



**D**enise D. Denton was sworn in as ninth chancellor of UC Santa Cruz during an investiture ceremony in early November. The investiture was one highlight of a three-day celebration that featured a thought-provoking academic symposium on the relationship between excellence and diversity in higher education. The two-day symposium began with a keynote address by Shirley Ann Jackson, president of Rensselaer Polytechnic Institute, and concluded with breakout sessions involving members of the campus community and guests. Completing the investiture activities was the annual Scholarships Benefit Dinner, illustrating the chancellor's commitment to increase scholarship and fellowship support for UCSC's undergraduate and graduate students.

For complete coverage, please see pages 8-11.

## Grad student works to save sea turtles

**T**HE CRITICALLY endangered North Pacific loggerhead turtle nests only on certain beaches in Japan, where the number of females showing up each year to lay their eggs has dropped below 1,000. These long-lived sea turtles travel widely in the Pacific Ocean, and Hoyt Peckham, a UCSC graduate student in ecology and evolutionary biology, has been studying them in southern Baja California, where they congregate to feed.

His research addresses questions about the migrations, habitat use, and life history of these remarkable animals, and the results are helping

to guide conservation efforts.

Peckham knows that research alone will not save the turtles, which die by the thousands as incidental "bycatch," tangled in fishing nets and caught on long-lines set out to catch fish.

So he has helped develop an outreach and education project that fosters ocean conservation in small fishing villages along the Baja California peninsula.



Graduate student Hoyt Peckham, right, and fellow researchers prepare to release a young loggerhead turtle in Baja California.

## Econ Department ranked ninth in international finance

**U**CSC'S ECONOMICS Department is ranked ninth in the world in the field of international finance in a survey of more than 300 public and private research universities.

The ranking is based on the research productivity of faculty as measured by scholarly publications in 63 academic journals from 1993 to 2003. The results were published by *econphd.net*, an online resource for prospective graduate

students in economics.

"These results reflect the work we've done to recruit top scholars and graduate students, and we are pleased to be at the top of the list," said economics professor and former department chair Michael Hutchison, who is now interim dean of the Division of Social Sciences.

"The Economics Department at UCSC has made a concerted effort over the past 15 years to develop complementary programs in the international field," said Hutchison. "The concentration of scholarly research and teaching in international economics has led to a highly distinguished program."

## Physics course focuses on working in industry

**U**csc's Physics Department is giving students in the applied physics program something few college students in any major receive: a course on how to get a job after they graduate.

The new course, called *The Physicist in Industry*, lets students know what kinds of job opportunities exist for people with physics degrees and how to go about pursuing those opportunities and succeeding on the job.

"Most college students are not very aware of the job market and what they need to do to get those jobs," said Fred Kuttner, a physics lecturer at UCSC.

Kuttner and Bruce Rosenblum, professor emeritus of physics, designed the course and taught it for the first time last year. The course will be

offered every year during spring quarter and is open to all students, although first preference is given to students in the program.

Kuttner and Rosenblum have extensive experience working in industry, but they also wrote to a large number of physics alumni, hoping to hear from two or three who would be willing to come talk to the class. "We got about 40 replies," Rosenblum said.

Alumna Marianne Walpert spoke to students about working in industry. She is vice president for sales and marketing at Pacific Power Management, a solar energy company.



## New study highlights role of hit-and-run collisions in space

**H**IT-AND-RUN collisions between embryonic planets during a critical period in the early history of the solar system may account for some previously unexplained properties of planets, asteroids, and meteorites, according to UCSC researchers who published their findings in the January 12 issue of the journal *Nature*.

The four "terrestrial" planets (Earth, Mars, Venus, and Mercury) are the products of an initial period, lasting tens of millions of years, of violent collisions between planetary bodies.

