

The Aztec Geographer

Department of Geography

Fall 2006

San Diego State University

MESSAGE FROM THE CHAIR

Greetings Aztec Geographers and friends—past, present, and future! It has been several years, at least, since our last newsletter, and we are excited to inform you about happenings in the Department since we last contacted you. I am happy to report that despite a severe budget cut three years ago to the CSU system, our program is in excellent shape. All of the traditional measures of departmental health are positive, and we have undertaken a number of initiatives that have had a significant impact upon our program. I have served as chair since August 2004 and followed Ed Aguado who served from January 1997-August 2004. Previous to Ed, Doug Stow was chair from August 1992-January 1997, succeeding Ernie Griffin.

In overall enrollment terms we are serving more than 2200 students per semester. Our number of undergraduate majors has increased to 132 this fall, from 103 two years ago, and the quality our majors remains high. In addition to our B.A program with its four emphases, we have added a B.S. degree in Geography with an emphasis in Geographic Information Science. The Department also plays a major role in the new, interdisciplinary Watershed Analysis track in the Environmental Sciences program. Related to curricular changes in the undergraduate program are the addition of several new courses, the most recent being Geography 104 — Geographic

Information Science and Spatial Reasoning — which serves both as a requirement for some of the major's emphases, as well as a general education course for non-majors in the mathematics/quantitative reasoning section of the general catalog. Our number of master's students remains at about 55-60 each academic year, with at least 30 receiving financial support through the Department. We continue to attract quality applicants from all over the world. In addition to the M.A. in Geography, we now offer an M.S. with emphases in Geographic Information Science and in Watershed Science.

Our doctoral program continues to thrive, and we have averaged about 24 doctoral students over the past several years. Doctoral, as well as master's-level students are increasingly engaged in various faculty research projects as well as their own thesis/dissertation research. Some of our recent Ph.D.s have found academic employment at institutions such as Clark University, SUNY Buffalo, Arizona State University, West Virginia University, Queen's University (Canada), and the University of Oklahoma. Students graduating with the bachelor's, master's, and doctoral degrees have also found meaningful employment in both the private and public sectors. The quality of our undergraduate and graduate-level instruction continues to be quite high. Diana Richardson

was awarded an Exemplary Academic Advising Award in spring, 2004 for her undergraduate advising by the Academic Advising Center Student Advisory Board and the Academic Advising Awards Committee. Last spring, the same board and committee awarded Distinguished Service Awards to Ed Aguado and Bonnie Golden for their exemplary academic advising of master's students.

Substantial changes have also occurred in faculty composition since our last newsletter. First and foremost, I have the sad task of announcing the recent passings (2006) of Dr. Charles Yahr and Dr. Bob O'Brien. Please see the attached bios on these two colleagues who served the Department and its students so well for many years. On a happier note, Phil Pryde retired in June 2001 but has remained active in the Department by serving on thesis committees, participating in our 'Teaching of College Geography' course, periodically guest lecturing in other professor's courses, and revising his book – *San Diego: An Introduction to the Region*. While Imre Quastler and Richard Wright retired in June, 2002, both remain very active. Richard has been the principal investigator for several funded projects that involve both other faculty and graduate students. Imre has authored at least two books dealing with the historical patterns and importance of railroads in the central U.S. Arthur Getis retired in June 2004 as the Stephen and Mary Birch Foundation Chair in Geographical Studies, but remains very active in the discipline and in the Department by continuing his research and serving on graduate student committees. Dave McArthur, Ernie

Griffin, Barbara Fredrich-Kennedy, and Fred Stutz also retired in June 2004, but remain busy. Dave taught as a lecturer in the Department from Fall 2004 through Fall 2005, and will teach again this spring semester. Ernie Griffin taught in the department from 1972-1996, then served as special assistant to the associate vice president for Academic Affairs in the Provost's Office until his retirement. He continues to work there part time, and was honored at last May's graduation ceremony when he delivered the commencement address to the College of Arts and Letters. Barbara and Fred have retired through the Faculty Early Retirement Program and have been teaching Fall and spring semesters, respectively. Janet Franklin moved over to the Biology Department here at SDSU in June 2002 but serves as an adjunct professor in our Department. Christina Tague left us last July to join the Bren School of Environmental Science and Management at UC Santa Barbara. Molly Pohl-Costello resigned last June to devote more time to her two young children, but, happily, she will be rejoining us this spring semester to teach two classes. Finally, Jean Colborn, our administrative coordinator, retired last June and moved with her husband Jim to Beaver, Utah. She has been capably replaced by Patti O'Leary (no relation to me). Patti is the daughter of Henry O'Leary who some of you may remember worked for 18 years in the College of Arts and Letters before his retirement in 1987.

While loss of faculty due to retirement causes some sadness, the hiring of new faculty brings invigorating freshness and new perspectives to our program. Dr.

Ming-Hsiang Tsou joined the Department in August 2000, and has teaching and research expertise in cartography and geographic information systems (GIS). Dr. Fernando Bosco joined the Department in August 2002, and brings research and teaching expertise in urban geography, social and cultural theory, economic geography, and Latin America. Dr. Piotr Jankowski joined the Department the following August, and has research and teaching expertise in the areas of spatial decision support systems, GIS, and water resources. Drs. Li An and André Skupin joined the Department in August 2005. Dr. An is a landscape ecologist with expertise in human-environment interactions and quantitative methods. Dr. Skupin has teaching and research expertise in cartography and GIS. Dr. George Christakos joined us last January as the third Stephen and Mary Birch Foundation Chair in Geographical Studies. He has research and teaching expertise in spatiotemporal stochastic modeling, knowledge synthesis, interdisciplinary systems, temporal GIS, geostatistics, environmental health and medical geography. Dr. Kathleen Farley joined the Department last July bringing expertise to our Department in the areas of global environmental change, ecosystem and watershed ecology, environmental policy, natural resource management and conservation. The Department is currently conducting hiring searches for both an urban-economic geographer and for a geographer with expertise in watershed science. If successful, the filling of these two positions will increase the number of our tenure/tenure-track faculty to 17.

