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Geological Sciences NEWSLETTER

May 2007

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NEWS

UCSB
UNIVERSITY OF CALIFORNIA
SANTA BARBARA

GEOLOGICAL SCIENCES
Webb Hall, Room 1006
Santa Barbara, CA 93106

Faculty News News News!

EMERITUS PROFILE: JOHN CROWELL

John Crowell earned his laurels with his investigations of the San Andreas fault. At a time when 'fixists' were very skeptical of large horizontal displacement, Crowell was at the very forefront to demonstrate srike-slip along large faults of California. His work on the Ridge basin opened our eyes to a new kind of sedimentary basin: long, straight, narrow and deep, formed by strike-slip extension by slip along the San Gabriel fault.

Stratigraphers and sedimentologists know Crowell for his papers on the origin of mass flow deposits and flysch. His interests in downslope sliding processes in California and Europe led him to study the origin of pebbly mudstones and to formulate the means to discriminate between those downslope deposits and those laid down by continental glaciers. Although it is Arnold Bouma whose name is associated with turbidites, many of the sedimentary structures that characterize such deposits were first recognized and interpreted by Crowell.

Crowell's work on mass-flow deposits in California led him to doubt that ancient tillites scattered the southern hemisphere were indeed of glacial origin. Could they have been pebbly mudstones of slump origin? This question led Crowell on his many trips to Gondwanaland, where he concluded that the deposits were indeed of glacial origin, all of about the same age, and all originated before the continents fragmented and drifted to their present positions. Thus, through his southern hemisphere research with several graduate students, Crowell was one of the first to reconstruct Gondwanaland.

Crowell's growing interest and expertise in glaciation and plate tectonics naturally led him to study the origin of continental glaciation and, thus, paleoclimatology to work out the history and causes of continental glaciation through geologic time.

Crowell came to UCSB in 1967 after having been a tenured professor for 20 years and department chairman at UCLA. John graduated from the University of Texas, and joined the US military during World War II. John was trained in meteorology, and joined a small, elite team that gave General Eisenhower the critical weather forecast for the D-Day invasion at Normandy. After the war, John obtained his MA in oceanographic meteorology from Scripps Institution of Oceanography in 1946 and his PhD from UCLA in 1947. He retired from UCSB in 1988.

Among his many honors are membership in the US National Academy of Sciences, fellowship in the America Academy of Arts and Sciences, an honorary doctorate from the University of Louvain,Belgium, and the Penrose Medal from the Geological Society of America.

OH CAPTAIN, OUR CAPTAIN: Letter From The Chair...

Jim Mattinson

Dear Alumni and Friends,

Once again it is my privilege as Chair of our Department to write you. 2006-2007 has been another challenging and exciting year. We are still feeling the effects of the recent California budget crisis, but thanks to your help, we have been able to minimize the financial impact on our students.

For example, we are preparing for a new Summer Field Geology class, and the Sylvester Summer Field Fund will again significantly reduce the cost of the class for every student enrolled. The Jane Woodward matching fund challenge is still on, and has served as a wonderful catalyst for many alumni and friends.

We also look forward to awarding our 5th annual Lloyd and Mary Edwards graduate field fellowship, and another annual Rich and Eleanor Migues graduate field prize, along with a host of other graduate and undergraduate awards at our year-end awards ceremony. This year the ceremony will be on June 6, in Webb Hall, Room 1100. If you are in the SB area, please consider joining us – the fun starts at 4:00PM.

As I mentioned in my 2006 year-end letter, the Department is entering a time of transition in terms of faculty. As you know, Bill Prothero and Jim Kennett retired recently. By this time next year, Tanya Atwater and Ken Macdonald will have retired as well. Meanwhile, we are advertising for a new faculty member in continental dynamics, someone with a strong field orientation.

With the pace of anticipated future retirements, we are entering a prolonged period in which we will be hiring about one new faculty member per year, just to stay even. More "challenging and exciting" years ahead! The faculty we hire over the next decade will no doubt attack new research areas, applying new insights and new generations of instrumentation, not yet on the radar screen.

Despite these onrushing changes, one thing will remain constant – the importance of your role in helping us maintain the highest quality educational experience for each succeeding generation of undergraduate and graduate students, and our appreciation of that role. We have by far the most involved and generous alumni of any science department on campus. Once again, thank you for being our partners in the education of the new generation of Earth scientists.

