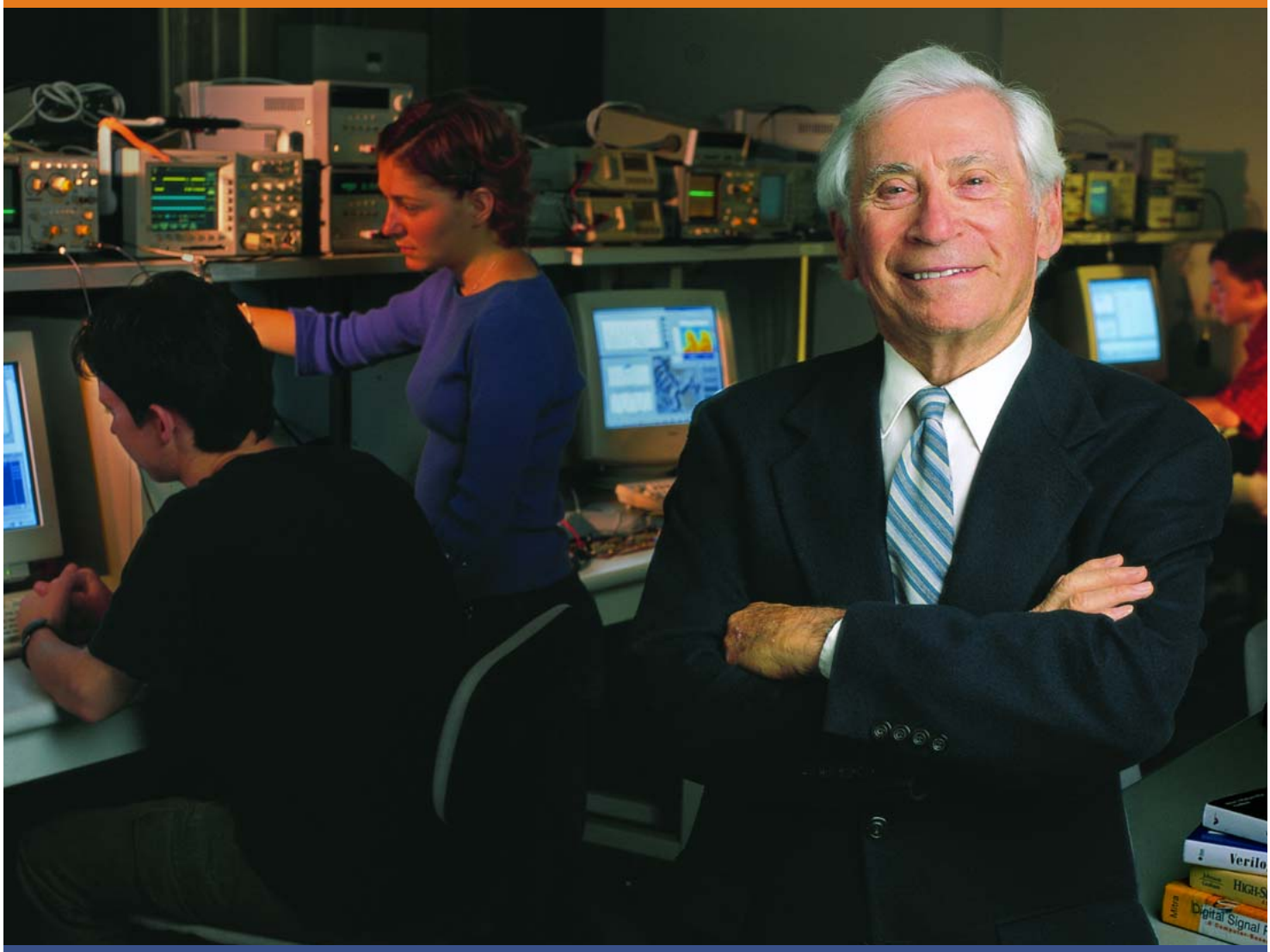
UC SANTA CRUZ

Fall 2003

REVIEW



ENGINEERING SUCCESS

Launched by a series of generous gifts from philanthropist Jack Baskin, UCSC's first professional school is beginning to make its mark through innovative research and the outstanding work of its alumni.

Contents

UC Santa Cruz
Review

Chancellor
M.R.C. Greenwood

Vice Chancellor, University Relations
Ronald P. Suduiko

Associate Vice Chancellor
Communications
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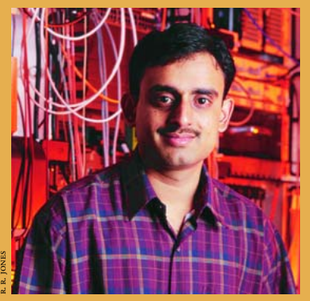
Features

Departments



R. R. JONES

The Baskin School of Engineering is only six years old, but it has already recruited a number of top faculty and trained many successful engineers—like Aman Shaikh—who are working in some of the field's most exciting areas of technological innovation. **6**

R. R. JONES

Anthropologist Nancy Chen's new book tells the fascinating story of qigong, a holistic practice that became a national obsession in China—until it was squelched by government leaders who saw qigong's charismatic masters as a threat to their control. **14**

R. R. JONES

Ed Houghton, dean of the arts at UCSC, meets with a group of students to discuss a comprehensive plan that is being drafted under his leadership—a blueprint that will guide the development one day of a dramatic "arts and community access" area on campus. **18**

JIM MACKENZIE

A class on the Holocaust last year didn't dwell on the horrific images usually associated with the genocide, but focused students instead on the boycotts of businesses, restrictions of civil liberties, and other institutional forces that preceded the death camps. **20**

From the Chancellor

By M.R.C. Greenwood

As I listened to undergraduate Jenny Jiang deliver her commencement speech during Cowell College's graduation ceremony last June, I was filled with pride at the achievement of our students and the positive difference a UC Santa Cruz education makes in their lives.

"I was encouraged—even compelled—by faculty members to take all that I've learned into the outside world, and to really become an active member of this community," Jenny told her commencement audience.

Jenny discovered a passion for public service during internships in the Santa Cruz District Attorney's Office, the Public Defender's Office, and the offices of former California Assembly Speaker Pro Tem Fred Keeley and Assemblyman John Laird. Inspired by faculty mentor Isebill "Ronnie" Gruhn of politics, she pursued her interest in public policy. Jenny's work culminated in an award-winning senior thesis critiquing U.S. official opposition to the international criminal court in The Hague, the first permanent international court created to try cases of human rights violations, genocide, and war crimes.

R. R. JONES

UC Santa Cruz remains focused on fostering a unique intellectual environment, one that inspires progress.

Graduating from UC Santa Cruz in legal studies with a minor in East Asian studies, Jenny Jiang has enrolled this fall at UC Berkeley's Boalt Hall School of Law. Her story is just one example of the exceptional educational experiences available to the young scholars who attend UC Santa Cruz. I invite you to read about a few of them in a new ongoing series of student profiles posted at: *www.ucsc.edu/students/profiles*

These profiles underscore that UC Santa Cruz remains focused on fostering a unique intellectual environment, one that inspires progress driven by our faculty, undergraduate and graduate students, and alumni. This tradition of innovation is also exemplified in the articles you will read in the following pages.

In October, UC Santa Cruz will convene nationally prominent leaders in higher education for the Clark Kerr Symposium focused on the student experience at today's public research universities. The event is one highlight in a weekend of activities summarized on page 2. Another feature is a gala dinner to benefit scholarships and fellowships, never needed more than at this period of reduced state support. Ideas generated and funds raised over this weekend will ensure that young scholars like Jenny Jiang continue to thrive at UC Santa Cruz. Please join us in supporting tomorrow's leaders!

MRC Greenwood

M.R.C. Greenwood
Chancellor

To help support students like Jenny Jiang, contact our Development Office at (800) 933-SLUG or visit *giveto.ucsc.edu/*.

Campus Update

Kerr Symposium, celebration of 'student experience' this fall

This fall, UC Santa Cruz will welcome many of this country's biggest names in higher education to the campus for the University of California Clark Kerr Symposium. The weekend of October 10–12 will focus on public research universities in the 21st century with an emphasis on the student experience.

Topics will include the benefits of student diversity, creating changes in curricula and instruction, and how best to develop the leaders of tomorrow. Participants include Richard Atkinson, who steps down as UC president October 1; Karl Pister, chancellor emeritus of UCSC; Donald Kennedy, president emeritus of Stanford University; I. Michael Heyman, chancellor emeritus of UC Berkeley; Judith Ramaley, of the National Science Foundation; and James Duderstadt, president emeritus of the University of Michigan. In addition, Leon Panetta, former White House chief of staff under President Clinton, will participate.

Other weekend events scheduled include the dedication of Colleges Nine and Ten, UCSC's first-ever scholarships benefit dinner, and a celebratory brunch to mark the 10th anniversary of the prestigious Karl S. Pister Leadership Opportunity Awards Program. Alumni, students, parents, and friends of UCSC are invited to attend the festivities. Advance registration is required for some events; for details, see *kerrsymposium.ucsc.edu.*

"We are proud to host these esteemed leaders for a discussion of ways to strengthen education and enhance the student experience in the 21st century," said UCSC Chancellor M.R.C. Greenwood. "This is an extraordinary opportunity to celebrate the campus and our unique undergraduate colleges."

ILLUSTRATION ELEMENTS: JOSE ORTEGA

Friday, October 10
Clark Kerr Symposium

Saturday, October 11
- **Dedication Ceremonies, College Nine and College Ten**
- **First Annual Scholarships Benefit Dinner**

Sunday, October 12
- **Karl S. Pister Leadership Opportunity Awards Reunion Brunch**
- **Annual Sidhartha Maitra Lecture** (see page 5)

For details, see
kerrsymposium.ucsc.edu

The symposium, taking place Friday, will be followed by the Saturday dedication of Colleges Nine and Ten. "UCSC has pioneered the role of the colleges within the public research university, and the college is at the heart of the UC Santa Cruz student experience," said Greenwood.

During the gala benefit dinner Saturday evening, Atkinson will be presented with the first UCSC Foundation Medal in recognition of his exemplary leadership. Proceeds from the dinner will help support undergraduate scholarships and graduate fellowships, as well as undergraduate internships, community service, and research opportunities.

