do well to read the new book that Professor Reg Golledge has just written: Amedeo, D., Golledge, R. G., & Stimson, R. J. (2009). Person Environment Behavior Research. Investigating Activities and Experiences in Spaces and Environments. New York: Guilford Press). But, for now, we are forced to deal with the reality of the economic meltdown. According to the UC Office of the President, “UC received $48 million less in state revenue than in the prior year. But furthermore, the adopted state budget did not provide funding for increased student enrollments or inflationary increases in fixed costs such as utilities and health benefits. The university must achieve $100 million in savings to cover those cost increases.” If you can afford it, please consider investing in Geographic research and education at UCSB. Global change is real, and our future is, literally, at stake.

Sincerely, Oliver Chadwick
Where in the World?

The correct choice is N. PLATTE R., RES., DUNES/USA-NEBRASKA

Featured in this northeast-looking, low-oblique photograph are the Kingsley Dam and Lake C. W. McConaughy on the North Platte River, which separates the agricultural south from the Sand Hills to the north. The lake provides water for public water systems, irrigation, and recreation. The Sand Hills, formed during the ice ages and covering 20,000 square miles (50,000 square kilometers), is the largest sand dune complex in the Western Hemisphere. Most are transverse dunes—some as high as 300 feet (90 meters) and 10 miles (16 kilometers) long. Many Sand Hills valleys distant from major streams contain wet meadows or small, shallow lakes, some of which rise and fall with the fluctuating water table. The flat valleys of both the North Platte River and the South Platte River (bottom center) were followed by pioneers moving west from the eastern United States. The first transcontinental railroad also followed this route.

Raubal Wins U.V. Helava Award

Associate Professor Martin Raubal has won the prestigious Helava Award, including a grand prize of ~$10,000. The international award, sponsored by Elsevier Science BV and Leica Geosystems, LLC, is presented to the author(s) of the most outstanding paper published exclusively in the ISPRS International Journal of Photogrammetry and Remote Sensing during the four years preceding its Congress. The award was established to encourage and stimulate submission of high quality scientific papers by individual authors or groups to the Journal, to promote and advertise the Journal, and to honor the outstanding contributions of Dr. Uuno V. Helava to research and development in Photogrammetry and Remote Sensing.

The paper in question is: Martin Raubal, Stephan Winter, Sven Teßmann, and Christian Gaisbauer (2007) Time geography for ad-hoc shared-ride trip planning in mobile geosensor networks. ISPRS Journal of Photogrammetry and Remote Sensing 62(5): 366-381. Dr. Raubal comments: “The work was done with my long-time collaborator Stephan Winter (The University of Melbourne, Australia), Sven Teßmann (my former grad student who now works for the German Space Agency) and Christian Gaisbauer (now a PhD student at Vienna University of Technology, Austria). We have been working on this particular topic for several years, providing an agent-based simulation of the shared-ride trip planning problem within a non-deterministic transportation network. The research utilizes mobile geosensor networks and applies spatio-temporal concepts from time geography to find optimal travel assignments. In the simulation we could quantitatively confirm the theoretically foreseen reduction in communication costs.”

George Vosselman, Editor-in-Chief of the ISPRS Journal, announced the award to Dr. Raubal by stating, “As announced in my previous mail, your paper selected as the best paper of 2007 was a candidate for the ISPRS Helava Award for the best paper in the period 2004-2007. It is my pleasure to inform you that this prestigious prize has been awarded to you and your co-authors. I would like to congratulate you on behalf of the ISPRS Council and the jury of the Helava Award! The award, consisting of a plaque and a grant of SF$ 10,000, will be presented at the opening ceremony of the ISPRS congress in Beijing on July 3rd. We would appreciate it if you (or one of your co-authors) could be present at this ceremony to accept the Helava Award.” Quite an honor—as well as yet another reason our Department is internationally renowned.

Welcome Aboard, Dr. Carvalho!