P.S. Many alums from the early days of the Department (myself included) are approaching retirement or retired already. I am beginning to get inquiries about how to donate to the Department other than by the usual annual gift.

Of course, a bequest through a will or trust is an obvious way, but because we are a non-profit organization, there are also some interesting charitable gift annuity opportunities that pay a guaranteed income for the rest of your life/lives, have significant upfront and continuing tax advantages, and ultimately benefit the Department, rather than providing a bonus for some insurance company CEO.

Please e-mail me if you would like more information. (mattinson@geol.ucsb.edu)

Trivia

How many of these faculty members can you name?

Muckers' Corner

Mucker: -noun
1) slang. a vulgar, illbred person.
2) informal. a person who often does or says the wrong thing; bungler
3) (esp. in mining) a person who removes muck.

Unprepossessing at first, upon further study the word "Mucker" is found to have a variety of meanings. The UCSB geology club is proud to claim some of these as their own. The definition that best describes the undergrad club members is open to interpretation, but to be honest each has probably applied to every one of us at some point. Of course we prefer to think of ourselves as akin to miners- we sift the earth for treasure. The third definition surely fits those intrepid undergrads who went on the annual trip to Trona, CA to participate in the Gem-O-Rama. We spent all weekend digging around in mud looking for hanksite crystals and tromping through brine pools with rock hammers in search of rare pink halite. And we couldn't have had more fun! We just had to remember not to fall- geologists may be accustomed to the occasional scratch or cut, but scraping oneself on an enormous salt crystal is a new level of hurt. Fortunately, as rising geologists we're far too distracted by the interesting minerals to notice the pain... much.

Besides embarking on exciting and educational trips, the Muckers have been keeping the department happy and fed by providing bagels and coffee every Tuesday morning for the low price of $1! Grad students, professors, office personnel and undergrads meet and mingle at the bagel table in the morning, sipping hot coffee with creamer and experimenting with different seasonings and toppings to spice up their breakfast bagel. Newcomers to the department are met by smiling faces and delicious refreshment, and are happy to contribute a one dollar donation to keeping our club going. The money we raise from this sale helps fund our Trona Trips, and offsets the cost of our quarterly bowling nights. Each of us is happy to man the table or buy bagels in our turn, although showing up at Webb at 7:30 AM is never easy. Really though, between bagels and field trips, we should be used to it by now. Sleep is something a Mucker learns to forgo for the greater good.

And life in the Earth Sciences department really is good. It isn't all work, all the time. Winter quarter's bowling night had a great turn out! The undergrads bowled, danced, and sang oldies while most of the grads sat and drank beer in the back, relishing the simple pleasure of one another's company and not having to stare into a petrographic microscope at yet another confusing thin section or sneak a bagel from the Mucker's Box because there's no time to go get lunch. Everyone had a great time and met those whose paths they had not yet chanced to cross in Webb. Names were learned, and forgotten if a grad student happened to be on the receiving end, and general camaraderie reigned supreme.

Speaking of camaraderie and teamwork, the current batch of Muckers have grown very close from the various trips and adventures we have enjoyed, and sometimes endured, together this year. From the Death March on Santa Cruz Island where we hadn't enough water and learned to share with each other as strangers, to late nights in the geology building frantically trying to finish Structure labs when we learned to sooth each other's panic as friends, to standing on a mountain at sunset knowing we have an hour's hike in the dark and just not caring for anything but the sheer beauty of it, we have been through a lot together. In the past few months we've spent more time together than we have with our other friends, our biological family, and the roommates with whom we've never spent a week in a tent the wind keeps collapsing. Although sometimes we feel like the second of the definitions of "Mucker", as we learn we are improving our skills and looking forward to whatever challenges this last quarter and summer bring us!

— Sara, Hanna and Natalie

GS103 Structural Geology

Listing includes donors from December 2005 through March 2007. Every effort has been made to insure accuracy. Please notify our office of any errors or omissions at (805) 893-4604 or at edgerton@geol.ucsb.edu

2006/07 Earth Science Fund Drive

We had a great response to our funding appeals last year. It is gratifying to see our alumni taking a lasting and consistent interest in their department. When I explain to potential donors that we have substantial commitment of support from our alumni, it makes us believable about our needs and we are taken seriously. The department has benefited in particular from employer matching gift programs. Be certain to check with your company when you make your gift this year!