Faculty research efforts continue to grow significantly. The number of refereed journal articles, book chapters, and books published by departmental faculty and graduate students is indeed impressive. Over the past three years, departmental faculty have produced or contributed to 147 refereed journal articles, 76 book chapters, and 13 books. Faculty members have also produced a substantial number of book reviews and technical reports. Over the past decade, departmental faculty have been very active in the acquisition of extramural funding to support their research, and in the last six years have averaged \$1,130,500 in grants and contracts per year. Research is vital to the professional growth of our faculty and directly benefits our teaching programs at both the undergraduate and graduate levels. Among other things, it creates new information to be given in the classroom, provides research projects that give students a chance to participate, brings new equipment to the Department, and generates additional funds for graduate assistantships.

Over the past decade most of the funded research has been conducted in the Department's Center for Earth Systems Analysis Research (CESAR). More recently a substantial amount of teaching and funded research involving geographic information systems has been conducted in a GIS lab dedicated to that purpose. In June, 2004 the lab was renamed the Richard D. Wright Spatial Analysis Laboratory in tribute to the very substantial contributions Richard has brought to our GIS program over time.

Lastly, we have a “Geography Development Fund” in the SDSU Campanile Foundation and have received generous support from alumni and friends. Donations to this fund have helped maintain departmental quality in an era of continual reductions in financial support from the state. Monies from this fund have been used for a variety of things such as scholarships and awards, field trips, colloquia honoraria, post-colloquia receptions, acquisition of classroom maps, and supplemental support of graduate student and faculty research.

To conclude, Geography continues to thrive at SDSU. However, as academics, the real satisfaction most of us derive from our profession is the success of all of our students. We are truly interested in your activities and hope that you will keep us informed of what you are doing. Please stop by and say hello when you have the chance or call us when you are thinking about us. Also visit our Department’s Web site (<http://geography.sdsu.edu/index.html>) to keep abreast of departmental news/activities and get the latest information on other alumni.

Best regards,

John O’Leary
Department Chair

FACULTY NEWS

Dr. Edward Aguado

Dr. Aguado is the Master’s Program advisor and his interests and research encompass climatology and weather. He is

principally interested in the precipitation and hydrology of Western U.S. Mountains. Dr. Aguado teaches Physical Geography, Meteorology, and Climatology courses, and is the co-author of the college text, [Understanding Weather and Climate](#).

Dr. Stuart Aitken

Dr. Aitken has done extensive research in urban and social geography with emphasis on families and communities, children and youth, and film. He is interested in the critical analysis of visual representations and GIS with a focus on how they are used in planning and teaching. Dr. Aitken emphasizes qualitative and poststructural methods as well as feminist approaches and critical theory in his research.

Dr. Li An

Dr. Li An is a relatively new faculty member who joined the Department in July, 2005. Dr. An’s academic pursuits focus on modeling and simulation of complex systems, landscape ecology, applications of GIS (including spatial analysis, Geocomputation) in land-use and land-cover change studies, quantitative landscape analyses, and human-environment interactions. More specifically, his current activities aim to (1) extend survival analysis to the GIS field and integrate it with GIS and Remote Sensing data/methods, (2) develop a new methodology called pseudo-history analysis that links agent-based modeling and statistical modeling, aiming to better analyze emergent space time data and understand the local mechanisms that generate such data (3) study the long term ecological effects of micro-level human demographic features

over space, and (4) apply for several external grants including NSF and NIH.

Dr. Fernando Bosco

Assistant Professor Fernando Bosco is now on his 5th year as a human geographer in the department. His interests include urban, social and political geography. He's been publishing several papers in the areas of geography and social movements and geography and social networks. Professor Bosco is also working on a co-authored edited collection on the human geographic dimensions of Latin America. He also is taking his research in new directions, and he is currently working on papers and a new research project in the areas of children geographies, development, and neoliberal economic restructuring in the Global South. He plans to collaborate with Professor Stuart Aitken on a project that examines the role of Hispanic children in San Diego in helping their immigrant parents become more involved in their local community. Professor Bosco continues to teach urban and cultural geography courses in the department as well as advanced human geography seminars for graduate students.

Dr. Kathleen Farley

Dr. Farley joined the SDSU Geography Department in July 2006. Her research interests are focused on the combined analysis of the socioeconomic and ecological components of environmental changes, ecosystem response to land use change, environmental policy, and ecosystem services. One of Dr. Farley's current projects studies the effects of the conversion of grasslands to tree plantations in Uruguay and Argentina.

This study looks at local and regional impacts on water cycles and implications for water quantity and quality in afforested regions. Before coming to SDSU, Dr. Farley spent two years as a post-doctoral research associate in the Center on Global Change at Duke University and on year working as an ecologist with The Nature Conservancy in northern California.

Dr. Larry Ford

Over the past year, Dr. Ford has been working on four different projects. He has been doing research with two Italian graduate students on Trieste, Italy and its border setting in conjunction with a Fulbright Award to the city in the Spring of 2005. Dr. Ford has also been working on a paper dealing with residential skyscrapers and globalization. He has given two papers on the topic and organized and chaired a session on cultural identity and the city for the APCG Meetings in Eugene this past September. Dr. Ford also has two book contracts that he is currently working on. The first is on older California suburbs and the second is entitled the city as a ride. In addition, he has directed Brenda Kayzar to the completion of her PhD dissertation.