The Pister Scholars Brunch on Sunday will unite current and alumni recipients of the community-college transfer student scholarship program that was established in 1993 by then-chancellor Pister.

"We look forward to welcoming alumni back to campus and making new connections with parents of current students and other members of the UCSC family," said Greenwood.

Numerous individuals and organizations have provided generous gifts to support the symposium, scholarship dinner, and other events. They include the David and Lucile Packard Foundation, UC Regent John Moores, Thomas Pritzker, Robert Bisno Sr., and Tim Weiss.

Linguist elected to American Academy of Arts and Sciences

UCSC linguistics professor Geoffrey K. Pullum has joined Supreme Court Justice Antonin Scalia, journalist Walter Cronkite, philanthropist William Gates Sr., Nobel Prize–winning physicist Donald Glaser, recording industry pioneer Ray Dolby, and U.N. Secretary-General Kofi Annan, as a newly elected member of the American Academy of Arts and Sciences.

The 2003 class includes four college presidents, three Nobel Prize recipients, and four Pulitzer Prize winners.

"Newly elected Fellows are selected through a highly competitive process that recognizes those who have made preeminent contributions to their disciplines," noted Academy President Patricia Meyer Spacks.

Pullum is coauthor of *The Cambridge Grammar of the English Language,* the first definitive grammar reference book of standard international English in more than 20 years. He has published a dozen books and nearly 200 articles on the scientific study of language.

Geoffrey Pullum

ANN M. GIBB

PHOTO: PAUL SCHIFFHORST, UCSC

Ten faculty members have received Excellence in Teaching Awards for this past academic year. Demonstrating exemplary and inspiring teaching, the winners were selected by the UCSC Academic Senate Committee on Teaching. The 2002–03 awards were presented by Chancellor M.R.C. Greenwood and committee chair Judith Habicht-Mauche, who both joined the faculty winners, above. Back row, l–r: Marc Mangel, Ann Caudle, Nancy Chen, and Eugene Switkes. Front row, l–r: honorable mention winner Gregory Fritsch, Lori Kletzer, Sandra Chung, Chancellor Greenwood, Habicht-Mauche, and Wendy Martyna. Not pictured are Bruce Schumm, Melanie DuPuis, and Margaret Brose. Twelve graduate students were also honored for their teaching excellence.

In 2002–03, UCSC received $22.7 million in private support

UC Santa Cruz received $22.7 million in private support in the form of gifts and grants during 2002–03, the second-largest total ever raised by the campus. A record $24.4 million was raised in 2000.

"The generous support from our donors is especially critical as the campus faces the funding challenges posed by the state budget shortfall," said Chancellor M.R.C. Greenwood.

The largest single gift came from the Gordon and Betty Moore Foundation, which gave $9.1 million to establish a Laboratory for Adaptive Optics.

A tradition of support for the Baskin School of Engineering continued with a $1 million gift from philanthropist Jack Baskin (see story, page 6).

Making science more engaging for undergraduates was the goal of a $1 million grant from the Howard Hughes Medical Institute to Manuel Ares, a professor of molecular, cell, and developmental biology.

UCSC's New Teacher Center drew $1.7 million from various sources, including a $750,000 grant from the Carnegie Corporation.

Individual donors also provided crucial support to the campus. Gifts to the Annual Fund, including gifts from UC Santa Cruz Foundation trustees, alumni, parents, and friends, totaled $2.6 million. This included $100,000 for the Alumni Association Scholarship Fund.

Trustees of the UC Santa Cruz Foundation, which supports the campus through advocacy and private fundraising efforts, gave $1.3 million this past year, with 100 percent participation from board members.

Actor Nicolas Cage pays surprise visit to UCSC film class

A jolt of electricity shot through a UCSC classroom on an afternoon last May when Academy Award–winning actor Nicolas Cage stepped onstage for a surprise visit to Assistant Professor David Crane's *Techno-Thrillers* film class.

The star of more than 40 feature films including *Raising Arizona, Leaving Las Vegas, Guarding Tess, Red Rock West,* and *Moonstruck,* Cage appeared on campus with his cousin, Roman Coppola, a film and music video director, and the son of director Francis Ford Coppola.

The visit was arranged by Chip Lord, chair of UCSC's Film and Digital Media Department, who had met Roman Coppola through a mutual friend. Three days before the visit, Lord said, "Roman called me at home and said, 'my cousin just invited me to go to Europe, but I don't want to hang you up.' Then he put Nick Cage on the phone, and Cage offered to come to UCSC with Roman when they got back from Europe. I said: 'it sounds like you're making me an offer I can't refuse.'"

At UC Santa Cruz, Cage displayed the same combination of intensity and sincerity that has made him such a riveting presence on screen. He fielded questions from Crane's class of 350 for well over an hour, covering a wide range of topics, from Hollywood relationships to production design.

SCOTT RAPPAPORT

Nicolas Cage chats with theater arts graduate student Megan Mercurio after paying a surprise visit to a film class.

Asteroid may collide with Earth. . .in 2880

If an asteroid crashes into the Earth, it is likely to splash down somewhere in the oceans that cover 70 percent of the planet's surface. Huge tsunamis, spreading out from the impact site like ripples from a rock tossed into a pond, would inundate heavily populated coastal areas.

A computer simulation of an asteroid-impact tsunami, developed by scientists at UC Santa Cruz, shows waves as high as 400 feet sweeping onto the U.S. Atlantic Coast.

The researchers based their simulation on a real asteroid known to be on course for a close encounter with Earth eight centuries from now. Steven Ward, a researcher at UCSC's Institute of Geophysics and Planetary Physics, and Erik Asphaug, an associate professor of Earth sciences, reported their findings in the June issue of the *Geophysical Journal International.*

On March 16, 2880, the asteroid known as 1950 DA, a huge rock two-thirds of a mile in diameter, is due to approach Earth. If it collides with the planet, it wouldn't mark the first such collision. The "K/T impact" ended the age of the dinosaurs 65 million years ago.

Dynes named 18th president of UC

COURTESY OF THE OFFICE OF UC PRESIDENT

Dynes is shown with his wife, Frances Dynes Hellman, a professor of physics at UC San Diego, at a press conference after his selection.

Robert C. Dynes, a first-generation college graduate who went on to become a distinguished physicist and chancellor of UC San Diego, was named the 18th president of the University of California system in June by the UC Board of Regents.

Dynes will become president of the 10-campus UC system on October 2. He succeeds Richard C. Atkinson, who is retiring from the UC presidency after eight years.

Dynes was selected from a national pool of more than 300 candidates. The recommendation was made by a regental selection committee that was advised by faculty, staff, students, and alumni.

"I am delighted with the choice of Chancellor Bob Dynes," said UCSC Chancellor M.R.C. Greenwood. "He brings to this task his international scholarly reputation, his record of extraordinary achievements at UC San Diego, a strong sense of personal optimism, and integrity."

Dynes, 60, is an expert on semiconductors and superconductors who spent a 22-year career at AT&T Bell Labs before coming to UC San Diego in 1991. He was appointed chancellor in 1996.

UCSC scientist part of team decoding gamma-ray burst mystery

Scientists have pieced together the key elements of a gamma-ray burst, from star death to dramatic black hole birth, thanks to a March explosion considered the "Rosetta stone" of such bursts.

The results were described in the June 19 issue of *Nature,* in an article coauthored by Stan Woosley, professor and former chair of astronomy and astrophysics at UC Santa Cruz.

The telling March 29 burst in the constellation Leo, one of the brightest and closest on record, reveals for the first time that a gamma-ray burst and a supernova—the two most energetic explosions known in the universe—occur essentially simultaneously, a quick and powerful one-two punch.

The burst was detected by NASA's High-Energy Transient Explorer and observed in detail with the European Southern Observatory's Very Large Telescope in Chile.

"The March 29 burst changes everything," said Woosley. "With this missing link established, we know for certain that at least some gamma-ray bursts are produced when black holes, or perhaps very unusual neutron stars, are born inside massive stars."

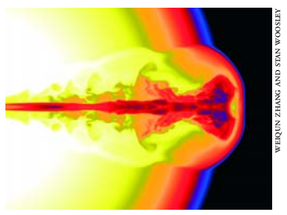
The research team said that just as the Rosetta stone helped us understand an ancient language, this burst will serve as a tool to decode other gamma-ray bursts.

Woosley and his graduate student, Weiqun Zhang, created computer simulations of a gamma-ray burst using one of the fastest unclassified computers in the world, at Lawrence Berkeley National Laboratory. Using 128 computer processors simultaneously, Woosley said the simulations took about two weeks—or about 25,000 processor hours.

A supernova is the explosion of a star at least eight times as massive as the Sun.

When such stars deplete their nuclear fuel, they no longer have the energy to support their mass. Their cores implode, forming either a neutron star or (if there is enough mass) a black hole. The surface layers of the star blast outward, becoming a billion times as luminous as the Sun.

Scientists have suspected gamma-ray bursts and supernovae were related, but they have had little observational evidence, until March 29.



ATTOOM, NYIS AND ZHANG SCIENCE

NASA/SKYWORKS DIGITAL

Left: *A computer simulation, developed by a UCSC professor and his graduate student, depicts an early stage of a gamma-ray burst. A "jet," created in the center of a star, begins to erupt through the star's surface.* Right: *Within seconds, the star is shattered. Additional images and animations:* www.gsfc.nasa.gov/topstory/2003/0618rosettaburst.html

JON KERSEY

Midori Iwanabe

Center helps students bridge cultures, build friendships

When exchange student Midori Iwanabe arrived at UCSC from Tokyo a year ago, she felt nervous about interacting with American students and apprehensive about the U.S. university system. By spring quarter, Iwanabe had become a successful student with a network of close friends.

"I have a feeling of belonging here," said Iwanabe, who credits College Nine's new International Living Center (ILC) with providing support and a sense of community. "When I arrived, I didn't know anybody. Now, almost every night my friends come for tea. It's more a feeling of living in America than just visiting."

Iwanabe shares an apartment with exchange students from France and Australia, as well as two U.S. students. Her housemates have helped Iwanabe with English and shared American traditions with her, and she has taught them about Japanese cooking and her own traditions.