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WHAT ARE THE ALUMNI DOING?

Peter Von Lagen
Since finishing his doctorate in December 2001 through the Department of Geological Sciences, Peter von Langen has worked at the Central Coast Regional Water Quality Control Board office in San Luis Obispo. More information regarding this agency, that regulates surface and groundwater pollution from North of Santa Cruz to Rincon at the Santa Barbara/Ventura border, can be found at the following link. **http://www.waterboards.ca.gov/centralcoast/**
Peter has worked on many regulatory projects and programs at the Central Coast Water Board dealing with such issues as storm water, non-point source pollution, and point source discharges. Peter is currently working on issues related to marine impacts from power plants, desalination plants and harbor dredging in the Central Coast Region. A few examples of some of Peter's other work responsibilities include working on Areas of Special Biological Significance, reviewing grants, and coordinating with other agencies and researchers on pollution related issues effecting the state.

William Amidon finished his M.S at UCSB with Doug Burbank. His research focused on using U-Pb dating of zircons in modern river sediment to look at patterns of erosion in the Himalaya. He is now working with Ken Farley at Caltech trying to use minerals such as apatite, titanite, and zircon for cosmogenic 3He dating. Hopefully this will expand the range of geologic settings and applications to which cosmogenic 3He dating can be applied.

Scott Johnston has moved to Tucson to pursue a postdoc position with George Gehrels at the University of Arizona. While finishing up loose ends on his PhD work in Norway, Scott has started a new project in Greenland trying to understand the history of the Caledonides from a new perspective. In addition, Scott has been working on developing new dating techniques for apatite and titanite using laser ablation ICP mass spectrometry.

Christy Till (BS 2004, MS 2005) is now pursuing a PhD at MIT in geochemistry and petrology. She became interested in better understanding the origin of subduction zone magmas while working with Dr. Phillip Gans in Sonora, Mexico for her MS and is now working with Dr. Timothy Grove using experimental petrology to try and unravel the primary processes of melt generation at subduction zones. This winter Christy presented her research on Sonoran magmas at the "State of the Arc" conference in Termas de Puyehue, Chile and she was recently awarded a National Science Foundation fellowship to fund her work at MIT.

Suzanne Carbotte- recently named to the "Bruce Heezen Endowed Chair" at Lamont-Doherty Earth Observatory of Columbia University.

Marie-Helene Cormier, moved to Univ. Missouri, Columbia, as Assistant Professor of Geophysics, presently leading an expedition to East Pacific Rise to install an array of seafloor pressure sensors.

Scott White, Assistant Professor of Geophysics at Univ. South Carolina, just returned from co-leading a successful multi-disciplinary expedition to the East Pacific Rise.

Dick Heermance had a short stint teaching Physical Geology for 3.5 weeks at the Colorado College (alma mater) in Colorado Springs, CO from February-March, 2007. He then started his Mendenhall postdoctoral work for the United States Geologic Survey in Tucson, Arizona. Dick will be doing research along the Ventura River, CA, determining fluvial terrace ages and the climate and tectonic controls on their formation. He is also actively involved in setting up the 10Be and 26Al cosmogenic isotope lab at the University of Arizona.

DEPARTMENTAL HIGHLIGHTS

Royal Geological Society Goleta

FOP

This year once again a bunch of grads attended the "Friends of the Pleistocene" meeting. On the trip they learned about the "Triangle of Doom" (Mendocino triple junction). They observed fluvial terraces and landslides, and learned about tectonics, stratigraphy, paleoseismology, and so much more. Last but not least they witnessed Richard Lease surpassing his last year infamous garlic binge by taking a bite of an old log with some mystery berries on the side.

AGU and more

In addition to attending many smaller conferences, a huge crowd of grads attended this year's AGU. Besides having a blast in all-time-favorite bars like the Edinburgh Castle or sipping on a ridiculously expensive cocktail while enjoying the city view from the Marriot, the attendees presented their research in numerous talks and posters. Congratulations to Earth Science grads who received awards for outstanding student papers: Susana Custodio (Advisor: Ralph Archuleta) and Sarah Fowler (Advisor: Frank Spera). Also congratulations to Richard Lease (Advisor: Doug Burbank) who not only succeeded at eating a log this year but also received a NSF Graduate Research Fellowship.