Dr. Leila M. Véspoli de Carvalho has joined the UCSB Department of Geography as an Assistant Professor specializing in Climate Science. Dr. Carvalho received her PhD in Meteorology from the Institute of Astronomy and Geophysics, Department of Atmospheric Sciences, University of São Paulo (USP), Brazil. She was an Assistant Professor at the Institute of Astronomy and Geophysics, Department of Atmospheric Sciences, USP 1998 - present, as well as an Assistant Researcher at the Institute for Computational Earth System Science at UCSB, 2001 - present. Leila’s research interests include regional and large-scale climate variability and modeling, global climate change, Antarctic climate, tropical climate, monsoon systems, and scaling processes in geophysics. She will begin teaching Geography 201 (Seminar in Geography) in the 2009 Spring Quarter.

Leila joined the Department of Geography at UCSB, because she was “motivated by its multidisciplinary scope and exciting opportunities to bridge climate, environmental, and social sciences.” She also adds to the department’s international flavor: Reg Golledge is from Australia; Martin Raubal from Austria; Hugo Loaiciga from Costa Rica; Keith Clarke, Mike Goodchild, and Terry Smith from England; Catherine Gautier from France; Helen Couclelis, Kostas Goulias, and Phaedon Kyriakidis from Greece; Waldo Tobler from Switzerland; and Bodo Bookhagen from Germany. More importantly, Leila adds to the department’s international reputation, and we welcome her aboard!”

Where in the World?

The correct choice is N. PLATTE R., RES., DUNES/USA-NEBRASKA

Featured in this northeast-looking, low-oblique photograph are the Kingsley Dam and Lake C. W. McConaughy on the North Platte River, which separates the agricultural south from the Sand Hills to the north. The lake provides water for public water systems, irrigation, and recreation. The Sand Hills, formed during the ice ages and covering 20,000 square miles (50,000 square kilometers), is the largest sand dune complex in the Western Hemisphere. Most are transverse dunes—some as high as 300 feet (90 meters) and 10 miles (16 kilometers) long. Many Sand Hills valleys distant from major streams contain wet meadows or small, shallow lakes, some of which rise and fall with the fluctuating water table. The flat valleys of both the North Platte River and the South Platte River (bottom center) were followed by pioneers moving west from the eastern United States. The first transcontinental railroad also followed this route.
Dickey continued from page 1

Distant celestial objects using earth-based telescopes as light passes through our turbulent and wavy atmosphere. An analogous effect occurs in the ocean, and even swimming pools, as evidenced by dancing light producing time-varying, complex patterns. Also, have you ever wondered why you cannot see objects above a water surface when you are swimming? If so, you are not alone! In fact, oceanographers from 12 different nations recently conducted a field study of waves and light rays with an eye toward the problem of imaging in the ocean and across the air-sea interface. The Radiance in a Dynamic Ocean (RaDyO) program is funded by the Office of Naval Research (ONR) to investigate this problem and to advance our understanding of waves and light propagation across the air-sea interface and within the upper ocean. This topic bears not only upon imaging, but also on the use of light field measurements for characterizing and quantifying surface waves, phytoplankton physiology and productivity, near surface thermodynamics, natural and man-made surfactants, bubbles, and gas exchange across the air-sea interface. Several aspects of RaDyO also bear on the problem of constraining global carbon budgets.

The first phase of RaDyO centered on the testing of newly developed optical and wave sensing instrumentation from the Scripps Institution of Oceanography pier in January, 2008. In September 2008, RaDyO investigators led by Professor Tommy Dickey came to the Santa Barbara Channel for the first of two major field experiments. RaDyO instrumentation was deployed from the Research Platform (R/P) FLIP [acronym for FLoating Instrument Platform (see website http://sio.ucsd.edu/voyager/flip/flip2.html)], the research vessel (R/V) Kilo Moana, two autonomous underwater vehicles (AUVs, essentially robotic submarines), a small platform for collecting surfactants at the ocean surface (dubbed Lil Kilo Moana for obvious reasons), and a small airplane. These collective platforms measured a host of ocean processes related to the fundamental problem of light propagation as affected by waves, turbulence, bubbles, surfactants, and the optical properties of near surface seawater.