Like a mini–United Nations, the ILC opened last fall to foster cross-cultural understanding and is now home to more than 100 undergraduates, about half of whom are exchange students from other countries.

Stimulating series of lectures open to all

A distinguished array of speakers—focusing on everything from Islam and California to biotechnology—are coming to UCSC during 2003–04.

Special presentations like these, arranged by UCSC's academic divisions and departments, have long been enjoyed by members of the campus community. Beginning this year, the campus will make them more visible and accessible to the public through expanded publicity and outreach.

"The campus is eager to bring these engaging, thought-provoking lectures—addressing a wide range of scientific, social, and political issues—to the broader community," said Ronald P. Suduiko, vice chancellor for University Relations.

The following lectures are open to the public and free. For updated information, call the University Events Office at (831) 459-5390, or go to *events.ucsc.edu/lectures.*

2003 Sidhartha Maitra Memorial Lecture
PICO IYER, respected travel writer and distinguished author, will discuss "Islam and California: A Cultural Romance." October 12, 7 p.m., UCSC Recital Hall. Reception to follow.

Fall Halliday Lecture
KEN NEALSON, Wrigley Professor of Geobiology at the University of Southern California. October 16, 8 p.m., UCSC Recital Hall.

Silicon Valley Alumni Chapter Lecture
MICHAEL ISAACSON, Narinder Singh Kapany Professor of Optoelectronics at UCSC's Baskin School of Engineering. Fall-quarter date, time, and location TBA.

First Annual Keeley Lecture
JANE LUBCHENKO, Wayne and Gladys Valley Professor of Marine Biology and Distinguished Professor of Zoology at Oregon State University, member of the Pew Oceans Commission, and world-recognized expert on nearshore regions of the Pacific Coast. Fall-quarter date, time, and location TBA.

Faculty Research Lecture
BARBARA ROGOFF, UCSC Foundation Professor of Psychology and UC Presidential Chair. February 5, 8 p.m. Location TBA.

Sinsheimer Lecture
ROBERT GALLO, M.D., director of the Insitute of Human Virology and the Division of Basic Science, University of Maryland Biotechnology Institute. March 4. Time and location TBA.

Alumni Banana Slug Spring Fair Lecture
SANDRA FABER, University Professor of Astronomy, and astronomer, UCO/Lick Observatories. April 17. Time and location TBA.

Spring Halliday Lecture
GEOFFREY MARCY, professor of astronomy at UC Berkeley, astronomer at UCO/Lick Observatories, and renowned planet hunter. May 19, 8 p.m. Location TBA.

Center for Justice, Tolerance and Community Lecture
ERNIE CORTEZ, regional director for the Industrial Areas Foundation. Spring-quarter date, time, and location TBA.

Parents may inhibit girls' performance, interest in science

Parents are more likely to believe that science is less interesting and more difficult for their daughters than sons, and their beliefs appear to affect children's interest and performance in science, according to research published in *Developmental Psychology.*

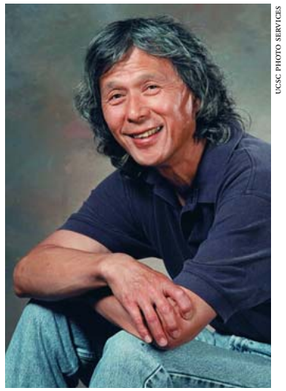
The study, "Parent-Child Conversations About Science: The Socialization of Gender Inequities?" may help explain why women remain underrepresented in the science and engineering labor force, according to authors Harriet Tenenbaum, a graduate of the UCSC doctoral program in psychology and a postdoctoral researcher at Harvard, and Campbell Leaper, a professor of psychology at UCSC. The article presents the findings of Tenenbaum's dissertation research; Leaper was her adviser.

Tenenbaum and Leaper found that parents also appear to use different language when discussing science and interpersonal relationships with their sons and daughters. Fathers who were observed were more likely to use challenging or scientific language with their sons than with their daughters, while they were more likely to ask daughters challenging questions about interpersonal dilemmas.

Tenenbaum and Leaper speculate that the differences contribute to the gender gap in scientific and interpersonal interest and skills. Only 23 percent of people employed in the sciences are women.

In their study, Tenenbaum and Leaper asked 52 boys and girls around 11 and 13 years old to indicate how much they enjoyed science and how good they were at science. There was no gender difference in children's grades or interest in science or math.

In Memoriam



UCSC PHOTO SERVICES

Mel Wong

Mel Wong, a renowned choreographer, dancer, and visual artist, died of a heart attack in July in Santa Cruz. He was 64.

Wong established an international reputation, first as a performer with the Merce Cunningham Dance Company, and then as a choreographer, teacher, and performer with the Mel Wong Dance Company. He had been a professor of dance in the Theater Arts Department at UC Santa Cruz since 1989.

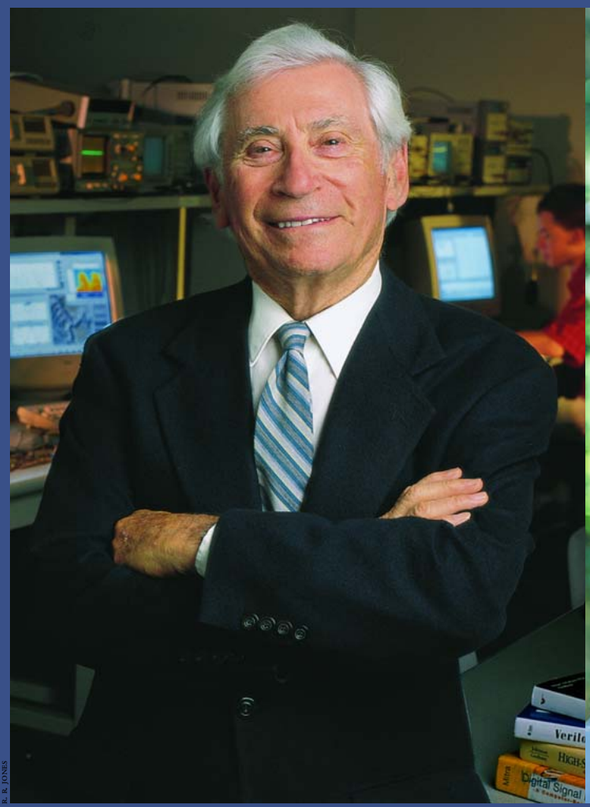
Wong's dance background included professional training in ballet and modern dance in California and New York. He toured internationally with the Merce Cunningham Dance Company (1968–72) and later formed his own dance company.

At press time, a public celebration of Wong's life was being planned for late September.

Richard Hooper, a politics major who graduated with honors from UCSC in 1985, was killed in August when a bomb exploded outside United Nations headquarters in Baghdad. At press time, other details concerning his death were not known. Hooper, a U.N. expert on Arab affairs, was 40.

ENGINEERING SUCCESS

BY TIM STEPHENS



P. R. JONES

"UC Santa Cruz is developing a school that will meet the engineering challenges of the 21st century. I am delighted with the engineering school's progress and consider it to be my greatest legacy."

Jack Baskin
Retired engineer and philanthropist

"I expect to see tremendous developments in our core areas of information technology, biotechnology, and nanotechnology, with significant impacts to society for decades to come."

Steve Kang
Dean, Baskin School of Engineering

WHEN IT WAS FOUNDED IN 1997, UCSC's Baskin School of Engineering had already established a reputation for excellence in computer science and computer engineering. But in the six years since its founding, the campus's first professional school has added a number of disciplines, emerging as a distinctive engineering school with a unique focus on some of the most exciting areas of technological innovation.

The faculty are conducting vital research in the core areas of information technology, biotechnology, and nanotechnology, and 12 of them were featured at the school's first Research Review Day in May (see story, pages 12 and 13).

Graduates and students of the School of Engineering are also helping to build its reputation through their own accomplishments in industry and academia. In the pages that follow, we profile four of these people.

The subjects of the four profiles represent the school's founding departments, computer science and computer engineering. The quality of their work, however, speaks to the promise of the school's new departments and programs in applied math and statistics, biomolecular engineering, electrical engineering, information systems management, network engineering, and software engineering.

To accommodate the expansion of the engineering school's programs, a new building is under construction adjacent to the existing Baskin Engineering Building. With 90,000 square feet of new office, laboratory, and classroom space, the Engineering 2 Building is scheduled for completion in fall 2004.

Jack Baskin, whose $5 million gift helped launch the engineering school six years ago, has continued his support with a $1 million gift this year to help fund the new building and to create an endowed chair in biomolecular engineering. Baskin's donations to the School of Engineering now total almost $8 million.

"That we have come so far in such a short amount of time is due in large part to Jack Baskin's vision and support," says Chancellor M.R.C. Greenwood. ►

R. R. JONES

KIMMEN SJÖLANDER

UC SANTA CRUZ EDUCATION:
B.A., computer science, 1993;
Ph.D., computer science, 1997

CURRENT POSITION:
Assistant Professor of Bioengineering
UC Berkeley

Kimmen Sjölander's specialty, bioinformatics, brings the methods of computer science to bear on problems in molecular biology. Her current work includes efforts to understand disease resistance in plants and, more broadly, the nature of innate immunity in both plants and animals.

The interdisciplinary nature of Sjölander's work is reflected in her affiliation with two departments at UC Berkeley: bioengineering and plant and microbial biology.

"It's easy for computer scientists to stay very theoretical, but by working closely with the biologists you find out what's really important to them," Sjölander says.

Proteins, with their extraordinary diversity of structure and function, pose some of the toughest problems in bioinformatics, and Sjölander has made key contributions to the arsenal of computational tools available for protein analysis. Her software programs can sort out the evolutionary relationships among proteins, allowing scientists to infer the structure and function of a newly discovered protein on the basis of its relationship to known proteins.

Sjölander began this work as an undergraduate working with bioinformatics pioneer David Haussler, UC Santa Cruz professor of computer science and Howard Hughes Medical Institute Investigator. After earning her Ph.D., also under Haussler's guidance, Sjölander worked in industry for several years. As chief scientist at the Molecular Applications Group (MAG), she oversaw the development of the Panther protein classification system, which included methods she had developed for her Ph.D. thesis.