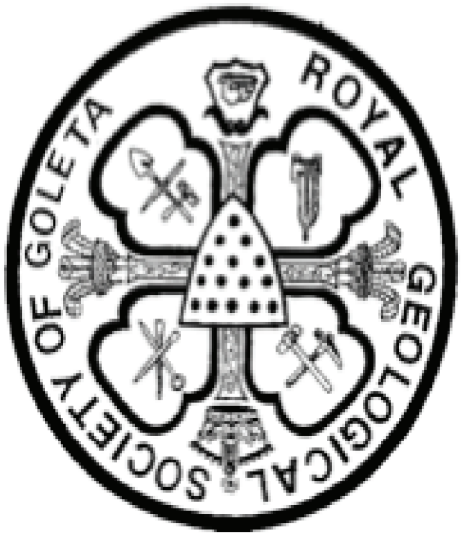
Design Contest

RGSG once again held a design contest to find the best design for this year's RGSG logo design. We all felt that our wardrobes need more than the good old T-shirt, so here comes the latest in the world of fashion- the RGSG hoodie! Warm, flattering and sensually soft, it features the award winning design created by Joseph Goode himself. Hurry to order while supplies last!

Auf Wiedersehen,

King Jan I the Benevolent

Back



RGSG at Friends of the Pleistocene Field Trip

Scott Herman, Phil Gans and Richard Lease

DEPARTMENTAL HIGHLIGHTS

2005-2006 Departmental Student Awards

G.K. Gilbert Award
Josh Cole

Harry Glicken Memorial Award
Jeanette Hagan

Richard and Eleanor Migues
Graduate Field Research Award
Brian Clarke and Josh Cole

George Tunell Endowed Fellowship
Sarah Fowler

Wendell Woodring
Memorial Award
Martin Medina

Preston Cloud Memorial Award
David Lamb, Joshua Cole,
Emily Peterman, Trystan Herriott

Lloyd and Mary Edwards
Graduate Research Award
Trystan Herriott

Alumni Graduate Award for
Research Excellence
Dick Heermance

Geophysics Award
Shuo Ma

Distinguished Alumni
Samuel Mukasa and
John Pallister

William Bushnell Memorial
Scholarship
Elise Hale and Jameson Henkle

Robert M. Norris Prize in
Field Geology
Andrew Evans

Outstanding Graduating Secior
Sarah White

Outstanding Academic
Achievement
Sarah White, Shaun Burree,
Joseph Tritchler, Cadi Fung,
Christopher Burt

Charles Douglas Woodhouse Award
Shaun Burree

Venoco Field Scholarship
Ryan Wopschall, Luis Busso,
Michael Hoshiyama, Christine Orlowski,
Stephanie Satoorian

MSO Leslie Edgerton and Chair Jim Mattinson

Grant Yip, Karen Blair and Susana Custodio

Scott Johnston and Garth Seward

Grads enjoying each others company

John Pallister and Robert Norris

Howard along with his new Buddy

Summerfield

New Digital Geologic Map of the Northern Lake Tahoe and Donner Pass Region, Northern Sierra Nevada, California

Arthur G. Sylvester. and William S. Wise

Intermittently since 1988, Sylvester and Wise have taken the second half of the UCSB summer field camp for 3 weeks of research mapping in an area of wonderfully diverse rocks and structures around northwest Lake Tahoe and Donner Pass. The only previous comprehensive mapping in the area, aside from a few theses, was published by Waldemar Lindgren in his 1895 USGS Folio of the Truckee Quadrangle.

The result of this work is a beautiful, multi-colored map of the bedrock and surface geology that has been submitted to the US Geological Survey for publication in its Digital Data Series. The UCSB map is compiled in GIS format using ArcMap9. It comprises nearly 1300 sq km, almost six 7.5' quadrangles, mapped by 138 students and TAs. In fact, we have really mapped all or parts of eleven 7.5' quadrangles, but the six in the completed map form a nice unit that straddles the Tahoe-Truckee graben from the Pacific Crest Trail east to the California-Nevada state line, and from Homewood on the west shore of Lake Tahoe, northward a few kilometers north of I-80. It comprises the Norden, Truckee, Martis Peak, Granite Chief, Tahoe City, and Kings Beach quadrangles, and includes the towns of Truckee and Tahoe City, as well as the Upper Truckee River drainage.