Why were R/P FLIP and the R/V Kilo Moana chosen as the primary platforms for RaDyO? Stability! The center of gravity of the ~355 ft long FLIP, when flipped of course, is very deep. Thus, its vertical and rolling motion in the water is minimal. This is important for measuring waves and near surface light, as removal of the effects of normal ship motion is difficult if not impossible. And why R/V Kilo Moana? The Kilo Moana is a 186 ft long SWATH vessel. SWATH is one of the many acronyms of RaDyO and stands for Small Water Area Twin Hull. So, the Kilo Moana is much like a catamaran, but stable as its center of gravity is relatively low in the water as well. RaDyO is taking advantage of two of the most stable vessels in existence.

Why was the Santa Barbara Channel selected for the first RaDyO field experiment? First, the conditions of interest were moderate sea states and winds. Second, a site whose optical properties had been characterized was desirable. And third, an accessible location would allow for transfers of personnel and instrumentation from shore. The first point was nicely satisfied during RaDyO as a broad range of winds and sea states was observed, and a big bonus was the occurrence of several sunny days— a wonderful thing for optical oceanographers interested in the propagation of natural sunlight. The second selection criterion was met thanks to past optical work in the Channel by Ray Smith, Dave Siegel, Libe Washburn, and the Ocean Physics

R/V Kilo Moana and a surfactant skimmer called Lil Kilo Moana in the foreground, and R/P FLIP in the background at left as they were used for the RaDyO experiment in the Santa Barbara Channel in September 2008. The Lil Kilo Moana was developed by Svein Vagle and his group from the Institute of Ocean Studies in Sydney, B.C., Canada. Photo credit to Masaya Shinki.
Laboratory. The third aspect turned out to be far more important than RaDyO scientists had envisioned, as early mechanical problems with a large AUV were only solved when parts were transported to the Kilo Moana by a small boat (Zephyr) out of Ventura.

The data collected from all of the RaDyO platforms are being analyzed at present, and modelers from MIT, Johns Hopkins, and Texas A & M are anxiously awaiting the ingestion of the field data into their models. The imaging problem for the modelers is analogous to that of the astronomers who attempt to remove the blurring effect of atmospheric waves and turbulence. The next field experiment will be conducted off Hawaii in August 2009, and plans are already being discussed during evening sessions by the oceanographers on the Kilo Moana and FLIP. The Hawaiian site is desirable, as it will provide larger sea swell, stronger winds, and contrastingly clear waters. A Waves and Rays workshop will be held in early January 2009, with participants coming from several countries and states, as well as southern California.”

According to some websites devoted to the derivation of names, the name “Hallie” has a Greek origin and means “thinking of the sea.” True or not, all of us in Geography hope that Hallie Eakin will think of us at “UCSB by the Sea” after she leaves. Hallie has accepted a faculty position at Arizona State University, and everyone in the department is sad to see her go. The following comment about Hallie is only a small sample of the many tributes to her that your editor received:

“After three years in our Department, Hallie Eakin has accepted a position at Arizona State University. She will be leaving us this summer along with her husband, Luis Bojorquez of ICESS. Hallie’s arrival followed a flowering of human-environment relations teaching and research in our department. She introduced new courses at the undergraduate and graduate levels: World Regions, a popular course among majors and Global Studies students, Society and Hazards, and several popular graduate seminars, including Global Environmental Change, and Food, Agriculture and Global Change. She remains lead advisor for three UCSB Geography students: Felipe Murtinho (Community watershed management and capacities for adaptation in Columbia, Amy Lerner (Food production, globalization, and urbanization in Mexico, and Elisa Frank (Coffee farming and sustainable development in Mexico. She was a popular and involved committee member for many students in the department in human-environment relations and human geography writ large. Hallie’s research centers on human adaptation at local scales to global environmental change. Her broader research involves governance, globalization, within the institutional context of vulnerability and adaptation, rural development, food security, agricultural change and food sovereignty, and social-ecological resilience and integration of hazard risk into development planning. Her overarching research question, applied to small-scale coffee and maize farmers in Mexico and throughout Latin America, centered on the question: How do households cope with various sources of uncertainty and adapt livelihoods to accommodate evolving environmental, political, and economic change? Her 2006 book (Weathering Risk in Rural Mexico: Climatic, Economic and Institutional Change. University of Arizona Press) is a mainstay in the emerging canon on human adaptation to climate change. To quote from the book: ‘From floods and droughts to tsunamis and hurricanes, recent years have seen a distressing and often devastating increase in extreme climatic events. While it is possible to study these disasters from a purely scientific perspective, a growing preponderance of evidence suggests that changes in the environment are related to both a shift in global economic relations and these weather-related disasters.’ We thank Hallie for all the support she provided us. We enjoyed working with her and we will miss her. We wish her the very best in her new position.” (Professor David Carr)
The Gap Fire