When MAG's Panther group was acquired by Celera Genomics, Sjölander found herself working on the analysis of the human genome sequence. While Sjölander was at Celera, the public Human Genome Project recruited Haussler's group to help analyze its sequence. Although the media tended to focus on the competition between Celera and the public consortium, Sjölander says those involved just laughed about it.

"I think whatever competition there was got hyped up by the media," she says.

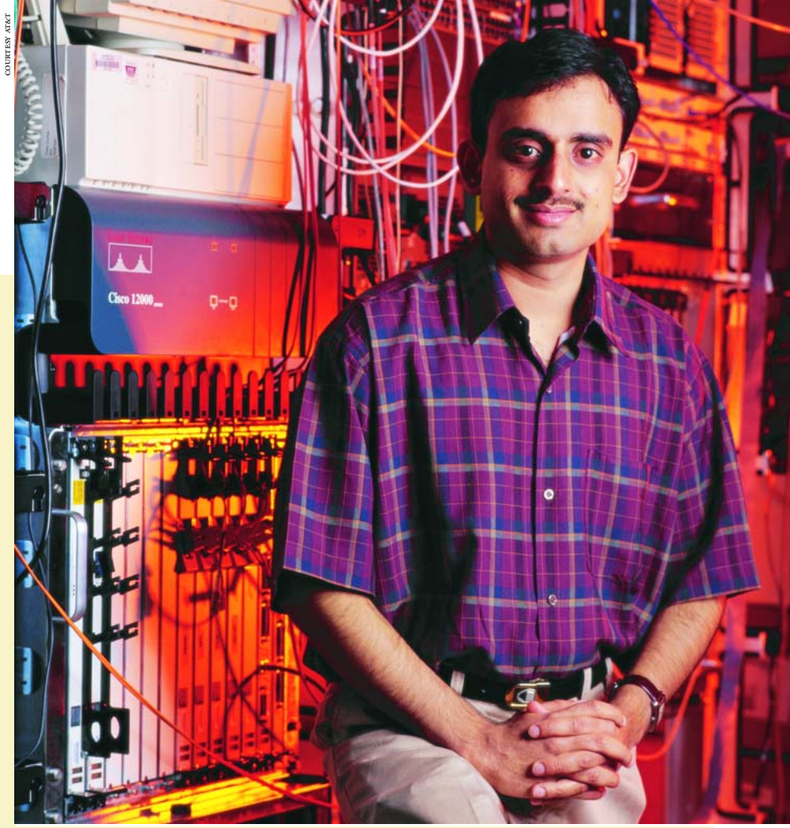
Nevertheless, she is thrilled to be back in academia, with greater freedom to do research in a collaborative environment. She was recently awarded a prestigious research grant from the National Science Foundation's Faculty Early Career Development (CAREER) program. And she was busy this summer organizing a research conference on bioinformatics held at Oxford University.

It is ironic that Sjölander ended up at UC Berkeley, having turned down generous offers from Berkeley in favor of UCSC for both undergraduate and graduate studies. The opportunity to study with Haussler was a big factor in those decisions, but there were other reasons as well, she says.

When Sjölander went back to school to earn her bachelor's degree, she was a single mother of three, including two-year-old twins. UCSC's Family Student Housing offered a supportive environment, including free after-school care for her children.

"The support that UCSC provided made a tremendous difference to my success," she says.

COURTESY AT&T



AMAN SHAIKH

UC SANTA CRUZ EDUCATION:
M.S., 2000; Ph.D. candidate,
computer engineering

CURRENT POSITION:
AT&T Labs–Research, Florham Park, New Jersey

Aman Shaikh has not yet written his Ph.D. dissertation, but there can be little doubt about the quality of the work he has already completed. Shaikh has been working on his research at the AT&T Labs in New Jersey, where he helped develop a new software tool for monitoring network performance.

After extensive testing, AT&T has deployed Shaikh's monitoring software on its national backbone network, a core component of the Internet.

"As you can imagine, the barriers to such deployment are quite high, and getting to this point within such a short time is no small feat," says Shaikh's UCSC adviser, Anujan Varma, a professor of computer engineering.

Varma used his industry connections to create the opportunity for Shaikh to do his thesis research at AT&T, which has provided almost $100,000 in funding to UCSC for the project.

The stability and performance of a computer network depends on its routers, devices that manage network traffic and find the best routes for sending data packets to their destinations. Open Shortest Path First (OSPF) is a widely used routing protocol that enables routers to gather information about the network and find the best route to a destination. It does this by sending messages back and forth between routers.

Shaikh, working with AT&T researcher Albert Greenberg, developed an OSPF monitor that listens in on the constant chatter of messages (called Link State Advertisements, or LSAs) passing between routers. The monitor can detect problems in the network, such as a failing router, before they become serious.

"The OSPF monitor basically listens to LSA messages and analyzes them to assess the health of the network," Shaikh says. "It does the analysis in real time, but it also archives the messages, so you can go back and do a more detailed analysis offline."

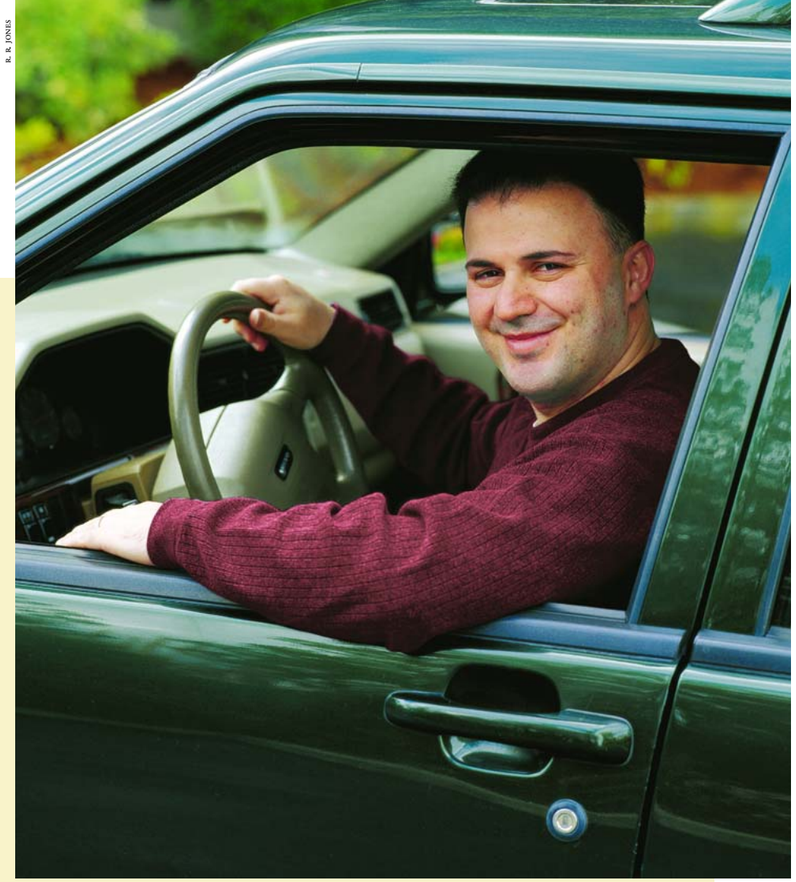
AT&T first tested the monitor on a small research network, then deployed it in a large customer network that connects hospitals to a health services data center. Shaikh's OSPF monitor detected a problem with one of the network's core routers, enabling the company to fix the problem before it affected customer service. That experience paved the way for the monitor's deployment in AT&T's national backbone network.

"Aman Shaikh's work has been extremely well received in the networking research community," says AT&T's Greenberg. "It has been deployed in very large networks, where it has had significant real-world impact."

In addition to its practical value, the OSPF monitor is a useful research tool because of the data it collects, says Varma.

"We are getting a lot of information that we can use for subsequent research on network behavior," he says.

Shaikh continues to work on the project and plans to complete the requirements for his Ph.D. by the end of 2003.



R. R. JONES

MIKE TZAMALOUKAS

UC SANTA CRUZ EDUCATION:
M.S. and Ph.D., computer engineering, 2000
CURRENT POSITION:
Founder, Circumnav Networks Inc.

Consumers in the United States have shown limited interest so far in navigation systems for cars, but Mike Tzamaloukas is developing a product that could change all that when it hits the market sometime next year.

Imagine having a device in your car that knows not only where you are and where you want to go, but also the current traffic conditions, and can map out the best route to get you around traffic jams and to your destination as quickly as possible.

That's the idea behind Circumnav, a company Tzamaloukas started incubating in 2002 with help from Skymoon Ventures, a venture capital firm based in Palo Alto. The company was officially founded this year.

"We've developed a wireless device that enhances the navigation systems now available for cars in a very affordable manner, and can give you dynamic route guidance based on traffic conditions," Tzamaloukas says.

Although Tzamaloukas is reluctant to reveal details of the technology behind his company's product, Circumnav uses the kind of wireless network technology that he has been working on since he was a graduate student with professor of computer engineering J. J. García-Luna-Aceves.

García-Luna's group developed technologies for establishing an ad hoc communications network consisting entirely of mobile wireless devices. It is like a network of cellular telephones that can communicate directly with each other, with no need for cell towers to relay signals.

Circumnav incorporates similar wireless networking technology in its navigation systems to provide constantly updated traffic information. For now, however, the source of the traffic information is a secret.

"We haven't been giving all the details, but we have the technology to make it work," Tzamaloukas says.

Before launching Circumnav, he was chief scientist with AmbiCom, a Fremont-based company specializing in wireless technology.

With the high-tech industry suffering during the recent economic downturn, this would seem like a difficult time to launch a new company in Silicon Valley. In the case of Circumnav, however, Tzamaloukas leveraged an idea that Skymoon Ventures was already exploring on its own. He now works out of the Skymoon offices in Palo Alto.

"They had a great idea, and I knew how to make it happen," he says.

WILL KIRK / COURTESY JOHNS HOPKINS UNIVERSITY

RANDAL BURNS

UC SANTA CRUZ EDUCATION:
M.S. and Ph.D., computer science, 2000
CURRENT POSITION:
Assistant Professor of Computer Science, Johns Hopkins University

Randal Burns is working to solve one of the great challenges of the digital age: how to manage efficiently the massive amounts of data stored in computer systems. It is a challenge that any large organization eventually confronts as data steadily accumulates and computer systems and networks evolve.