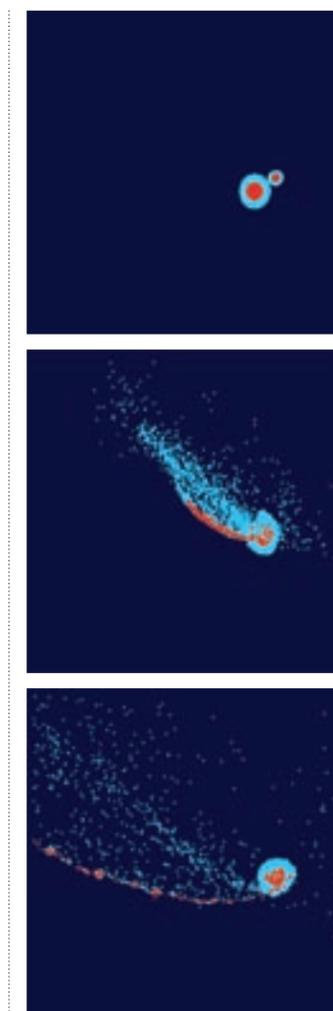
When planets collide, half of the time a planet-sized impactor hitting a larger planet-sized body will bounce off; these hit-and-run collisions have drastic consequences for the impactor, said Erik Asphaug, associate professor of Earth sciences and first author of the *Nature* paper.

"You end up with planets that leave the scene of the crime looking very different from when they came in—they lose their atmosphere, crust, even the mantle, or they can be ripped apart into a family of smaller objects."

## Exploring a neglected piece of Jewish and European history

**N**EUFELD LEVIN Professor of Holocaust Studies Murray Baumgarten has been awarded nearly \$200,000 from the National Endowment for the Humanities to fund an institute for college and university teachers in Italy. The institute is scheduled to take place in Venice from June 19 to July 21.

The interdisciplinary pro-



The images (top, center, and bottom) show a collision between two planetary embryos before, during, and after the impact. Blue represents the rocky material of the mantle; red, the iron-rich material of the inner core.

gram will explore the cultural, intellectual, and historical experience of Italian and Venetian Jews through the study of literary, artistic, and dramatic works.

"The Jewish community in Venice is an important but neglected piece of Jewish and European history," Baumgarten said. "Having been expelled from most of Western Europe, Jews settled in Venice in 1516, and though they were sequestered in a ghetto, the Jewish community flourished in business and the arts... and had an integral role in early capitalism."

## Popular Santa Cruz tourist attraction isn't so mysterious, after all

FOR YEARS, psychology professor Bruce Bridgeman has taken UCSC students to the Mystery Spot, a popular local tourist attraction, to demonstrate how the human brain works.

Tourists flock to the Mystery Spot to enjoy the “puzzling variations in gravity, perspective, height and more,” leaving baffled and perplexed by the apparent exceptions to the laws of physics and gravity.

But for Bridgeman, the site is a powerful—and entertaining—way to demonstrate the influence of the visual context on perception. “It shows that you can teach serious science in unexpected places,” said Bridgeman, who published a scholarly article that explains the perceptual effects at work at the Mystery Spot. His article,



Mystery Spot managers welcomed Bridgeman's research on the attraction.

“Influence of Visually Induced Expectation on Perceived Motor Effort: A Visual-Proprioceptive Interaction at the Santa Cruz Mystery Spot,” appeared in an issue of *Psychonomic Bulletin and Review*.

Mystery Spot visitors will recognize the scene of Bridgeman's research: In a cabin on a steep hillside, an 8-kilogram weight hangs on a chain from the ceiling. Although the weight hangs vertically, the

tilt of the cabin makes the weight appear to be suspended at an angle. Visitors find that pushing the weight one way is perceived as much more difficult than pushing it the other way. Rather than a magical defiance of gravity, the explanation lies in the “mismatch” between expectations and the actual weight: Expectations based on visual information override the proprioceptive experience of moving the weight.

## UCSC engineers named IEEE Fellows

TWO FACULTY MEMBERS of UCSC's Baskin School of Engineering have been elected Fellows of the Institute of Electrical and Electronics Engineers (IEEE). They are J. J. García-Luna-Aceves, Baskin Professor of Computer Engineering, and Darrell Long, Malavalli Professor of Storage Systems.

The IEEE Board of Directors cited García-Luna-Aceves's “contributions to theory and design of communication protocols for network routing and channel access” and Long's “contributions to storage systems architecture and performance.”

## Library addition to provide increase in space, new features

AFTER YEARS of planning, a project to increase the size of and renovate McHenry Library took a giant step toward reality when construction on a multi-year project began in the fall.

Not only will space at McHenry be expanded by 72 percent, adding approximately 81,600 square feet, the project will provide a number of enhancements, including:

- An electronic research center with 60 stations to access library resources.
- A visual resource center, providing access to electronic



This rendering illustrates how the library will appear from the southwest.

graphic files and image banks, 35 mm slides, and historic collections in various photographic formats.