Dr. Barbara Fredrich-Kennedy

Dr. Fredrich-Kennedy is our FERP teacher in fall semesters with research interests encompassing the origin of Mexican granaries, alternative medicine in the San Diego-Tijuana region, landscape interpretation, teaching and testing GIS for non-geography majors, and Caribbean women in reference to place and space. Dr. Fredrich-Kennedy's current projects include a field trip guide to the San Diego-Tijuana region and the SDSU Mediterranean garden.

Dr. Arthur Getis

Dr. Getis, retired Endowed Chair, is working as part of a large project designed to reduce the sometimes fatal disease, dengue hemorrhagic fever, from the tropical areas of the world. His work takes him to Thailand each year where he gathers data on dengue fever transmission. Mosquitoes are responsible for carrying the disease virus. He uses spatial analytic techniques and map analysis to identify movement of the disease over time. The project depends on geographic information systems (GIS). Dr. Getis and the project team have made considerable progress to the point where vaccine trials are expected to begin in about 2008. Unfortunately, however, the disease is spreading with global warming.

Dr. Allen Hope

Dr. Hope is working on a NASA funded project that is aimed at predicting river flows in southern California and the Western Cape region of South Africa. This research is being conducted in collaboration with researchers in South Africa and colleagues/students at SDSU (Doug Stow (Co-Investigator), Anders Burvall, Ryan Bart, Robyn Clark, Jordan Decker, Dillon Fitch and Daniel Hawtree). Specific goals of this study are to integrate satellite data into the hydrologic modeling schemes and to determine how changes in land-cover due to fires and invasive exotic vegetation affect river flows.

Dr. David S. McArthur

Dr. McArthur is an emeritus professor of geography with interests in coastal and fluvial geomorphology and the computer modeling of geomorphic systems. He

continues to enrich students' academic experiences by teaching Environmental Geomorphology and leading Accelerated coastal geomorphology field trips.

Dr. John O'Leary

Dr. O'Leary's main research interests include biogeography and vegetation ecology of Mediterranean-type ecosystems with special emphases on spatial and temporal patterns of species diversity, community composition, post-disturbance resilience, and habitat preferences of species. Dr. O'Leary uses field sampling, statistical analysis, remote sensing, GIS, and mapping as methods for vegetation analysis. He teaches Physical Geography, Natural Vegetation, and Climatology courses and was awarded the 2002-2003 SDSU Senate Excellence in Teaching Award.

Dr. Philip Pryde

Since retiring from active teaching in June of 2001, Phil continues to work with graduate students, does occasional guest lectures, and otherwise participates in departmental activities. He extends his appreciation to all who helped with the production of the revised 4th edition of San Diego: An Introduction to the Region (2004), for which Phil served as primary author and editor. When not lurking around the department, Phil stays active in the community serving on the board of directors of the San Diego Audubon Society, the San Dieguito River Park Joint Powers Authority, and other organizations, and giving talks to local groups on global warming and other environmental topics. Since 2003 he has been leading birding expeditions all over North America, with

trips to Alaska, Texas, and Arizona in 2006 and to Maine and Florida scheduled for 2007. He also lectures and leads field trips at Rancho la Puerta in Tecate, Mexico.

Dr. Sergio Rey

Dr. Rey's current projects include an open source geocomputation program named STARS (Space-Time Analysis of Regional Systems). Dr. Rey is also interested in integrated multiregional modeling, regional and urban socioeconomic modeling, spatial econometrics, spatial data analysis, and regional economics. He teaches courses such as Open Source Geocomputation, Regional and Urban Modeling, Quantitative Methods in Geographic Research, and Spatial Data Analysis.

Dr. André Skupin

One recent addition to the Geography faculty is Dr. André Skupin, who came to SDSU from the University of New Orleans where he was a faculty member in the Department of Geography for eight years. A native of East Germany, Dr. Skupin considers himself a "classically trained cartographer," with a Dipl.-Ing. degree in Cartography from the Technical University Dresden.

Dr. Skupin's core research area is the application of geographic metaphors, cartographic principles, and computational methods in the visualization of non-geographic information. His research is strongly interdisciplinary, aimed especially at increased cross-fertilization between geography, information science, and computer science. For example, he has developed new approaches to create map-

like knowledge domain visualizations on the basis of high-dimensional vector space models and artificial neural networks. Based on this approach he recently created a map of the geographic knowledge domain based on more than 20,000 abstracts submitted to the Annual AAG meetings between 1993 and 2002. A large, highly detailed version of this visualization has become part of an exhibit called *Places & Spaces: Cartography of the Physical and the Abstract*.

A growing Web site accompanying the exhibit is found here: <http://www.scimaps.org/>. To see Dr. Skupin's visualization called "In Terms of Geography," visit the 3rd floor hallway in Storm Hall. A convenient alternative is accessible at: http://www.scimaps.org/dev/map_detail.php?map_id=30

Dr. Skupin's classes are in the core GIS area and are focused on cartography and visualization, including animated and hypermedia cartography, in which students work on such projects as animated 3D fly-throughs of the SDSU campus. In the current fall semester, Dr. Skupin and Dr. Rey teamed up to offer an innovative graduate seminar dealing with geovisualization and geocomputation, including extensive project work.