According to Burns, data storage accounts for most of the money spent on information technology and often represents the most valuable asset of a company or organization. A major focus of his research addresses the difficulty of moving data from one computer system to another.

"When data is stored in a certain system it tends to gain inertia, in the sense that it becomes harder to move it to a different system," he says. "We're trying to overcome that inertia by developing tools that allow data to move between different software systems and different management domains."

These tools enable data to migrate seamlessly between computers running different operating systems and software programs. That can be helpful for sharing data among different sites and for deploying new storage technologies.

"We want to allow data to outlive the software systems on which it is initially stored," Burns says.

Burns directs the Hopkins Storage Systems Laboratory in the Whiting School of Engineering at Johns Hopkins University. As a graduate student, he worked with Darrell Long, professor of computer science and director of UCSC's Storage Systems Research Center. He also was on the research staff at the IBM Almaden Research Center in San Jose, both as a graduate student and after he earned his degree.

"One of the great things about my graduate career was the interaction with industry while I was at Santa Cruz," Burns says.

His work at IBM earned him six patents and a series of IBM awards for his inventions, including an IBM Outstanding Innovation Award. Since his arrival at Johns Hopkins in 2001, Burns has received two prestigious federal grants to support his research and teaching: an Early Career Principal Investigator Award from the Department of Energy and a Faculty Early Career Development (CAREER) Award from the National Science Foundation.

The NSF CAREER awards are meant to recognize and support those young faculty who are most likely to become the academic leaders of the 21st century. It's not hard to see why Burns was among those chosen.

A ROUNDUP OF ENGINEERING RESEARCH

THE BASKIN SCHOOL OF ENGINEERING held a Research Review Day this past May, presenting a sample of current research activities to an audience that included high-tech industry representatives from Silicon Valley. Some of UCSC's leading engineering faculty discussed their work in the series of presentations outlined here. Additional information about the talks described here is available on the web at *soe.ucsc.edu/events/research_review_day.*

INTERFACING THE PHYSICAL AND BIOLOGICAL WORLDS

MICHAEL ISAACSON
Narinder Singh Kapany Professor of Optoelectronics

Isaacson develops novel techniques and tools for "nanobiotechnology," using technology from the semiconductor industry to study biological systems and develop devices with biomedical applications. His projects include the development of devices for use in neural prosthetics.

INTRAOCULAR RETINAL PROSTHESIS

WENTAI LIU
Professor of Electrical Engineering

Liu has applied his microelectronics expertise in an interdisciplinary project to develop a retinal prosthesis for the restoration of eyesight in the blind. His research interests include biomimetic microsystems, molecular electronics, microelectronic sensor design, and computer vision and image processing.

PHOTONIC MATERIALS AND DEVICES FOR OPTICAL FIBER COMMUNICATIONS

CLAIRE GU
Professor of Electrical Engineering

Gu's research on photonic technologies for fiber optic networks includes the use of light-sensitive materials to design and implement optical filters, switches, and other devices.

NANOSCALE DEVICES FOR OPTO-THERMO-ELECTRONIC CONVERSION

ALI SHAKOURI
Associate Professor of Electrical Engineering

Shakouri's projects, including microcoolers for computer chips and devices for direct thermal to electric energy conversion, are based on the engineering of optical, thermal, and electric properties of nanostructured semiconductors.

WIRELESS INTERNETWORKING

J. J. GARCÍA-LUNA-ACEVES
Professor of Computer Engineering

A leading expert on computer communication, García-Luna has developed new technologies for establishing ad-hoc networks of mobile wireless devices. He is working on new protocols to support wireless networks and enable seamless interconnection with the wired Internet.

RECENT RESEARCH DEVELOPMENTS IN THE UCSC VISUAL COMPUTING GROUP

HAI TAO
Assistant Professor of Computer Engineering

Tao has a variety of research projects involving image enhancement, video processing, and facial modeling. Applications include improved teleconferencing, video surveillance, and enhanced image resolution for digital photos.

INTERFACES FOR COMPONENT-BASED DESIGN

LUCA DE ALFARO
Assistant Professor of Computer Engineering

Embedded software runs a growing array of products, from cell phones to satellites, and reliability of embedded systems is a major issue. De Alfaro addresses this through component-based design of embedded software.

STORAGE RESEARCH IN THE UCSC STORAGE SYSTEMS RESEARCH CENTER

SCOTT BRANDT
Assistant Professor of Computer Science

The Storage Systems Research Center focuses on key challenges for next-generation storage systems, including huge capacity and scalability, performance, security, portability, new storage technologies, and large-scale information management.

CUTTING-EDGE RESEARCH IN APPLIED MATHEMATICS AND STATISTICS

DAVID DRAPER
Professor and Chair of Applied Mathematics and Statistics

UC Santa Cruz's applied math and statistics faculty develop mathematical models of complex natural phenomena and statistical methods for solving a wide range of problems. Draper's talk included a discussion of the value of Bayesian statistical methods for solving real-world problems in science and engineering.

NANOPORE ANALYSIS OF NUCLEIC ACIDS

MARK AKESON
Codirector, UCSC Biophysics Laboratory

UC Santa Cruz researchers have pioneered the use of ion channels ("nanopores") for the analysis of single RNA and DNA molecules. The nanopore device promises to have broad utility for biomedical research and diagnostic tests.

THE HUMAN GENOME PROJECT

DAVID HAUSSLER
Director, Center for Biomolecular Science and Engineering; Howard Hughes Medical Institute Investigator

Haussler leads a team of engineers and scientists at UC Santa Cruz who have been assembling and analyzing the human genome as part of the publicly funded Human Genome Project. Their crucial role in the project has earned them international recognition.

THE PROMISE AND PERILS OF MODERN GENETIC ENGINEERING

JIM KENT
Research Scientist, Center for Biomolecular Science and Engineering

Kent wrote the software to assemble the human genome sequence and created a widely used web-based browser for exploring the genome. He discussed the promise of genomics to revolutionize medicine and concerns about some potential uses of the technology.

Riding the TIGER

The quest for healing in a country in transition

By Jennifer McNulty

MIKE FIALA / ASSOCIATED PRESS

Left: An elderly woman joins in a group qigong exercise during a fitness demonstration in a Beijing park in 1997. Below: Police arrest practitioners in Beijing's Tiananmen Square in September 1999.

ASSOCIATED PRESS

ON A COLD AND GUSTY MORNING in late spring 1991, a Beijing stadium is filled with the attentive faces of thousands of people. They have come to experience qigong, a form of meditative breathing that has developed a loyal following among the ailing and infirm. Clad in drab, dark colors, the crowd looks oddly dated, like the clock stopped 40 years ago. But this audience is animated, eager, and expectant. Not since the days of the Cultural Revolution have crowds gathered with such passionate fervor.

The qigong (pronounced chee-GONG) master who takes the stage is renowned for using only his voice to convey qi, the "life force" energy associated in Chinese medicine with healing, longevity, and prosperity. Having paid the equivalent of one week's wages, many in the audience are hoping for relief. Most have heard stories of dramatic healing during these gatherings: stroke victims who recover the ability to speak, wheelchair-bound individuals who rise and walk across the stage. Riveted, they watch as the master embarks upon a six-hour lecture delivered without pause or interruption, even for a sip of water.

At first, the audience is silent, listening with deep concentration. A few individuals begin to move their arms in slow, graceful gestures to "receive" the master's qi energy. Soon, many are swaying, trembling, or shuddering. Several run up and down the aisles, appearing overcome with emotion.

Watching from the sidelines, anthropologist Nancy Chen is reminded of the evangelical faith healers she watched perform while growing up in Louisiana. Chen is in Beijing to conduct fieldwork for her dissertation on mental health and psychiatry in China. "Qigong fever" is sweeping the nation, and scenes like this are playing out across the country.

IN HER NEW BOOK *Breathing Spaces: Qigong, Psychiatry, and Healing in China,* Chen, now an associate professor of anthropology at UC Santa Cruz, bears witness to the story of qigong. Like so many chapters of modern Chinese history, it is a tale of alienation, suffering, and survival as the hopes and needs of the Chinese people collided with the government's desire for control.

A holistic blend of breathing, mental imagery, and movement, qigong emerged in the 1950s,

offering the hope of relief from ailments ranging from arthritis to cancer. The practice surged in popularity, however, during the post-Tiananmen era that began in the early 1990s when many Chinese experienced profound physical and psychic distress as reforms convulsed the socialist nation.

"Qigong offered a sense of belonging and an opportunity to express belief in something outside state ideology," says Chen. "It was promoted by charismatic masters and embraced by tens of thousands of Chinese as an antidote to state-induced chaos."

With the 1989 Tiananmen Square massacre and six months of martial law as a backdrop, China's move toward a market economy ushered in an era of profound economic change. New government policies transformed China, creating the nouveau riche and establishing a drive for consumer goods that struck at the core of Maoist traditions. Many displaced poor were left to struggle with new, rampant material desires without the support of state-provided services, as the country's widely celebrated health care system was overhauled into a fee-for-service structure. The changes took a grave toll on China's citizens, 79 percent of whom now lack health insurance.

For many suffering from chronic or even acute illness, self-medication became the only option, and Chen expresses little wonder at the widespread appeal of qigong and its charismatic leaders. Compared to government bureaucrats, one of whom was lampooned in a 1990 political cartoon holding the tail of a tiger that was poised to pounce back on him, qigong masters were viewed as the embodiment of ultimate power and able to "ride the tiger."

Practiced in urban parks under the supervision of a master, qigong promised physical relief, a much-needed sense of community, and a respite from the distress of living in a country in transition. Before long, parks became social centers "like cafes in 19th-century France," says Chen.