- An instructional design center to help faculty make innovative use of technology.
- A “cyber study” room and Internet café, providing social space and online access.

## After Katrina, UCSC welcomes students from New Orleans lab

IN THE AFTERMATH of Hurricane Katrina, University of New Orleans researcher Stephen Winters-Hilt was struggling to get his life back to normal and his lab up and running again. Thanks to his strong ties to UCSC, however, about half of the students in his research lab temporarily relocated to UCSC in the fall to carry on their research here.

The students—four graduate students and one undergraduate—took up residence in campus housing, took classes, and conducted research in the UCSC Biophysics Laboratory.

Winters-Hilt, who earned his Ph.D. in bioinformatics at UCSC in 2003, is a coinvestigator with UCSC faculty David Deamer and Mark Akeson on two grants funded by the National Institutes of Health.

## Three receive top awards from Alumni Association

A SENIOR WRITING lecturer, an epidemiologist in the international fight against AIDS, and a staff member who helps nontraditional students thrive have received the UCSC Alumni Association's highest honors for the 2005–06 year.

In an on-campus luncheon in February, Donald Rothman received the Distinguished Teaching Award; Cheryl Scott, the Alumni Achievement Award; and Corinne Miller, the Outstanding Staff Award. The three were honored along with 31 student award winners.

Rothman, who served as



FROM LEFT: Donald Rothman, Cheryl Scott, and Corinne Miller

provost of Oakes College in the 1990s, was instrumental in creating and shaping UCSC's Writing Program. In 1977 he founded the Central California Writing Project, dedicated to helping elementary and secondary teachers and university faculty improve the teaching of writing.

As director of the U.S. Centers for Disease Control and Prevention (CDC) opera-

tions in Tanzania from 2001 to 2005, alumni award-winner Cheryl Scott (Oakes '74, biology) was in the thick of the global battle against AIDS. Under Scott's leadership, CDC-Tanzania assisted the Tanzanian government to improve its HIV/AIDS surveillance system, strengthen lab services, advance blood-transfusion safety, and develop a network of antenatal health centers.

What began as a small support system for “nontraditional” women students—those not fitting the 18- to 22-year-old profile—has blossomed under staff award-winner Corinne Miller's leadership. Services for Transfer and Re-Entry Students (STARS) now welcomes more than 3,000 transfer and nontraditional students and has a solid record for student success.

## Grad students shine in arts collaboration

IN *Nightingale*—the first thesis project of UCSC's new graduate program in Digital Arts/New Media—dancers onstage trigger digital effects through their intricate movements, creating streams of light and colors that appear on images of their bodies projected on screens behind them.

Featuring video illuminated on three screens, interactive digital media, theater improvisation, and original sonic compositions, *Nightingale*—which was performed on campus five times in November—is the result of an ambitious collaboration between Digital Arts/New Media graduate students and BarnStorm, UCSC's new student-run theater arts company.

The production was choreographed by assistant theater arts professor Ted Warburton, who worked with student media designer Jess Damsen to pilot the

use of a technology called ActiveSpace, developed by Professor John Crawford at UC Irvine. With computer hardware newly purchased by the Digital Arts/New Media program, UCSC students can now take advantage of an interactive dance system that allows dancers to generate digital effects from their movements onstage.

“The basic idea is that one camera captures the image of a dancer, another camera registers the movement of that dancer onstage, and that movement triggers effects depending on how they are programmed,” explained Porter College lecturer and program alumnus Bob Giges. “The effects are then projected on screens behind the dancer.”

Giges wrote the

script for the production as his M.F.A. thesis project, taking the classic Hans Christian Andersen tale of “The Nightingale” and embedding it into a contemporary story about relationships in turmoil.

*Nightingale* was directed by program grad student Timothy Jordan and featured students from a variety of disciplines in the acting roles and technical positions.

Actors improvise in live interactions with taped interviews of audience members recorded just before the performance.



## Luncheon, activities mark Women's Center's 20th anniversary

THE UCSC Women's Center in October observed its 20th anniversary with a luncheon, a new publication from the University Library, and an art exhibit by women staff and alumnae.

The luncheon, which was opened by Chancellor Denton, featured Santa Cruz County supervisor Mardi Wormhoudt and UCSC psychology professor Aída Hurtado, who both spoke on the topic: “Why a Women's Center?”