Dr. Douglas Stow – Doctoral Program Coordinator

Dr. Stow continues to focus his teaching and research on remote sensing and image processing techniques that are applied to geographic analyses. He has been fortunate to collaborate with a number of his talented faculty colleagues,

skilled technical staff (Pete Coulter and John Kaiser) and a large number of very bright students on several funded research projects. The NASA Affiliate Research Center just concluded after almost eight years of providing support to commercial and public sector organizations on how to improve the way that they conduct business by integrating remote sensing and other geo-spatial technologies. Stow is also P.I. for a large NASA funded research project that is assisting the US Border Patrol in its mission to control cross-border smuggling through the development of a spatial decision support system. He is also assisting John Weeks with his National Institute of Health funded study on disparities of health and wealth within Accra, Ghana, and Allen Hope with his NASA funded project pertaining to regional estimates of stream runoff from watersheds in southern California and the Cape region of South Africa. Stow recently traveled with his family to South Africa and was able to meet with South African collaborator from the Agricultural Research Center and visit some of the study watersheds.

Dr. Frederick Stutz

Dr. Stutz, who teaches during the Spring Semester only now as he is in the process of retiring, was on the SDSU Trolley (Mission Valley East Line) Advisory Committee. His former student, Toni Bates, was and still is Director of Planning at the Trolley and in charge of all aspects of the project. It runs in the family - his daughter, Christa, was planner assigned to the Mission Valley East Line for 5 years during its construction. Fred encourages everyone to “please try the

trolley to campus!” This is also Fred’s 40th year as a geography instructor (36 years at SDSU: 34 years teaching and 2 years looking for a parking place!). He is the co-author of the college text, The World Economy: Resources, Location, Trade and Development, 5th ed., will be out in Dec. ‘06.

Dr Ming-Hsiang (Ming) Tsou

Dr. Tsou is a Cartographer and GIS expert. His research interests are in Internet mapping and distributed GIS applications, mobile GIS and wireless communication, multimedia cartography and user interface design, and software agents with GRID computing technology. He has applied his research interests in applications such as wildfire mapping, environmental monitoring and management, habitat conservation, and homeland border security. He is co-author of the book, *Internet GIS: distributed geographic information services for the Internet and wireless networks*. Dr. Tsou is the co-chair of the NASA Earth Science Enterprise Data System Working Group (ESEDWG) Standard Process Group (SPG) from 2004 to present. He received the 2004 Outstanding Faculty Award at San Diego State University and was elected as the 2006 - 2007 Vice Chair of the Cartographic Specialty Group in the Association of American Geographers. Dr. Tsou was recently listed in Marquis Publishing Who’s Who in America in 2006, and was appointed by the National Research Council to serve on the committee on the Research Priorities for the USGS Center of Excellence for Geospatial Information Science in 2006.

Dr. John Weeks

Dr. Weeks' research is focused especially on an analysis of intra-urban variability in health in Accra, Ghana, using geospatial techniques including GIS, remote sensing, and spatial statistics. This work is funded by the National Institute of Child and Human Development and his co-investigators include Drs. Stow and Getis. Several graduate students have been working on this data, especially Anna Carla Lopez, Debbie Fugate, Sarah Hinton, Justin Stoler, and Meredith Albert. Dr. Weeks is also very involved as a co-investigator in Dr. Stow's NASA REASoN project, which applies geospatial techniques to issues along the US-Mexico border. Dr. Weeks and the REASoN project investigators are currently analyzing the predictors of migration to the border from each state and municipio in Mexico. Graduate students Steve Warmerdam and Cristiano Giovando, along with Justin Stoler, have played important roles in this phase of the research. Dr. Weeks is a member of the National Research Council Committee on the Effective Use of Data, Methodologies and Technologies to Estimate Sub-National Populations at Risk. The report from this committee will be available soon from the National Academies Press. Dr. Weeks continues his work as an expert witness on the demographics of juries, and is involved in a high-profile case right now in San Diego County.

Dr. Richard D. Wright

Dr. Wright is Emeritus Professor of Geography and Past Co-Director of the Center for Earth Systems Analysis Research at San Diego State University.

He is a specialist in (GIS), cartographic visualization, and coastal watershed analysis. He has been a consultant to private industry and public agencies on a variety of mapping and geographic information systems projects. During the past fifteen years, he has been engaged in GIS education and the use of GIS in land use and water quality modeling. He is an expert on the human and technical issues involved in the acquisition and integration of geographic data across the U.S.-Mexico border. He has edited a volume of a journal on cross-border applications of GIS for solving environmental problems, co-produced a large poster of the Tijuana River Watershed that was distributed widely along the border, supervised the GIS and cartography for the San Diego-Tijuana International Border Area Planning Atlas, and directed the development of the Tijuana River Watershed Atlas, the first of its kind along the U.S.-Mexico border. Since 1987, he has been the PI or Co-PI of 85 awards, grants, and contracts from federal, state, and local agencies that have resulted in more than 100 research papers and professional presentations on GIS and related topics. And this is what he does while "retired!"

LECTURERS

There are currently six active lecturers within the Geography Department at SDSU. The majority of undergraduate students experience courses taught by **James Chagala, Alan Osborn, Molly Pohl-Costello, Diana Richardson, Jane Thorngren, and Fred Wildes**. Their interests

encompass Urban Planning, Medical Geography, Physical and Environmental Geography, Fluvial Geomorphology, Public Land and Water Policy, Environmental Resources and Planning, Biogeography, Human Geography, and the Geography of the Americas.

GRADUATE STUDENT RESEARCH

Maurizio Antoninetti (Ph.D Student)

Maurizio Antoninetti's research is about people and places. Specifically, he uses a mixed methodology to investigate the neighborhood experiences of everyday living of recent retirees. He also combines in-depth interview and spatial analysis with the intent of raising issues for future research around the topics of aging populations and urban design.