> *I didn't really believe in qigong or know much about it. My mother [in her eighties] had heard about a famous master coming to Beijing and mentioned interest in going to the event. I didn't plan to go, but somehow our relatives managed to get some complimentary tickets through their work unit and gave them to us. I'm the eldest son, so she lives with us now, and if she needs to go out, I have to carry her to my bike cart and pedal her myself. So we went to hear Master Zhang. The stadium was packed with people who had paid twenty yuan each. When he began to lecture, some people started to rock back and forth. Eventually, my mother, who has severe arthritis but is mentally clear, stood up and began to wave her arms. It's painful for her to stand on her bound feet for long, but that night she stood for four hours, the entire time of the lecture. Now I don't have to carry her around anymore. She likes to walk around the neighborhood and go out every day with a cane. It's like watching a young kid.*
>
> **Mr. Wang, a factory worker in his 50s, from *Breathing Spaces* by Nancy Chen**

Beijing bookstalls were packed with qigong-related magazines, novels, movies, and texts. Workers scrimped to attend lectures by well-known masters, the more entrepreneurial of whom produced videotapes, audiotapes, and toured the country to build their followings. Dog-eared copies of hard-to-find qigong texts were passed from friend to friend, and masters jockeyed to be photographed with movie stars who would enhance their cachet. As qigong grew, its dedicated followers became adept at using e-mail and the Internet to expand the appeal of their charismatic leaders beyond China's borders.

The state's initial support of qigong cooled as government leaders recognized the risk of being upstaged by the new national obsession. They branded qigong "black magic" and deemed masters a "latent danger," raiding bookstalls "to reduce the feverish interest in qigong" and introducing regulations to "diminish the involvement of charlatans, protect public health, and prevent mass hysteria."

Bolstering the government's claims were reports of negative reactions among a growing number of qigong practitioners, including disturbing visions and auditory hallucinations, vertigo, hyperventilation, insomnia, extreme heat, and what was described as "uncontrollable qi energy." Although qigong masters and practitioners of Traditional Chinese Medicine (TCM) viewed these symptoms as preventable, manageable, and responsive to treatment, the state seized on what it called "qigong deviation," or qi-induced psychosis, as evidence of the risks of qigong practice. The establishment of a new psychiatric category to classify sufferers of qigong deviation was the final step in the government's "pathologization" of qigong, says Chen.

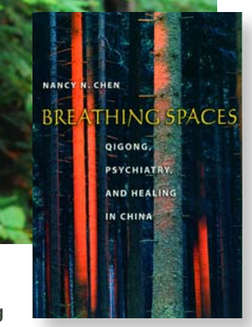
"The state sought to differentiate between forms of qigong to discredit the charismatic masters," says Chen. A new state bureau was created to license and regulate masters of state-sanctioned "medical" qigong, which was promoted in clinics. Practitioners vanished from public parks after the government banned spontaneous practice and conducted raids to round up violators.

The state's response reflected its concern about the emergence of so many informal social networks and the likelihood that individuals would develop an allegiance to their qigong master rather than the state or party. Unlike previous social movements that began in the countryside, qigong was an urban phenomenon that attracted intellectuals, men and women in equal numbers, and was led by well-traveled masters, many of whom had spent time outside China.

The government's efforts to squelch qigong coincided with the state's drive to become a major global economic power. By 1995, qigong had largely faded from view, and the people of China entered the world of material consumption. Private restaurants, markets, toy stores, and beauty salons were popping up everywhere, signaling the dramatic cultural changes that paralleled the country's new economic livelihood. New wealth deepened existing inequalities among the Chinese even as qigong began to take hold in Europe, the United States, Latin America, and elsewhere in Asia.

"In China, the government-sanctioned form of qigong took on a scientific flavor, but elsewhere it has more spiritual overtones," observes Chen. "It's marketed in a less charismatic way. For the most part, it's only available to those with the time and money to learn it in private settings or clinics." One-on-one and small-group instruction may also account for the absence of adverse reactions, or qigong deviation, outside of China, she believes.

R. R. JONES



UCSC anthropology professor Nancy Chen, author of *Breathing Spaces,* a breakthrough book about qigong

In 1999, the 10th anniversary of the Tiananmen uprising again focused attention on Beijing, where the international press corps gathered to assess the political climate. Overseas interest in qigong had taken off even as interest within China shifted to *falungong* (FAH-loon-gong), a practice similar to qigong. So it followed that journalists turned their attention—and their cameras—to the crowd of 10,000 falungong supporters who gathered April 26 in front of the government leaders' official state residence to protest the state's depiction of falungong as an "evil cult."

Unlike the student protests a decade earlier, this demonstration was by older Chinese, many of whom were the contemporaries of state leaders.

Demonstrators were rounded up, and warnings against further protests were issued. But it wasn't until the end of July, as China was preparing its bid to join the World Trade Organization, that the government's anti-falungong campaign intensified. All falungong practice was banned, violators were arrested, and books, CDs, and audiotapes were destroyed.

An ensuing series of demonstrations became almost predictable, says Chen, until a concerted government sweep in 2001 netted 35,000 detainees. The government seized falungong web sites, shut down computer servers, and suspended regular television programming for four days to repeatedly broadcast a government-produced documentary on falungong.

Although 1999 marked the apex of conflict, falungong remains a "thorn in the side of the body politic," says Chen. Hundreds of falungong followers remain in detention camps, and the state continues to press its campaign. Media reports portray falungong as a public health threat, and claims of healing are immediately countered with stories of unthinkable violence caused by mental instability.

"Like qigong, the falungong movement gave meaning to those who were being displaced in the new economic order," says Chen. "The people who've been drawn to these practices are the very people—now in their 40s, 50s, and 60s—who sacrificed their lives to build the nation. They wanted relief and were drawn to the messages of inclusion."

Today, a decade after the state's initial crackdown on qigong, China's pursuit of wealth and economic power surges ahead while qigong endures behind the scenes, according to Chen. "Chinese practitioners have nurtured these forms of healing for centuries," says Chen. "Their persistence in the face of government control demonstrates a perseverance of human will and spirit."

ENVISIONING *a* new *community for* the ARTS

By Scott Rappaport

Imagine a 30-foot-high pedestrian skybridge, modeled on the *Pont des Arts* in Paris, connecting patrons to an art museum, galleries, theaters, and a 1,500-seat performing arts auditorium. Painters and dancers mingle with cultural tourists in a central plaza surrounded by sculpture gardens, pausing occasionally to dine in a relaxing indoor/outdoor café. Filmmakers, actors, and musicians meet amid courtyards and artists' studios—all collaborating in a nationally renowned center for the arts, overlooking the stunning vistas of Monterey Bay.

R. R. JONES

Above: The current Performing Arts parking lot is the proposed site for a dramatically reconfigured and expanded center for the arts at UCSC.

Facing page: Arts Division dean Ed Houghton shares plans for the new arts area with students.

UC Santa Cruz hopes to transform this idyllic scene into reality under a comprehensive arts and community access plan now being developed for the campus. This visionary effort, led by Arts Division dean Edward Houghton, has involved faculty, students, and staff, as well as outside architectural consultants. These groups have been working together for the past year to come up with a conceptual framework that will form the basis for future architectural plans. The end result will be a master blueprint—designed to dramatically enhance the Performing Arts area of the campus.

"This is where our artists are, where some of the most creative activities occur on campus," Houghton notes. "It's where the campus intersects with the community, where people come to see performances and experience the arts—music, dance, theater, film. So it's absolutely crucial that we plan wisely in this area."

The development of such a plan is not without significant challenges. How do you create a space for new construction that will work well with both existing buildings and the landscape, and at the same time provide a more enticing gateway to the campus?

In order to consider the best approach to these issues, UCSC hired a group of consultants led by Thomas Hacker Architects and Walker Macy. Both companies have a long history of designing plans for art centers and universities, collaborating on ventures such as Lewis & Clark College's Signature Project, Southern Oregon University's Center for the Visual Arts, and the Yellowstone Art Museum.

One of the trickiest hurdles the consultants face is determining how to build a pedestrian-friendly arts center that also meets the need for easy community access and parking. In response to this concern, architect Thomas Hacker has proposed removing the current parking lot in the Performing Arts area and building a new parking structure tucked among trees at the southern edge of the site. The center of the area would then be developed with a large auditorium space and museum, creating a central arts village that would connect the northern theater arts area with the southern music buildings.

"We are seeking a heart and soul for the area," observes Houghton. "The focus would be on taking cars out of the center and putting buildings and plazas in their place where people—major artists, emerging young artists, students, teachers, and audiences—can move and interact."

Driving this push for a long-range arts area plan has been a rapid rise in the number of UCSC students interested in the arts. Since the mid '90s, arts enrollments have been growing at a rate significantly faster than the total growth of the campus. "Students are applying to our programs in unprecedented numbers," says Houghton. "Five years ago, for example, we didn't have a Department of Film and Digital Media. Now we have over 400 students in that major alone."

In fact, to provide for the influx of new students, two new structures are already in the planning stage.

A state-funded $25 million arts building is slated to house the expanding digital arts program, as well as provide 10 studios for art faculty, a photography studio, and expanded space for music and theater arts classes. That building is expected to be completed by 2008.

The Arts Division has also received money from the campus to plan for a donor-funded art museum that would feature world-class touring art shows, teaching exhibits, and a permanent collection. The estimated cost is approximately $10 million.

"A museum is a critical part of a research university," notes Norman Locks, chair of the UCSC Art Department. "An important part of creating art is showcasing that work. It enables the artist to connect with other people, and to see how others react to what's been created. What a museum will do is put contemporary art research in a visible place in the university, and the campus has never had that before."

It will take many years and a combination of state and donor funds to bring this ambitious arts area plan into full fruition. At this point, it remains a work-in-progress, and no timetable has been set for its ultimate build-out. But Houghton stresses that now is the time to develop a vision to shape the future of this special area of the campus.

"A significant contribution we can make to tomorrow's students is to develop an exceptionally good plan today," he says.

For more information about the arts area plan, see arts.ucsc.edu/dean/areastudy/

PANORAMIC PHOTO, FACING PAGE: JIM MACKENZIE

In the classroom...

"You can't stop a genocide when the camps are already built and the trains are rolling. You have to recognize it in the boycotts of ethnic businesses, the restrictions of civil liberties."

–Tom Hogan

Deconstructing GENOCIDE

By Scott Rappaport

When 24-year-old junior Emily Atencio sat down in history lecturer Tom Hogan's class about the Holocaust last winter quarter, she was surprised at what she encountered. "I was expecting all these movies and awful photos," she recalls. "But he told us on the first day of class: 'We're already past that; we've already seen that. Now we need to focus on how this actually happened and why it lasted so long.'"