The misnamed “Gap Fire” began on July 1, around 5 pm, and quickly grew from 300 acres to 3000 acres in the next 36 hours. The flames were visible from Ellison Hall on July 2. The perimeter of the fire got within 4 miles of the northernmost point of the UCSB campus, and it forced the evacuation of thousands of people in the Goleta and foothill areas adjacent to the inferno. Old chaparral which hadn’t burned in over 55 years fueled flames as high as 100 feet, and evening “sundowner” winds threatened to create a fire storm that could move at 60 mph or more and devastate a major urban community within minutes (as was the case in the 1990 Painted Cave Fire). The Gap Fire quickly became the number one priority fire in California. Thick smoke and ash played havoc with Edison’s main transmission lines and resulted in near-daily power outages for a week, as well as serious air pollution. In all, over 10,000 acres burned, and it cost over $20 million to contain the conflagration—but no lives or homes were lost.

Hazards and Risks is a major focus in Geography, and the UCSB Department of Geography is well equipped and, ironically, well situated to study one of the main ones—fire. Professor Dar Roberts maintains a lab that is devoted to such things—his Visualization and Image Processing for Environmental Research Lab, better known as the VIPER Lab, specializes in research on the remote sensing of vegetation, land-use/land-cover change, plant physiology, spectroscopy, and wildfire and fire ecology. Firefighters and ancillary personnel (and pure luck regarding the weather) saved us at the end of the day, but the geographic information they used to such good effect was provided by experts in GIS, remote sensing, and environmental research.

A note on “sundowners” in relation to Goleta: “The city’s geography at the feet of the Santa Ynez Mountains has made it subject to sudden, extremely hot winds locally called “sundowners,” similar to the more famous Santa Ana winds in the Los Angeles and San Diego regions. They are caused by high pressure drawing dry air from the inland side of the mountains, whereupon they can become superheated as they rush down the city’s side. On June 17, 1859, a sundowner wind rushed through Goleta and rapidly raised the temperature to 133 degrees Fahrenheit (approximately 56 degrees Celsius) in a matter of minutes. People were forced to take shelter immediately; when they emerged they saw that most animals and plants had been killed. It was the highest temperature recorded in the United States until 1913.” (From the Wikipedia article on the City of Goleta).

A Warm Welcome to Jennifer King

Dr. Jennifer Y. King began her appointment as an Associate Professor on July 1. She hails from the University of Minnesota where she was an Assistant Professor in both the Department of Soil, Water, and Climate and the Department of Ecology, Evolution, and Behavior. Dr. King was recruited into the Earth System Science departmental emphasis area with a research focus on biogeochemical processes. Her research interest is in the biogeochemistry, earth system science, global change, ecosystem ecology, and plant-soil-atmosphere interactions. Jennifer will teach her first class (Biogeochemistry) in Winter Quarter, 2009.