Nell Blodgett (Master's Student)

Nell's research interests include the application of remote sensing and GIS to the study of wildfire science. Her current work encompasses the analysis of fire behavior characteristics influencing burning patterns within the 2003 Cedar Fire. Nell is utilizing high-resolution post-fire imagery of the Cedar Fire to map unburned vegetation within the fire's perimeter. Employing GIS and remote sensing techniques, Nell is looking at the underlying vegetative, topographical, and weather-related characteristics that led to the formation of unburned chaparral and coastal sage scrub islands. The results of this research may help answer questions about the influence of severe weather events (Santa Ana winds), vegetation type, and age-class on the consumption of

wildland fuels in the southern California Mediterranean-Type Ecosystem.

Robyn Clark (Ph.D Student)

Robyn is a student in the joint doctoral program in geography at UCSB/SDSU. She is a physical geographer with a background in remote sensing and environmental modeling. Her current research involves conceptual rainfall runoff modeling of river discharge in Mediterranean-type ecosystems and regionalization techniques for predicting discharge in ungauged catchments. Her other research interests include multicriteria optimization techniques, quantifying data and model uncertainty in model predictions, incorporating remotely sensed data in hydrologic modeling studies, land use/land cover change, and global climate change. Her technical interests include image processing and spatial statistics.

Maribel Elias (Master's Student)

Maribel has traveled all the way from Peru to pursue a master's degree here at SDSU. Her research interests are in spatial analysis. Specifically, her research focuses on analyzing social and geographical patterns in Peru. Using education as the variable of analysis, Maribel is looking for spatial and temporal patterns that might help to understand the development of that country.

Mike Farrell (Ph.D Student)

Mike's love of rivers is what brought him into the geography department, and he's been able to use his research at SDSU to spend two complete summers in the Oregon Cascades "playing" in streams

in the McKenzie River basin. The McKenzie drains from the Three Sisters volcanoes at the crest of the Cascades westward to Eugene, OR. This is an amazing watershed to explore, because large areas in its headwater regions are covered by expansive lava flows, which are evidence of relatively recent volcanic activity. Not only is this variation beautiful, but it affects streamflows in the McKenzie; older more weathered regions have significantly different streamflow behavior than younger volcanic regions of the watershed. Some of Mike's fieldwork has included backpacking through Wilderness areas to investigate springs where water gushes forth out of hillsides, generating turbulent mountain streams. These streams are so cold that just standing in them for the 5 minutes necessary to take discharge measurements can be a challenge, even when it's over 90 degrees outside. Mike's current research is focused on applying hydrologic models to simulate the responses of different regions of the watershed to predicted climate change. The McKenzie River is a municipal water source for Eugene, a major source of hydroelectricity generation, and habitat for two Threatened fish species. Understanding its sensitivity to climate change will help land managers plan to balance its limited resources.

Meredith Albert Gerhardt (Master's Student)

Meredith is working on an investigation of intra-urban health in Accra, Ghana as part of an effort to examine the spatial parameters of health within the metropolitan area. She is looking at variability in levels of health between and

within Accra neighborhoods and looking for correlation between health and other variables that might be used to predict health. Part of this project involves using remotely sensed imagery to characterize land cover and structural patterns that may correlate with health. Another part of the project investigates socioeconomic or demographic characteristics that may correlate with health. Meredith is also studying the distribution of sexually transmitted infections in the area, paying particular attention to prevalence among immigrant or mobile groups.

Cristiano Giovando (Master's Student)

Cristiano moved from the Old Continent to sunny San Diego in 2004. As he started the MS program in GIScience, he also joined the NASA REASoN Project, for which he has been working for the last two years. Cristiano's main research activities are focused on geospatial data mining and geovisualization for discovering origin-destination patterns in illegal immigration from Mexico to the U.S. This is also the topic of his MS thesis, for which he has been advised by Dr Jankowski and Dr. Weeks. Cristiano's personal research interests also include geospatial web-services design, GI interoperability, augmented reality and 3D geovisualizations. He uses, and promotes the use of, free and open source geospatial software.

Andy Gordon (Master's Student)

The goal of Andy's thesis is to examine the relationship between color blindness and map reading ability. Previous research has shown that individuals with red-green color-vision impairments (roughly

5% of the population) have difficulty reading choropleth and other statistical maps when certain color schemes are used, and that these problems can be overcome by using perceptual color models to adapt the color schemes. Andy is attempting to apply these techniques to maps that utilize hypsometric tinting (the use of color to represent elevation.) Possible outcomes of Andy's research may include recommendations on hypsometric tinting schemes to accommodate the color-vision impaired.

Tony Howser (Master's Student)

Tony's research emphasis is on Mobile GIS. His current thesis research entails the display and output of multimedia data on the Mobile GIS platform for education and tourism. The system will be able to output location context-specific multimedia (imagery, audio, and video) to a user who physically "travels" into a specific geographic area which is associated with data. The research questions and challenges for this project include various issues related to the georeferencing of multimedia data, application and user interface development, and the hardware and software limitations of a compact computing system.

Brenda Kayzar (Ph.D Student)

Brenda's dissertation research examines change in downtown San Diego as a result of recent revitalization efforts. She employed a multi-method approach for her case study. She also conducted field work and interviews, examined primary and secondary data sources, and performed participant observation as both a researcher and downtown resident.

Brenda utilized a network framework based on actor network theory to develop a narrative about the city's morphology from the data gathered, supplemented by maps which depict changes in the material landscape, and graphs which quantify demographic change and employment location impacts. Through the narrative Brenda analyzed the dynamics of power relations between actors in various networks of redevelopment activity as economic, political and social contexts changed over time. Brenda's analysis suggests the center city's historically minor role in the region facilitates boom and bust cycles of investment due to a lack of attachment to, and confidence in, downtown. Therefore, the city's planning strategies and policies which are aimed at rapid growth produce uneven outcomes since they are employed during differing levels of investment interest. The result is the incomplete duo-scape of tourist destinations and housing units, which contracts with the city's live, work and play environment envisioned in the downtown community plan.