Hogan's course, *The Holocaust: Industrial Murder, Institutional Complicity,* took an alternative approach to teaching about this critical and horrific chapter in human history.

"You can look at the Holocaust from a variety of angles," Hogan says. "But I don't think students see the big picture if they are only hammered on the head with guilt and shocking images. To truly understand what happened, you need to take an almost clinical approach to the subject, to view it as a disease that has symptoms and warning signs.

"You can't stop a genocide when the camps are already built and the trains are rolling," he adds. "You have to recognize it in the boycotts of ethnic businesses, the restrictions of civil liberties."

From the very first day of class, Hogan stressed that anti-Semitism and hate alone were not sufficient to sustain the Holocaust. He warned students that conditions leading to genocide slowly become institutional forces, progressively becoming part of people's lives without them even being aware of it.

To illustrate this point, each student in the class was assigned a major institution in German society—such as transportation, finance, the family, or religion—and asked to analyze how it was used to create and perpetuate the Holocaust.

"Students need to see how institutions were first corrupted, and then utilized in sync to create a system of mass murder," Hogan says. "Each student dove in to really look at how the fabric of German society changed to create social death for Jews—and then actual death."

Although the Holocaust is one of the most gruesome and well-documented examples of genocide in the recent past, there are many other less widely known instances that have occurred in the last 100 years. Hogan teamed up last spring with Michael Thaler—a professor emeritus at UC San Francisco School of Medicine, as well as an authority on the study of Nazi medicine—to teach a course that examined 20th-century genocides in Armenia, Rwanda, the Balkans, and Cambodia, as well as Germany.

But it is the prospect of 21st-century genocides that has UCSC's Humanities Division exploring the possibility of creating an Institute for Comparative Genocide.

Emily Atencio

ALL PHOTOS: JIM MACKENZIE

"Historically, UCSC has taken pride in combining scholarship and public activism," Humanities Dean Wlad Godzich notes. "Genocides are the most horrific actions carried out by humans. Educating students about them addresses a dimension of human experience that we often find difficult to describe, but must learn to analyze in order to protect ourselves and others."

Even though UCSC is now taking a more comprehensive and analytical look at the development of genocide, the subject still elicits an intense emotional reaction from students like Atencio. This personal impact was never more apparent than on the day Hogan brought in survivors of Auschwitz and witnesses from the ghettos of Warsaw and Lodz to speak to the class.

"It's a completely different experience from watching a movie, looking at a photo, or reading a book," Atencio says. "When someone looks you in the eye, and you see the marks on their body, and you see the tears in their eyes when they talk about losing their family members—it sinks in that it really did happen. And that it wasn't 100 years ago. It happened in the recent past, in a pretty civilized society.

"There are some classes where you leave the room at the end of the quarter and immediately forget so much," she adds. "In this class you couldn't."

Holocaust Studies at UC Santa Cruz

UCSC began offering classes in Holocaust studies during the mid-1980s after a campus visit by Leopold Page, Schindler's List survivor number 173. Page's visit took place several years after he had told his story to Australian author Thomas Keneally, but nearly a decade before Steven Spielberg turned Keneally's best-selling novel into the Academy Award–winning film.

"Leopold Page came to a conference on the 40th anniversary of the liberation of Auschwitz," recalls Murray Baumgarten, UCSC professor of English and comparative literature. "Before he left, he suggested we should teach a course about the Holocaust."

That suggestion led to the birth of *The Holocaust: The Destruction of European Jewry,* an annual upper-division class with a popularity that has surprised even its teachers, Baumgarten and history professor Peter Kenez. "As Peter always says, when we started, we thought there would be less and less interest in the subject as time passed, but we couldn't have been more wrong," says Baumgarten.

"And current history, especially the surge in anti-Semitism in Europe and the Middle East, has made the Holocaust a hot item."

Using funds given by Page from the "1939" club, a Los Angeles Jewish organization founded by Holocaust survivors, Baumgarten and Kenez began to bring in guest speakers, present film screenings, and organize conferences on the UCSC campus. They also made it a point to have survivors of the Holocaust visit their classroom. One of those survivors was UCSC Foundation Trustee Anne Neufeld Levin.

Anne Frederika Neufeld and her family escaped from Austria and immigrated to the United States in 1939. Nearly 60 years later, she donated the Neufeld Family Archive to the UC Santa Cruz library's Special Collections and established the Neufeld Levin Endowed Chair in Holocaust Studies at the campus. Professors Baumgarten and Kenez are co-holders of the Neufeld Levin Chair.

Because of this endowment and significant gifts from such organizations as the Koret Foundation and the Diller family, UCSC has been able to expand its Holocaust curriculum, adding additional courses exploring its relationship to music, film, art, and literature. This led to the establishment in 2000 of UCSC's interdisciplinary Jewish Studies Program, which today offers 20 courses, as well as a minor in the study of Jewish culture.

Last spring, the Jewish Studies Program presented a major three-day conference titled "Rethinking Anti-Semitism: The Holocaust and the Contemporary World," bringing together prominent scholars from around the globe. The event featured Yehuda Bauer, one of the world's premier Holocaust historians and director emeritus of Yad Vashem, the Israeli Holocaust Museum. —Scott Rappaport

Alumni News

Alumni Association Councilors, 2003–04

Cowell
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Gregory Canillas '90
Karen Rhodes '77
Allison Tom '93

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David Brick '69
Amy Everitt '92
Sandor Nagyszalanczy '77, *Vice President for Administration*
Joan Fitting Scott '69, *Vice President for Internal Affairs*

Crown
LizAnne Jensen '78
Stacey Vreeken '83

Merrill
Ken Doctor '71, *President*
Patrick R. Ford '93
Dominador Siababa '75, *Executive Vice President*

Porter
John Gutierrez '73
Rob Sawyer '72, *Vice President for Finance*

Kresge
Richard C. Hall '92
Sharif Traylor '85

Oakes
Eric D. Thomas '84, *Past President*
Filomena Trindade '85
Patrick Walker '84

College Eight
Susan Brutschy '80
Aaron Cole '91
Maya Suryaraman '83

Ex Officio
Carolyn Christopherson, *Executive Director*
Alison Galloway, *Chair, Academic Senate*
M.R.C. Greenwood, *Chancellor*
Mateo Reyes, *Chair, Student Union Assembly*
Emily Moberg Robinson, *President, Graduate Student Assoc.*

Gary Novack chosen as UC alumni Regent

Gary Novack's loyalties run deep. He still has his student ID card from his days as an undergraduate at UC Santa Cruz, from 1970 to 1973. And when he returned to UCSC for a meeting earlier this year, an old alumni volunteer name badge was in his pocket.

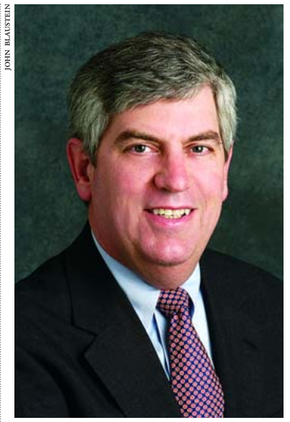
Those loyalties will be put to good use in the next two years. Novack has been selected to serve as one of two alumni members of the University of California Board of Regents. The selection in February by the UCSC Alumni Association Council capped an 18-month process that attracted alumni candidates from around the nation. UC's alumni Regents are drawn from the various UC campuses on a rotating basis.

"I am proud that a UCSC graduate will be serving again as alumni Regent, and especially proud that we will be represented by Gary Novack," said UCSC Chancellor M.R.C. Greenwood. "His scientific expertise and obvious commitment to UCSC and the university as a whole will make him a valuable asset to the Board of Regents."

Novack will be the third UCSC graduate to serve on the Board of Regents. His predecessors are Los Angeles Superior Court judge Allan Goodman (Stevenson '67), from 1979 to 1981; and San Francisco Bay Area attorney Paul Hall (Merrill '72), from 1991 to 1993.

During Novack's first year as an alumni Regent—from July 2003 to June 2004—he will attend all meetings and participate in policy discussions as a Regent-designate, without voting rights. During this time, Novack will also serve as treasurer of the Alumni Associations of the University of

JOHN BLAUSTEIN



Gary Novack

California. In the second year, Novack will become a voting Regent and serve as vice president of the UC alumni organization.

Novack, founder and president of the pharmaceutical and drug consulting company Pharma•Logic Development Inc., has a long history of involvement with UC. A biology major at UCSC, he graduated in 1973 with honors, after just three years. He received his Ph.D. from UC Davis in 1977 in pharmacology and environmental toxicology, was an NIH postdoctoral trainee at UCLA from 1977 to 1979, and later taught at UC's Santa Cruz, Davis, Irvine, and San Francisco campuses.

Novack spent eight years on the UCSC Alumni Association Council and served as its president in 1993–94. He is a trustee of the UCSC Foundation and is a member of the Dean's Advisory Council for the Division of Physical and Biological Sciences at UCSC. He has lobbied the legislature as a volunteer advocate for UC and helped create a UCSC Alumni Association scholarship endowment that has granted awards to 110 financially needy students since its establishment in 1992.

Speaking like the scientist he is, Novack joked that he may have a "genetic predisposition" for UC service. "My parents were Cal alumni," he explains. "I'm proud to continue the UC heritage."

Novack is a board-certified clinical pharmacologist. He has had a major role in the investigation of over 50 new drugs for the treatment of human illnesses, including macular degeneration, glaucoma, allergies, and cancer. He is a reviewer or is on the editorial board of several key ophthalmology journals, and has written more than 220 abstracts and publications in pharmacology, ophthalmology, neurology, dermatology, and medical communications.

Novack is on the boards of the nonprofit Foundation Fighting Blindness and of Inspire Pharmaceuticals, a public drug discovery and development company.

UCSC PHOTO SERVICES

2002–03 Collegiate Fellows of the Page and Eloise Smith Scholastic Society with Bill Dickinson (Cowell '68), back row, wearing a Cowell T-shirt

Alumnus helps foster youth realize their dreams

Bill Dickinson (Cowell '68), a former foster youth, created the Page and Eloise Smith Scholastic Society four years ago to honor Cowell's founding provost and his wife.