*Crossing Borders: The UCSC Women's Center, 1985-2005*, a new oral history from the library's Regional History Project, was also celebrated.

Two of the center's founding faculty—Helene Moglen and Marge Frantz—as well as five staff women who served as directors are featured in the publication.

## Psychologist receives national honor

**F**AYE CROSBY, professor of psychology and an expert on affirmative action, has received the Kurt Lewin Award, one of the most prestigious honors in social psychology.

Crosby received the award from the Society for the Psychological Study of Social Issues. Named for the founder of social psychology, the Lewin Award recognizes “outstanding contributions to the development and integration of psychological research and social action.”



UCSC PHOTO SERVICES

## Ecologist investigates role of plant roots in carbon cycling

**S**OIL ECOLOGIST Weixin Cheng is at the leading edge of scientific efforts to quantify the impacts of plant roots on the cycling of carbon between the atmosphere (where carbon dioxide contributes to global warming) and terrestrial ecosystems (where large amounts of carbon are stored in soil organic matter).

Cheng, an associate professor of environmental studies at UCSC, studies complex above- and below-ground systems to gather data on the movement of carbon in terrestrial ecosystems.

Plant roots contribute as

## California's oak woodlands face new threat: Climate change

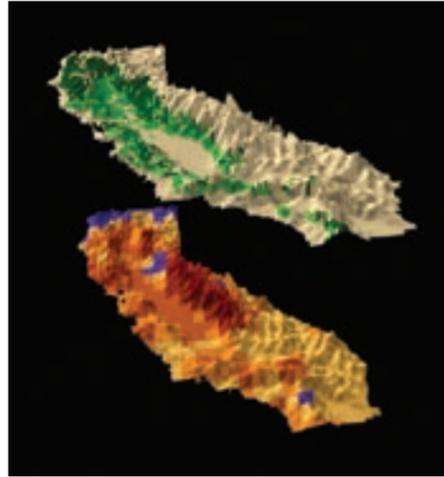
**C**ALIFORNIA'S iconic oak woodlands have endured many assaults over the years—they've been cut for fuel, cleared for vineyards and housing developments, and their seedlings face intense grazing pressure and competition from invasive grasses.

But the future will bring a new threat—climate change.

Using computer models, UCSC researchers have taken a close look at the implications of climate change for two familiar California oak species—blue oak and valley oak. Their findings were published in the *Proceedings of the National Academy of Sciences* in

November. The study was led by Lara Kueppers, a postdoctoral researcher working with Lisa Sloan, professor of Earth sciences.

The researchers found that the areas of the state where the climate is suitable for these spe-



LOWER IMAGE—Precipitation model: yellows to reds, decreases; shades of blue, increases. UPPER IMAGE—Predicted habitat for blue oak: dark green, future suitable habitat; light green, no longer suitable.

cies to grow will shift northward and could shrink to nearly half their current size as a result of global warming.

much as 50 percent of the total carbon dioxide produced by terrestrial ecosystems, and they also



Soil ecologist Weixin Cheng

play a major role in adding organic carbon to soil. But many studies of soil carbon have measured it in incubated soil samples that lack roots and vegetation.

“We’ve been oversimplifying the ecosystem,” said Cheng, who has

developed techniques for measuring below-ground carbon cycles.

In the greenhouse, Cheng is evaluating numerous plants, including soybeans, corn, wheat, Ponderosa pine, cottonwood, and amaranths.

By focusing on the rhizosphere, the soil that surrounds the roots of a plant, Cheng has documented changes in the rate

of soil organic matter decomposition that vary from 70 percent suppression to 300 percent stimulation, a range that underscores Cheng’s assertion that soil processes cannot be understood under plantless conditions.

## UCSC and Los Alamos form partnership for data management

**U**CSC AND LOS ALAMOS National Laboratory have agreed to establish a collaborative institute for research and education in the area of scientific data management.

The Institute for Scalable Scientific Data Management (ISSDM) will address looming issues of data storage and management for projects that involve large-scale simulation and computing.

“This new partnership builds on a history of fruitful scientific collaboration between UCSC faculty and students and Los Alamos scientists. The educational and research programs supported by the institute will benefit both partners while addressing major challenges in scientific computing,” said Chancellor Denton.