Arika Ligmann-Zielinska (Ph.D Student)

Arika Ligmann-Zielinska is a doctoral candidate at a Joint Doctoral Program in Geography at San Diego State University and University of California, Santa Barbara (SDSU-UCSB). She came to the Department from Poland, where she finished her graduate thesis majoring in Environmental Geography. Her interests focus on geoinformation, with emphasis on GIS-coupled Spatial Decision Support Systems. In particular her research involves generating land use

alternatives with multiobjective land use allocation, exploring land use alternatives with spatial agent-based simulation, and modeling choices – designing algorithms for spatial option exploration, spatial choice, and sensitivity analysis of spatial decision making. Since 2003, she has been working on a NSF-funded project “Participatory GIS in Transportation” (www.pgist.org) and is currently preparing a number of publications based on this research. She has also received a NSF Doctoral Dissertation Research Improvement Grant for her research: “Agent-based Exploratory Modeling of Sustainable Land Use Patterns Generated with Multiobjective Spatial Optimization”. She co-teaches a number of GIS-focused courses like Intermediate and Advanced GIS or Spatial Decision Support Methods. Her other interests include biking, Irish Dancing and knitting.

Jake Morton (Master’s Student)

Jake’s major research deals with segmentation approaches in remote sensing. Segmentation is a useful tool for classifying high-resolution remotely sensed imagery. He has worked extensively with a new image segmentation software called eCognition and is testing its ability to accurately classify plant communities.

Lauren Rizzo (Master’s Student)

Lauren’s research interests include urban studies, human geography, and GIS. In her thesis, Lauren compares green space in old and new suburban communities of San Diego. Lauren is also an active member of the geography club, which involves activities such as urban hikes, camping, volunteering, watching films,

and attending various events in San Diego. Lauren currently teaches physical geography lab at Grossmont College.

Philip Stephens (Master’s Student)

Philip is conducting research into the designation of economic enterprise zones in California. The main questions driving his research are: Where are the zones? (mapping) Do the designating agencies follow the statutory model that the program was founded on? (modelling) If not, what explains the possible errors of commission and omission in the designation of zones? (explanation) Does the spatial targeting of development yield intended results? (policy analysis) Philip believes that geography facilitates answering questions of social justice and equitable redistribution of social and economic goods.

Susan Whitford (Master’s Student)

Susan Whitford is a Certified Wildlife Biologist with seven years of field and management experience with threatened plant and animal species and habitats of the California Central Coast. Before her work at San Diego State University, she served as Conservation Biologist with Santa Lucia Conservancy in Carmel, CA. Susan’s passion for nature and experiences with land management inspired her to pursue a Master’s in GIScience to help the conservation community deal with impacts to ecological processes from anthropogenic habitat fragmentation. Her thesis focuses upon urban and agricultural areas of Monterey County to discern which landscape features (or the lack thereof), are driving population declines of bats. Current research includes the monitoring

of Coast redwood, *Sequoia sempervirens*, night roosts and seasonal insect prey preferences of pallid bats, *Antrozous pallidus*, at the Santa Lucia Preserve in Carmel. Susan graduated with a Bachelor's of Science degree in Evolution and Ecology from University of California, Davis in 1999 and an Associate Degree from Hartnell College, Salinas in 1996.

RECENT ALUMNI NEWS (2000-2006)

Kurt S. Baron, M.A., 2001

After completing my degree I took a position as GIS Group Leader with WEST Consultants, Inc. in Rancho Bernardo, California. WEST is an environmental consulting firm specializing in hydraulics, hydrology, sedimentation, water quality and erosion control. My work includes acquiring data for projects, preprocessing the data for input into hydraulic and hydrologic models, running the models, post-processing the models and producing floodplain maps, for example, and creating figures and writing sections for draft and final reports. I've also been involved in field surveys on projects, attending conferences and professional meetings, and continuing my education with programming classes. I stay in contact with people in the Geography Department through work, at the gym, at the movies and local restaurants, hiking, and on the softball field.

Steve Blackwell, M.A., 2001

Got that internship in Yosemite in 1995. Worked for HTI making SURE-Maps-Raster 1996-1998. Conducted my

graduate field work while working as an interpretive ranger, Yosemite 1998-2000. Learned to wield a chainsaw while I was a Prescribed Fire specialist 2001-2001 NPS -YNP also started painting again, mostly large mountain landscapes. Married the Saturday after Sept. 11th, 2001 and moved to sunny Sacramento. Worked for Pete Dangermond (yes, Jack's brother) for a few years on parks and recreation projects. Currently at URS as an environmental planner and GIS analyst. Living the dream; two kids, one dog, and a large mortgage! One day at a time, Steve B.

Matthew Brown, M.A., 2000

Hello, fellow Aztecs. I enjoy reading, playing basketball, and raising my three kids. Nowadays, you can find me at the San Diego County Water Authority. One of the best things about my job is working with former SDSU geograts.

Tim Cardoza, B.A., 2002

I was hired immediately after graduation by the Cleveland National Forest, which manages about 1/2 million acres of public land in San Diego, Orange and Riverside counties. My job title is Recreation, Lands, and Minerals specialist. The primary role of my position is to assist in the management the Forest's Special Use Program. The public, private companies, and government agencies have long established uses of National Forest Lands and applications by prospective users are often received. Special Uses of Forest lands range from recreational events like mountain bike races and ultra-marathons to utility uses like power lines and telecommunications sites. The permits have to be administered and reviewed for

compliance with environmental laws such as the National Environmental Policy Act and the Endangered Species Act. The broad background in environmental issues and natural resources, which the geography program provided, prepared me well for this position.