Dr. King received her PhD in Earth System Science from UC Irvine in 1999; she was a Postdoctoral Research Fellow, doing soil-plant-nutrient research with the USDA Agricultural Research Service, from 1999 to 2001; and she was an Assistant Professor at Minnesota from 2002 to 2008. Her numerous awards include the Arctic Research Consortium of the United States Research Excellence Award in 2000, a USDA Agricultural Research Service Postdoctoral Research Fellowship from 1999 to 2001, an Outstanding Reviewer Award from the Journal of Environmental Quality in 2002, and a nomination for the John Tate Award for Excellence in Undergraduate Advising from the University of Minnesota in 2008. She has coauthored articles in both Science and Nature and is currently working on ongoing research grants from the USGS/University of Minnesota Water Resources Center and the NSF’s Division of Environmental Biology (Ecosystem Science).

Jennifer comments, “I am thrilled to be joining the Geography Department. I think it will be an ideal environment for me to integrate my research focus on biogeochemical processes with my long-standing interest in studying the Earth as a system. I look forward to getting to know everyone!” I know I speak for the entire Department in extending a warm welcome to her!
Allen, Teddy (BA, 1999)
I wanted to take this opportunity to update UCSB geog on some news from an undergrad alumnus (1999). Since last year 2007, I have been pursuing a master's degree from East Carolina University as part their Atmospheric Science Program within their geography department. My thesis examines the variable summertime Caribbean precipitation pattern and its effect on Jamaican agriculture, which has allowed me to collaborate with researchers from The University of the West Indies in Kingston Jamaica. The project is a great opportunity to employ many of the interdisciplinary skills learned from the geog department such as remote sensing analysis, GIS, and climatology towards specific social applications. As part of my research, I have been awarded with the opportunity to serve as a graduate student summer intern this summer at the NASA Goddard Space Flight Center in Greenbelt, MD to focus on Caribbean precipitation variability from some of the world's leading experts. After my master's thesis is complete, I plan to apply my geographic skills to the goals of the Famine Early Warning System (FEWS NET) to continue working towards environmental-social applications. Thank you to the UCSB geog department who have been influential in guiding my interests within climate applications! I hope all is well back at 93107!

Kemp, Karen (PhD, 1992)
Karen writes to say that she is currently an Independent Scholar and Senior Scientist at the Kohala Center in Waimea HI, and that she has recently edited a book: Encyclopedia of Geographic Information Science, Karen K. Kemp, ed. 2008, Sage Publications.

Following my Geography and Environmental Studies teaching duties at UCSB from 1982-1990, I have become the principal researcher for range maps for birds in North America, creating the maps used in most of the field guides currently on the market; and including additional work on several bird-related mapping and book projects for the National Geographic Society. All this is NOT the result of any formal cartographic training at UCSB or elsewhere, mind you, but rather is the result of my long-standing interests in North American bird distribution, populations, migration, and the effects of weather on bird movements.

continued on page 8
THANK YOU, DONORS!
The Department of Geography would like to thank the following people and institutions for their generous support during the period January 2008 - November 2008

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Alumni, continued from page 7

Maynard, Paul (MA, 1981)
I have been working for Essex Corporation in Columbia, Maryland, a wholly owned subsidiary of Northrop Grumman, since last March. We manufacture our own multi-band SAR sensor, and currently fly it under contract for several 3 letter government agencies. I have been writing the software exploitation segment and having a blast. Our sensor can be dynamically software configured to acquire multi-polarimetric L, P, or X band wavelengths. We are pushing the state of the art with coherent change detection (we are able to detect changes at the sensor wavelength which can be measured in millimeters) and we can create 3D volumes (SAR tomography) that use a synthesized vertical aperture that can eliminate layover and dramatically reduce speckle. 2D slices extracted from one of our volumes looks like high quality EO imagery – it is unbelievable! We can model triple canopy forest scenarios, and model the ground surface vs. any particular canopy layer thanks to the 3D volume and the longer penetrating wavelengths of the L and P bands. I believe that our technology could be very useful in forest modeling and other civilian applications. I have attempted to email Drs. Alan Strahler and Curtis Woodcock at BU (my UCSB thesis advisor and office room mate), but have gotten no response. If there are folks at UCSB that would like to contact me regarding SAR, please do so.
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☐ Geography Department Support: Unrestricted support.