We divided the rocks and alluvial deposits into 100 map units, ranging from late Paleozoic and Jurassic metamorphic rocks; several Cretaceous granitic plutons on the shoulders of the graben; a thick section of nine Oligocene rhyolitic ash flow tuffs of the Valley Springs Formation in the Onion Creek paleocanyon; three volcanic members of the Neogene Mehrten Formation that include pyroxene andesite, hornblende andesite, andesitic basalt, debris avalanche deposits, and corresponding intrusive and pyroclastic units; diverse basaltic and trachybasaltic lava flows and intervening alluvial units assigned to the newly designated Truckee River Formation (2.5-1 my); Pleistocene till and outwash of the Donner, Tahoe, and Tioga glaciations; to recent landslides, talus, lake deposits, and stream alluvium.

Some of the students have given papers at national meetings about their work, the latest by Chris Burt and Stephanie Satoorian being a poster paper at the 2007 Cordilleran Section GSA meeting about the implications of gigantic boulders deposited around Truckee by a jökulhlaup (humongous flood) spawned by the failure of an ice dam across the Truckee River perhaps during Sherman glaciation time (750,000 years ago).

In summer 2007, we shall extend the mapping into two quadrangles north of the new map where comprehensive mapping also has not been done since Waldemar Lindgren went through there in 1893 on horseback looking for another Comstock Lode.

List Of Ms/Phd Dissertations (2006-Present)

Campbell, Brian MS W 07 Valentine
Origin and Isotopic Fractionation of Hydrogen in Biosynthesis of the Lipids of Hydrogenotrophic Bacteria

Cole, Josh MS S 06 Hacker
Fault-Zone Deformation and Strain Partitioning at the Brittle–Ductile Transition, SEMP Fault, Austrian Alps

Constantine, Candace PhD. F 06 Dunne
Quantifying the connection between flow, bar deposition, and meander migration rate in large grade-bed rivers.

Craddock, William MS M 06 Burbank
Bedrock channel geometry along an orographic precipitation gradient in the upper Marsyandi River valley in central Nepal

Del Sontro, Tonya MS F 06 Luyendyk
Beach Asphalt (Tar) Accumulation at Coal Oil Point, CA:
Identification of Processes Controlling Temporal Variations

Ehrhardt, Christopher PhD. W 07 Haymon
Minerals, microbes, and marine geochemistry of sub seafloor hydrothermal reservoirs: Development of new techniques and novel molecular approaches for geomicrobiological research on the deep crustal bioshpere.

Heermance, Richard PhD. W 07 Burbank
The structural and stratigraphic evolution of the Neogene Kashi foreland basin, northwest China.

Herriott, Trystan MS F 06 Gans
Stratigraphy, structure, and 40Ar/39Ar geochronology of the southeastern Laguna del Laja area: Implications for the mid-late Cenozoic evolution of the Andes near 37.5°S, Chile.

Hopkins, Sarah MS F 06 Luyendyk
Geometry and Quaternary evolution of a laterally propagating fold and fault system, Santa Barbara Channel, California

Johnston, Scott PhD M 06 Hacker
Exhuming ultrahigh-pressure rocks: evolution of the Nordfjord-Sogn Detachment Zone, western Norway.

Ma, Shuo PhD S 06 Archuleta
Using the Dynamics of Faulting to Explore Radiated Seismic Energy and Ground Motion

McDermott, Jeni MS S 06 Clark
Groundwater Travel Times near the Montebello Spreading Grounds: Inferences from Geochemical and Physical Approaches

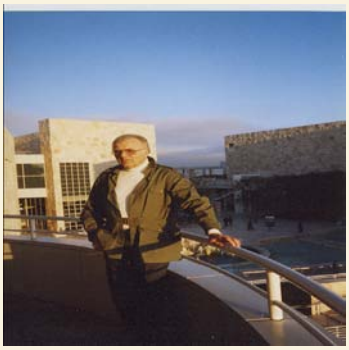
Prindle, Kenton PhD. F 06 Tanimoto
Broadband Analysis for a Dense Siesmic Array in California: Recovery of a Three-Dimensional S-wave Velocity Stucture from Surface Waves, the Finite Frequency Effect, Travel Path Complexities, and Azimuthal Anisotropy.