Gary Conley, M.A., 2005

After completing my degree I accepted a position as a Water Quality Analyst with the National Ocean Atmosphere Administration's Monterey Bay Marine Sanctuary in Santa Cruz. I synthesize water quality data sets from monitoring organizations on the central coast to report the status and trends of water quality within the Sanctuary and its watersheds. I spend my time setting up meetings with data generators and stakeholders in the region, crunching data, performing statistical analysis to identify spatial and temporal trends, and investigating relationships between water quality parameters and land use management practices. During the summer I teach surf lessons on the weekends and I am currently teaching introductory geology part-time at Monterey Peninsula College.

Judd Curran, M.A., 2005

Toward the end of my graduate studies, I was employed for three years as a Hydrologist in the California Water Science Center of the U.S. Geological Survey. This position involved surface and groundwater qualitative and quantitative studies, data collection, data processing, publishing, and web-based GIS hydrology database development. While at USGS, I also taught introductory Geography courses at various community

colleges in San Diego County. Currently, I am a full-time tenure track Geography instructor at Grossmont Community College in El Cajon, California. I am committed to improving student learning and encouraging new Geography majors that will continue their education at SDSU and other four-year institutions.

Liz Davidson, B.A., 2001

I graduated in 2001. I graduated with a double major in Anthropology (emphasis in archaeology) and Geography (emphasis in physical geography). Even though my passion is in archaeology I wanted to compliment it with a broader knowledge of geography and particularly GIS. I started out as a field archaeologist but because I had an interest and background in GIS I was allowed to explore and develop ways to use GIS to produce site maps as well as other maps for archaeology. Currently RECON is working an integrated archaeology GIS database for parts of the Imperial County.

Dan Henderson, M.A., 2000

After completion of my grad program, I worked as a GIS Technician for Ogden Environmental. I then moved on to the County of San Diego in the Department of Planning and Land Use as a GIS Analyst, working primarily in the Multiple Species Conservation Program. I am now the GIS Coordinator at the University of California, San Diego (UCSD) and serve as Faculty in the Urban Studies and Planning Program at UCSD. I am also an Adjunct Professor in the GIS Certificate Program at San Diego Mesa College.

Joel Jennings, M.A., 2003

I am currently a Gates Scholar at the University of Cambridge, England. I am writing my PhD dissertation on trans-national migration from Latin America (particularly Mexico and Central America) to the Midwest region of the United States.

Christopher Lukinbeal, Ph.D., 2000

I am currently an Assistant Professor at the Department of Geography, Arizona State University, Tempe.

Yoko Mae, M.A., 2001

Currently, I am working for the United Nations Development Programme (UNDP) Indonesia Office in Jakarta, Indonesia as a Program Officer of Environment Unit. While this is only a 2-years contract, I have to look for another job after August 2005 but I am happy to be given this opportunity to work for the UN system. To whom I studied with, I would love to get in touch with you, so please drop me a line!

David L. McIntyre, M.A., 2000

I started working at the US Army Yuma Proving Ground for the environmental services support contractor as an environmental scientist in November of 1999. I was responsible for preparing NEPA (National Environmental Policy Act) documentation on test and projects and I assisted in some leaking underground storage tank site characterizations. I was also responsible for helping with the implementation of an ISO 14001 compliant environmental management system. Recently, I left that position and will be working for KEA Environmental in San Diego as a project manager. I think

the geography department at SDSU is fantastic and almost everyone that I have interviewed within the environmental industry is very impressed with it. I hope the department can continue to grow and excel and that alumni are encouraged to participate with that process.

Christine E. McMichael, Ph.D., 2004

Christine McMichael is an Assistant Professor of Geography in the Institute for Regional Analysis and Public Policy (IRAPP) at Morehead State University. She received her Ph.D. from the Joint Doctoral Program in Geography between San Diego State University and the University of California, Santa Barbara. Her dissertation research, under the direction of Dr. Allen Hope and with funding support from NASA, NSF and Phi Beta Kappa, examined the impacts of fire and vegetation recovery on streamflow dynamics in California shrublands using a combination of remote sensing and distributed hydrological modeling. Dr. McMichael teaches both IRAPP and Geography courses including Basic Computer Techniques in Regional Analysis (RAPP 202), Seminar in Regional Analysis (RAPP 300), Graduate Seminar in Regional Analysis (RAPP 630), Physical Geography (GEO101), Environmental Geography (GEO 345), and Remote Sensing of Environment (GEO355). Her current research interests include using satellite remote sensing, GIS and hydrological modeling to investigate the impacts of human and natural disturbances on watershed structure and function. Her work has been published in the *International Journal of Remote Sensing*, the *Journal of the*

American Water Resources Association, the Journal of Hydrology, and the Journal of Environmental Management.

Lauren Scott, Ph. D., 2000

Research Analyst, Environmental Systems Research Institute (ESRI), Redlands, CA.

Peter Scull, Ph.D., 2002

Visiting Asst Professor in the Department of Geography at Colgate University, Hamilton, NY for AY2002-03.

Darren Smith, M.A., 1996

I'm currently working as District Ecologist at California State Parks, San Diego Coast District. I still get to get out and crawl around looking for areas of high plant species richness but I'm mostly in the invasive weed removal and restoration business. I continue to experience wonder at the natural world and more so at the sublime inanity of people's connections to it. Fortunately, these connections provide fertile ground for research at SDSU geography.

Adam Stein, M.A., 2003

I am working as technical support at the NOAA Pacific Services Center on Honolulu. We serve as a hub for coastal managers throughout the US Flag Pacific Islands.