☐ 30th Anniversary Scholarship: An endowment designed where interest only will be used to fund an annual scholarship.

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☐ The Nicholas Bourdakis Memorial Fund: The Bourdakis Fund was established after the tragic death of Nicholas, who died in February 2001 when struck by a car in Isla Vista. He had just declared Geography his major.

☐ Jack and Laura Dangermond Fund: Jack Dangermond is the founder of ESRI (1969), a GIS and mapping software company. He is considered one of the most influential people in GIS worldwide.

☐ The Jack Estes Memorial Fund: Jack Estes was a Geography faculty member for over thirty years. He built a thriving remote sensing research unit and mentored many students.

☐ The Reginald G. and Allison L. Golledge Distinguished Lecture Fund: Twenty years ago, the Golledge Distinguished Lecture was instituted to bring highly respected speakers to campus to share their research.

☐ The David Simonett Memorial Fund: David Simonett was the first Chair of the Geography Department. He built what has become one of the nation’s finest Geography Departments.

☐ Leal Anne Kerry Mertes Memorial Scholarship Fund: The Scholarship will support undergraduate and graduate UCSB students who are planning or are engaged in scientific field research.

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Dr. Joe McFadden was appointed Assistant Professor in the UCSB Department of Geography starting July 1. Dr. McFadden comes to us from the University of Minnesota where he was Assistant Professor of Global Ecology from 2002 to 2008. He received his Ph.D. from U.C. Berkeley in 1998; he was a Postdoctoral Research Fellow at the University of Alaska, Fairbanks from 1998 to 1999; and he was a Research Associate in Atmospheric Science at Colorado State University from 1999 to 2001.

Dr. McFadden’s research is focused on understanding the consequences of land-cover and land-use change. His recent work includes climate-induced vegetation change in the Arctic and its feedbacks to the atmosphere and hydrosphere, and the effects of urban and suburban development on regional water, energy, and carbon exchange.

He received a NASA New Investigator Award in 2004 and he has published widely in such prestigious journals as Science, Ecology, and the Journal of Climate. He is currently working on ongoing research grants from NASA’s Earth Science Division and NSF’s Dynamics of Coupled Natural and Human Systems program.

In describing his current research, Dr. McFadden writes: “Much of my current work is aimed at improving our understanding of developed (i.e. urban, suburban, and peri-urban) landscapes as a component of the changing mosaic of land uses in the United States. Specifically, I am determining how ecological and anthropogenic processes control the spatial and temporal dynamics of carbon fluxes in the built environment. This will provide a basis for representing developed land in regional and global carbon models, which do not currently include the effects of urban ecosystems.”

Dr. McFadden will be teaching Geography 115A (Earth from Above) and 200A (Introduction to Geography Research) this Fall Quarter. As for his move to Santa Barbara and the Department, he comments: “I am very excited to be joining the faculty

KUDOS: UCSB Geography in the News

Professor Hugo Loaiciga has been selected by the Water Resources Planning and Management Division of the American Society of Civil Engineers as the recipient of the 2008 Julian Hinds Award. The award was made for “notable performance, long years of distinguished service, or specific actions that have served to advance engineering in the field of planning, development, and management of water resources.”

Graduate student Jason Davis was selected as the Latin American Specialty Group’s Student Paper Competition winner and received honorable mention by the Population Specialty Group at this year’s annual AAG conference for his paper, “Flowing Wealth, Circulating Labor and Reproduction in Central American and Caribbean Households.”

Grad student Kriste Henson was awarded an Eisenhower Graduate Fellowship from the US Department of Transportation, a Geography and Regional Science Dissertation Improvement Grant from the National Science Foundation, and a Doctoral Dissertation Grant from the University of California Transportation Center. According to Kriste’s advisor, Kostas Goulias, her Eisenhower Graduate Fellowship award of $35,500 “was the largest award that I have ever seen since the creation of the program.