The institute will provide opportunities for UCSC graduate students to gain specialized experience and expertise in this area by working on large-scale computing projects at Los Alamos. In addition, the students who take advantage of these opportunities will provide a pool of potential employees for the laboratory with skills in key areas of computer science and data management, where the lab foresees significant staff needs in the future.

“We want to be able to hire people who already understand our problems and can come in and be immediately productive. This partnership will provide a valuable pipeline for recruitment and retention of staff in a key area for the laboratory,” said Gary Grider of the High Performance Computing Systems Integration Group at Los Alamos.



JIM MACKENZIE

**R**obert F. Kennedy Jr. drew a large audience to the Santa Cruz Civic Auditorium in late January for a lecture titled “Our Environmental Destiny.” Greeting Kennedy at a dinner reception held in his honor were Chancellor Denton, center, and Anuradha Luther Maitra, president of the UCSC Foundation. Kennedy is a senior attorney for the Natural Resources Defense Council. The event was sponsored by UCSC’s Arts & Lectures program.

## Historian finds women's labor movement in Latin America

**I**N 2001, history professor Dana Frank was asked by the U.S. Labor Education in the Americas Project (US/LEAP), a Chicago nonprofit, to develop a union label for the U.S. banana market.

Frank signed on as a consultant and traveled to Central America to attend union workshops and regional conferences. She stayed with women banana workers in Honduras and went on road trips to Guatemala and Nicaragua to observe workshops designed for younger members of

the union. Frank had meals with the workers and visited their packing plants and union offices.

As she conducted her research in Latin America, Frank discovered a powerful, sophisticated, and highly successful network of women’s banana worker activism that is largely unknown to the rest of the world. The result is *Bananeras: Women Transforming the Banana Unions of Latin America*, a new book that traces the growth of this transnational labor movement.

“It’s an amazing story, and I just happened into it,” said Frank, an expert on U.S. and international labor issues. “I didn’t go down there intending to write about it—I just

went down to work with the banana unions, and I was stunned by all of the women’s projects. My book is about the history and development of these projects for gender equity and power in the banana unions, and how these women were able to build them and win the support of the men.”

Historian Dana Frank



COURTESY DANA FRANK

## Annual alumni panel featured at spring fair on April 22

**A**PAIR OF EMMY AWARD-winning writers, an expert on nuclear strategy and nonproliferation, and an acclaimed science writer are among the graduates of UCSC who will participate in a panel discussion on campus on April 22 during the Banana Slug Spring Fair reunion weekend.

The four graduates, who will discuss the relationship between their UCSC education and current careers, are as follows:

- **ANNE FLETT-GIORDANO** (Porter ’76, B.A. psychology, theater arts) and **CHUCK RANBERG** (Porter ’77, B.A. theater arts) met at UCSC; they received an Emmy for their work as writer-producers of the TV show *Frasier*.

- **GEORGE PERKOVICH** (Cowell ’81, B.A. politics) is vice president for studies at the Carnegie Endowment for International Peace and author of *India’s Nuclear Bomb*.

- **EILEEN CHU** (Crown ’71, B.A. biology; ’82, Ph.D. biology) is a senior editor with the U.S. Government Accountability Office; she was a teacher of science writing at MIT and editor-in-chief of the journal *BioScience*.



GEORGE T. MARTINE



COURTESY GEORGE PERKOVICH



COURTESY EILEEN CHU

The panel takes place on Saturday, April 22, at 10:30 a.m., in the University Center’s Bhojwani Dining Room.

For more information on the panel discussion and other Banana Slug Spring Fair reunion events, see page 24 or go to: [alumni.ucsc.edu/reunions](http://alumni.ucsc.edu/reunions).

## In Memoriam

- **THEODORE SARBIN**, 94, professor emeritus of psychology and criminology, died at his Carmel home in August. A major contributor to the field of social psychology, Sarbin became known as “Mr. Role Theory” for his belief that problems thought of as “mental illness” could be construed as moral judgments rendered by those holding social power.

- **GEORGE HAMMOND**, 84, professor of chemistry and vice chancellor of natural sciences in the mid-1970s, died in Portland, Oregon, in October. A chemist, Hammond was widely credited with creating the discipline of organic photochemistry.

- **EILEEN BROOKS**, 33, an assistant professor of economics since 2001, died in February in Santa Cruz after an illness.