Rioux, Matthew PhD. S 06 Hacker
The Growth and Differentiation of Arc Crust: The Temporal and Geochemical Evolution of the Accreted Talkeetna Arc, south- central Alaska.

Tsuda, Kenichi PhD. W 07 Archuleta
A New Method of Site Response Estimation and Its Application to Ground Motion Prediction

Zayac, John MS F 07 Spera
The Volcano in the Laboratory: Experimental Investigations into Momentum Transport in Magmas

IN MEMORIAM



John Zoeger
(1923-2005)

My adventures in biomagnetism with John Zoeger started more than a decade ago. I received a call from him asking if I would be interested in working with him on the possibility that dolphins navigated by magnetic means and on the related possibility that there was magnetic material in their brain. He often reminded me that my reply had been: "That sounds like fun". Indeed it was great fun. The results were published in Science 213(1981) 892-894. With Bob Dunn's help we moved on from early work with Dolphins and other marine animals to work with human beings. The work followed two paths (1) could one demonstrate sensitivity in humans to magnetic fields and (2) was there magnetite in the human brain. The first led to work with patients, who had drug resistant epilepsy. We were able to stimulate with magnetic fields minor activity between seizures in these patients with C. L. Wilson at UCLA's Reed Neurological Institute. The discovery had some clinical value in the location of the focus of the activity, which would eventually have to be removed by surgery as reported in Brain Research Bulletin 60(2003) 43-52. The second led to clear evidence that there is magnetite in the human brain, as had been shown by others by that time. (Brain Research Bulletin 36(1995) 149-153).

While studying hippocampal tissue for signs of enervation of magnetite particles, John and Dave Pierce discovered "microspheres" that contained other elements in addition to iron. Together with Mark Rosenthal they submitted a paper on these findings. This led to further work on a possible role of magnetite in the brain in neurodegenerative diseases. There is now a major effort testing whether magnetite does indeed play a role in Alzheimer's disease. All our work was done without research funding, which allowed us to work as we pleased.

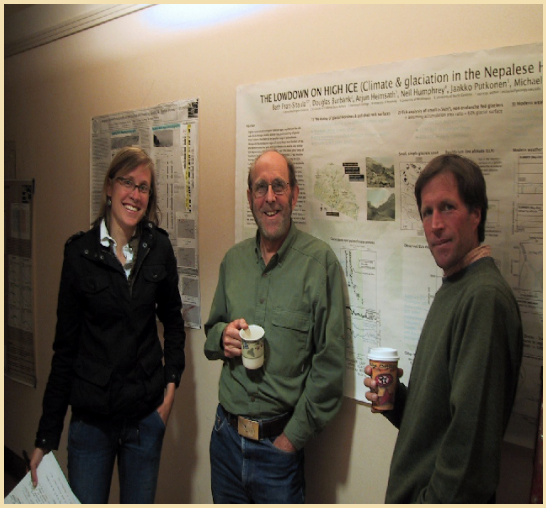
It was always a great pleasure to work with John and Bob and the "work" involved many a pleasant meal with them and with John's late wife, discussing the results and sampling John's excellent wine cellar. John was always interested in finding out whether animals were sensitive to magnetic fields and what the magnetite in the brain was doing. He had the natural curiosity that unites all scientists. John received a B.S. from Indiana State University and a Masters degree in Zoology from UCLA. His field work took him to Nicaragua, Mexico and Borneo collecting birds and small mammals. Once while collecting a specimen of whale tissue from a beached animal for the California Department of Fish and Game, he was so absorbed in his work that he fell into the decaying animal up to his arm pits and had to be rescued before being overcome by heat and stench. I shall certainly miss my time with John.

by Mike Fuller, Professor Emeritus, UCSB

Allison Yuriko Takao
(1975-2007)

Back to her home in Torrance and surrounded by her family, 31 year old Allison Yuriko Takao passed away on February 7, 2007. After the breast cancer diagnosis 8 years ago, she was still able to obtain her Masters degree in Education and a Bachelors of Science degree in Geological Sciences with an emphasis in Earth Systems at UC Santa Barbara and even taught surfing in Pacific Beach. In her brief life, she touched the hearts of everyone she met. She loved life, loved to surf, loved her many supportive friends and Tourmaline. She leaves behind her mother, Marlene Takao; her father, George Takao; brother, Brent (Philline); grandmother, Mikiye Tashima; Auntie Shirley; Auntie Elaine (Clive); Aunt Nancy (Don) and cousins, Melinda, Becky and Michael.