Grad student Seo Youn Yoon has been awarded an Eisenhower Transportation Fellowship of $1500 to cover travel costs to the 2009 Annual Transportation Research Board meeting in Washington DC.

Professor Dar Roberts was selected as a recipient of the 2007/08 UCSB Outstanding Graduate Mentor Award. The award was initiated in 2005/06 in recognition of UCSB faculty whose mentoring is considered exemplary, and, of the eight recipients to date, two have been from the Department of Geography (Professor Reg Golledge received the award in 2005/06).

Indy Hurt was awarded one of three highly sought after Center for Nanotechnology in Society Graduate Research Fellowships for 2008/2009. Center for Nanotechnology in Society fellows are awarded $30,000 for living expenses, GSHIP health insurance, and in-state tuition and fees.
Grad students **Brent Hecht** (along with Nicole Starosielski of Film Studies and **Drew Dara-Abrams** of Geography) won the 2008 AAG International Geographic Information Fund (IGIF) Student Paper Award this year with the publication of “Generating Educational Tourism Narratives from Wikipedia,” (B. Hecht, N. Starosielski, & D. Dara-Abrams, Proc. Association for the Advancement of Artificial Intelligence (AAAI) Fall Symposium on Intelligent Narrative Technologies (AAAI-INT 07), 2007, pp. 37-44).

The 2008 Jack and Laura Dangermond Graduate Fellowship was won by **Josh Bader**. This Fellowship is awarded to a promising graduate geography student in Geographic Information Systems (GIS) in the department of Geography. The recipient will hold the title “The Jack and Laura Dangermond Fellow” in residence and receives a stipend, allowing its holder to devote more time to imaginative and creative research. Monica Altmaier won The Jack & Laura Dangermond Undergraduate Scholarship.

The 2008 David S. Simonett Memorial Award was won by **Philipp Schneider**. The award is in honor of our first Chair. To quote from the “Department History” on our web site, “Simonett had the vision, firepower, persistence, and generosity of spirit to alchemize talented individuals into one of the most prestigious Geography departments of the United States.”

**Brett Hartman** won the 2008 Leal Anne Kerry Mertes Scholarship for his research proposal, “A community development approach to ecological restoration in developing nations: Case study analyses from the highlands of Peru and Bolivia.”

**Suzanne Foss** received the annual Department of Geography Excellence in Teaching Award. The Geography Excellence in Research Award was won by **Julie Dillemuth** for her outstanding research track record.

Grad student **Shithi Kamal** won a NASA Earth and Space Science Fellowship for the 2008/2009 academic year. Her fellowship proposal is titled “Hydrometeorologic Controls and Capacity for Prediction of Floods in the Brahamputra River Basin.” The NASA fellowship provides $30,000 of support for up to three years.

Insights on Science and Technology for Society (INSCITES) is an educational program funded by the NSF “with the goal of promoting scientific and technological literacy with a strong emphasis on social impact and responsibility.” As an INSCITES Teaching Scholar, graduate student **Keely Roth** will receive a $12,000 stipend for one year, during which she will develop and teach a new integrative undergraduate course on the science, economics, history, and sociology of innovative technologies.

A recent article in the Proceedings of the National Academy of Sciences, coauthored by **Chris Funk** (lead author) and **Joel Michaelsen** of the UCSB Geography Department’s Climate Hazards Group, links warming of the Indian Ocean with an alarming drop in African rainfall and consequent food insecurity. The article, “Warming of the Indian Ocean threatens eastern and southern African food security but could be mitigated by agricultural development,” received major press coverage.

**Geography professor Libe Washburn** has been appointed the new Chair of the UCSB Interdepartmental Graduate Program in Marine Science. The Program, which offers MS and PhD degrees, is made up of faculty from nine departments on campus.

**Grads Indy Hurt** and **Kailen Wright** won “Best Student Application” at an Adobe Conference. The event was designed to bring together Flash content developers at the Adobe San Francisco office where participants would have the opportunity to develop with pre release Adobe Flash CS4 and the new Flash 10 player before they are available to the general public.
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