For more alumni news and stories please visit the Geography Department website:

<http://geography.sdsu.edu/People/alumni.php>

RESEARCH LABS AND TECHNOLOGY

The Center for Earth Systems Analysis Research (CESAR) is the main research facility for the department. CESAR houses three (3) separate laboratory spaces outfitted with a variety of computer workstations and peripheral equipment. To meet the diverse research objectives of the faculty, the lab supports four (4) different operating systems, Windows, Solaris, MacOS X, and Linux. Current research includes comparison of Mediterranean watershed ecosystems, water quality monitoring in the San Diego Bay, fire spread and recovery modeling, and border monitoring for Homeland Security. The Richard D. Wright Spatial Analysis Laboratory (SAL) is the teaching lab for the department. Introductory through graduate level lab sections in Geographic Information Systems, remote sensing, cartography, and spatial statistics are held in this 25 computer workstation facility.

STAFF

The Department continues to be served in an extremely capable manner by superb administrative and technical staffing. Patti O'Leary and Bonnie Golden are our administrative coordinators in the front office, and Lilia Ortiz continues as our administrative support assistant. David McKinsey is the department's head operating systems analyst and was recently recognized by the College of Arts and Letters with his 20th anniversary service award. Marcus Chiu continues as an operating systems analyst as does Harry

Johnson as the department's information technology consultant. Lloyd ("Pete") Coulter works as a research specialist, and John Kaiser continues as a program specialist. Both work largely on funded research projects headed by Dr. Doug Stow.

GEOGRAPHY CLUB NEWS

The SDSU Geography Club is now a recognized club chapter within the University system. Meetings are held every three weeks in the Department of Geography, Storm Hall.

Past events held by the Geography Club include Dr. Ford's Urban Hike on November 11, a Coastal Erosion Field Trip on November 5 with Dr. McArthur and many more exciting events including IMAX movie nights, faculty/student softball game, Pacific Crest Trail Maintenance, and much much more! Please see the Geography Club website for future events, meetings, and pictures of past events. <http://geography.sdsu.edu>

SDSU STUDENT CHAPTER OF THE AEP

The SDSU has a student chapter of the AEP (Association of Environmental Professionals) in which geography students are actively involved. The student chapter has plans for a field trip and tour of SANDAG complete with dinner in the Gaslamp Quarter afterwards (all will be traveling by trolley – of course!). Please see the following websites for more information:

<http://www.rohan.sdsu.edu/~aepsdsu/index.html>

<http://www.sandiegoaep.org/index.html>

IN MEMORIAM

Bob O'Brien. Bob O'Brien passed away surrounded by his family (Laura and Gary) early Saturday morning on July 2, 2006 in Logan, Utah after a nine-month battle with cancer. For those of you unfamiliar with Bob, here is a little background material. A proud native Texan, Bob grew up on the family ranch in north-central Texas, and attended the University of Texas where he received his B.S. and M.A. in geology. Following that, his attention turned (happily) to geography, and he earned his doctorate in geography from the University of Washington in 1965. Following a short teaching stint at Montana State University, he joined the SDSU geography faculty in fall, 1966 where he remained until his "retirement" in 1995. However, he continued teaching in the FERP (faculty early retirement program) and as a lecturer through spring semester, 2005. Bob was a pioneer and integral component of the department's emphasis in natural resource and environmental geography. Many students were inspired to major in geography after taking a general educational course from Bob. Bob was an avid hiker who maintained a lifelong allegiance to conservation of the environment. Despite his terminal illness he continued this past academic year to contribute lectures to various geography classes and participated in field trips including co-leading

another memorable field trip with Diana Richardson in her Geography 575 class ('Geography of Recreational Land Use') late last April. Bob was one of the gentler, kinder human beings one could ever hope to meet. He will be missed dearly.

Charles (Chuck) C. Yahr. Chuck Yahr died on Saturday evening, July 22, 2006. He was 81 years old and died peacefully in his sleep after having suffered from Alzheimer's disease for the past several years. Chuck was raised in Illinois and attended Illinois State Normal University where he received his B.S. (1949) and M.S. (1950) degrees in geography. He was awarded a doctorate in geography from the University of Illinois in 1956. He joined the geography department here at SDSU in 1955 where he remained until his retirement in June, 1988. His areas of teaching expertise were cultural geography and the regional geographies of the United States, Southeast Asia, and South Asia. He also served quite capably as department chair from 1961-64 and again from 1967-69. He was a member of the California Council for Geographic Education, serving one term as President, and was also a 50+ year member of the American Association of Geographers. Among his many qualities, Chuck had a reputation for being a very fair-minded individual who would carefully consider and discuss the positive and negative aspects of issues before reaching a judgment. While somewhat quiet by nature he was a warm and delightful person. Though we were not able to see much of him over the past several years, we will certainly miss him. Chuck is survived by his wife Lois (who has been

attending our annual fall departmental parties), two sons (Jim and Jerry), and two daughters (Debbie and Cheri).

GIVING TO AZTEC GEOGRAPHY

If you might like to give to the Geography Department Development fund (it is tax deductible), please make checks out to **Geography Development Fund** and mail to:

Nancy Lemke
Director of Development
College of Arts and Letters
San Diego State University
5500 Campanile Drive
San Diego, CA 92182-4435

Alternatively, you may wish to donate online at the College of Arts and Letters web site (<http://cal.sdsu.edu/giving/index.htm>).

Gifts from alumni and friends make a huge difference to our department. We thank you.

John O'Leary

CONTRIBUTORS

The Aztec Geographer is a publication of the Department of Geography, San Diego State University and is dedicated to furthering the discipline of Geography.

John O'Leary, Department Chair; Nell Blodgett, Graduate Student; Diana Richardson, Undergraduate Advisor; and all Department faculty, staff, and students