Geological Sciences POINTS OF INTEREST



Jim Kennett with National Geographic staff

GS19 at Yosemite

Chris Burt, Ashlee Henig, and Ryan Weidert

GS18 at Death Valley

Maygan, Sara, Karri, Danielle and Katherine

Muckers Trona Trip

Every year, the department honors two of its alumni—one each from industry and academia—celebrating their accomplishments and providing our current students with exemplary role models.

Emery Goodman

After receiving his Ph.D. in late 1989, Emery took a position as Senior Research Geologist in the Integrated Basin Analysis Division, Exxon Production Research Company, Houston, where he worked for over ten years. Emery's research investigations included the evolution of extensional and non-marine basins, and structural geology. In addition, from 1989-1996, Emery participated in several multi-disciplinary, plate- to molecular- scale regional studies of Southwest Asia, China and Venezuela, focusing mainly on the tectonic evolution, basin analysis and structural geology of these complex areas. He drew heavily from his UCSB experiences in trying to sort out Central California tectonics! He has been an instructor for in-house schools and a campus recruiter, including UCSB.

After an assignment as Planning Advisor, in 1997 Emery was named Senior Research Supervisor for several teams, studying quantitative fluid flow analysis, fluid flow along faults, fluid inclusions and fault and bed seal. After the merger of Exxon and Mobil in late 1999, Emery was named Structural Geology-Seal-Gravity/Magnetics Coordinator for those technologies and some 70 geoscientists deployed around the world. From 2002-2005, Emery was Exploration Project Manager for several Gulf of Mexico and Gulf Basin projects. In early 2005, Emery was named Middle East Geoscience Manager for EM Production Company, focusing on large projects in Qatar and the UAE; North Field, offshore Qatar, is the largest gas field in the world. He now spends considerable time in Doha and Abu Dhabi.

Emery was named J. Ben Carsey AAPG Distinguished Lecturer for 2002-2003, in his lecture tour, he presented a model for Venezuelan tectonic evolution and how this influenced the development and demise of hydrocarbon systems there.

He enjoys biking, kayaking in the GOM, researching family history, and traveling. His son Jeff, born in Santa Barbara, heads off to college this fall, while Ethan will begin high school.

Thomas Rockwell

After finishing a draft of his dissertation in the summer of 1982, Thomas headed to Caltech to take a lectureship position for that fall, and then on to SDSU in January to start his tenure as an assistant professor. In the ensuing 6 years, Thomas jumped to associate professor (1986) and then full professor (1989) while attacking many of the major active faults in southern California and Baja California. After he left UCSB, most of his focus shifted to strike-slip faults, although in recent years, Thomas has been doing quite a bit of work in fold-and-thrust terranes in Asia and Latin America. After working primarily in the Californias for the first ten years at SDSU, Thomas began working in a number of foreign locales, including Mongolia, India, Nepal, Turkey, Israel, Portugal, Honduras, Panama, and Argentina. During the course of the past 25 years, he has tried to support most of his students by acquiring over $2.5M in grant support, most of which was used as student support. During this period,Thomas and his students published over 120 papers, most of them in refereed journals, along with several hundred abstracts of papers presented at professional meetings. A major highlight of Thomas' career has been his involvement with the Southern California Earthquake Center (SCEC). During the years, Thomas served on numerous review panels for various funding agencies, as well as reviewed numerous other proposals and papers. Thomas served for 6 years as associate editor of GSA Bulletin, and served on the Board of Directors of the Seismological Society of America. Thomas has also taught a number of summer schools in earthquake geology in Europe and Asia.

Altogether, it has been a very rewarding 25 years post-UCSB, and much of it resulted from the excellent education, direction and energy Thomas received while at UCSB.