The society, which is affiliated with the UCSC Alumni Association, seeks ways and means to help homeless, foster, and runaway youths, orphans, and wards of the court to dream bold dreams for their lives, to see higher education as a desirable and available path toward achieving those dreams, and to clear the way for a successful educational experience.

The society provides UCSC students, called Collegiate Fellows, with scholarships and mentors, called Senior Fellows.

Since the society's founding in 1999, nearly 250 UCSC alumni, faculty, staff, and others have become involved, and $130,000 has been raised for scholarships.

"It is deeply gratifying and a lot of fun to team up with UCSC faculty and staff, fellow alumni, and friends to make a difference in the lives of some very wonderful students," said Dickinson.

The society is now reaching out to alumni living in and near San Francisco, the Monterey Bay, Silicon Valley, and Los Angeles to help with outreach to precollege and community college youth in those areas.

To get involved with the Page and Eloise Smith Scholastic Society, contact Dickinson via e-mail at *wcdcamb@aol.com* or call (831) 457-5145. Information is online at *alumni.ucsc.edu/pesss.htm.*

Career conference connects alumni with students of color

In fair weather and foul, what compels more than 60 alumni from around the state to travel to UCSC for one day every winter? It's the Multicultural Career Conference, which brings together alumni and current UCSC students of color for career panels, ethnic breakout sessions, career networking, and other activities. The conference "is a great event—I really enjoy it," says Dom Siababa (Merrill '75), fleet services manager at PG&E in San Francisco and a participant for 10 years. "Having been in the business world for a fair amount of time now, I have an idea of what works and what doesn't. When I contribute some of that, I give back to the university and to students."

To contribute your career wisdom at next winter's conference, contact the Alumni Association at (800) 933-SLUG.

Mark your calendar: Reunions take place on April 17, 2004

Planning begins now for the April 2004 Banana Slug Spring Fair campus reunion weekend. Alumni from the classes of '69, '74, '79, '84, '89, '94, and '99 may celebrate their 5- through 35-year reunions—if volunteers step forward. Other types of groups—based on major, college, ethnicity, or other affinities—may also gather.

If you can imagine a memorable reunion you'd like to attend, contact the Alumni Association. Staff can help you make your vision a reality by finding a site, developing your mailing list, producing your invitations, deploying the alumni Online Community to reach out to your classmates, and more.

For more information, contact reunion planner Lynn Zachreson now via e-mail, *lynnz@ucsc.edu,* or toll free at (800) 933-SLUG.

DEBBIE ALDRIDGE, MEDIAWORKS/UCD

Every year, *more than 400 of UC's most politically savvy alumni lobby their legislators in Sacramento on behalf of UC. The event, called "UC Day," is sponsored by the Alumni Associations of the University of California. In March, 17 UCSC delegates participated, including Carrol Moran (Porter '71) and Doug Kaplan (Stevenson '74, right), who met with a fellow "banana slug" who is now a legislator: 27th Assembly District Representative John Laird (Stevenson '72). Alumni are invited to participate in next year's UC Day, planned for March 8–9, 2004. Contact Allison Garcia at the Alumni Association, (800) 933-SLUG, for information about UC Day and UCSC's Legislative Advocacy Program.*

Alumni Notes

Cowell College

'67 Lawrence RAPHAEL was planning to move to San Francisco in summer 2003 and become the rabbi at Congregation Sherith Israel; he's hoping to reconnect with other alumni.

'70 After five years in Manhattan, **Michael GRAYDON** moved to San Francisco, where he is director of client services for the investment firm McMorgan & Company; he's worked for the firm for 12 years. **Don WALLACE** received the 2002 co-contributor of the year award from the United States Naval Institute's *Naval History* magazine for his serialized novel *The Log of Matthew Roving,* a story about the children of a U.S. Navy officer who, while searching for their missing father, come across an ancient logbook that takes them back to the years leading up to the American Revolution; Wallace lives with his wife and son in New York City.

'71 Hatte RUBENSTEIN Blejer has been married to an Argentine for 30 years, and they live near Washington, D.C.; she works in technology consulting, and they have a son at Oberlin and a daughter who graduated from Stanford. **James GRAHAM** is pastor of St. Elias Melkite–Greek Catholic Church in San Jose, with responsibility for all Melkite Catholics in the greater San Francisco Bay Area; he recently began a second three-year term on the board of directors of the National Association of Catholic Diocesan Lesbian and Gay Ministries. **Katherine HUBAY Peterson** has been with the Foreign Service for 27 years and is currently serving as director of the Foreign Service Institute; prior to this assignment, she served as U.S. ambassador to the Kingdom of Lesotho. **Queenie (Nancy) McCLAIN Taylor** is running a small art center/gallery/studio in Mill Valley, Calif., called Sight & Insight; she has a 15-year-old son.

'72 Kate STAFFORD is a nature photographer and writer and a horticultural therapy consultant; currently she is working on creating exhibits to educate the public about issues of conservation and watershed enhancement.

'73 Jeffrey CARR has been named dean of academic affairs at the Pennsylvania Academy of the Fine Arts in Philadelphia; before taking this position, he was professor of art and chair of the Department of Art and Art History at St. Mary's College in Maryland.

'75 Thomas KILLION, a woodcut and letterpress artist, has illustrated the book *The High Sierra of California* (Heyday Books; 2002), with text by Gary Snyder and quotes by John Muir; the book was chosen as one of the top 100 books of 2002 by the *San Francisco Chronicle.* **James VOTH** earned an M.A. in history from Cal State University, Bakersfield, but has returned to his first love—gourmet cooking—and is now the resident chef at a successful restaurant in the Bakersfield area.

'78 Dana BEN-YEHUDA recently qualified as a board-certified teacher of Alexander Technique.

'84 Kate McKNIGHT Wippern has been living in Fresno for 16 years; she's married, the mother of a 13-year-old son, and getting a master's in educational administration after teaching high school drama.

'87 Rachel LUNDQUIST Diaz has been married for 14 years to Eduardo Diaz and they have two sons, ages six and nine; she has worked as a Spanish-English translator/interpreter for 13 years in a medical/legal setting and more recently as part of a research team in the Education Department at UCSC; she has passionately studied and performed African dance for 20 years.

'88 After receiving an M.S. in traditional Chinese medicine, **Cindy RIGGS** moved to Richmond, Va., and opened her own acupuncture and Chinese herbal clinic; friends may e-mail her at *cdriggs@earthlink.net.*

'92 Jane PARKS-McKAY had two of her photos shown in the Filoli Center's third annual Images of Photography exhibit in April 2003.

'94 Deborah COUSINS has been working in the Santa Cruz area real estate market for four years and welcomes business from fellow alumni and friends; contact her at *debweb15@yahoo.com.* **Jessica WHEELIS** has been married for eight years to **Ben GARDELLA** (Graduate Studies '93), and they have a son, Emmett, born in January 2002; Jessica is an executive assistant in San Francisco, and Ben works in the software industry and is editing his first documentary. They have a home in Berkeley.

'95 Leland BURRILL lives in San Francisco and is a synthetic organic chemist at Celera in South San Francisco, where he's working on a cancer project; in addition, he volunteers as an adult literacy tutor for Project Read at the San Francisco Public Library. In 2002, **Winnie POON** traveled to Peru and saw Machu Picchu, joined Mini Cooper's "Mission Mini" to solve an art crime in Barcelona, and spent Christmas in Denmark with her boyfriend and his family; visit her web page at *numba-tu.com.*

'96 Cliff KJOSS is surfing as much as possible while still having enough time to sleep.

'98 Sonya PRITZKER has received a 2002–03 Fulbright Student Award to study in Beijing, where she is researching and writing about mood disorder and its treatment; she is interviewing patients and doctors at several hospitals, including the newly opened Beijing Huilong Guan Suicide Research and Prevention Center.

'01 Robert CHANG is working in development for a literacy education nonprofit in Baltimore; friends may contact him at *robert@epistemonical.com.*

Stevenson College

'69 Gregg HERKEN has moved back to California to join the University of California as a professor of history at the yet-to-open UC Merced. **Joan FITTING Scott** has been appointed to the UCSC Alumni Council; she is president of Scott & Associates Public Relations Services.

'70 Wendy HATFIELD returned to teaching after many years in tourism and owning an inn; she would welcome news from friends.

'72 After many years working in law and Internet business development, **Christopher DWORIN** has become a professional artist; his work was displayed in London and San Francisco galleries in 2002, and one of his pieces recently won an award at a juried show in Monterey.

'74 In March 2003, **Janet ROSS Marder,** senior rabbi of Congregation Beth Am in Los Altos Hills, was installed as the first female president of the nation's largest group of Jewish clergy, the Central Conference of American Rabbis; CCAR represents 1,800 ordained leaders in the Jewish Reform movement.

'76 Mark STEINBERG has published a new book, *Proletarian Imagination* (Cornell Univ. Press, 2002), and he has completed a filmed series of lectures on Russian history for the Teaching Company.

'77 Kelvin FILER, a Los Angeles County Superior Court judge, was recently honored with the Bernard S. Jefferson Justice of the Year Award by the John M. Langston Bar Association; he has also been awarded a patent for his coffee-flavoring invention, Filer's Flavored Filters.

'78 Kathleen HARRIS Davis is

continued on page 26

NBC/NORMAN NG

Dana Priest interviews an Afghan farmer in the mountains above Shomali in Afghanistan.

Tracking the military is her 'mission'

Washington Post **reporter Dana Priest (B.S., Politics, Merrill College, '81) critiques the trend toward soldier-peacekeepers in her new book**

Timing is everything. Just ask *Washington Post* reporter Dana Priest—if you can catch her. Her first book, *The Mission: Waging War and Keeping Peace with America's Military,* arrived in bookstores this past spring just as jittery Americans prepared for war in Iraq.

She then headed out on a book tour, with stops in eight cities in two weeks, interviews on morning TV shows and C-SPAN, and Council of Foreign Relations speeches. Her vivid account of life with America's military—much of it based on her reporting for the *Washington Post*—struck a chord. "The reception was just great," she says. "A lot of that had to do with the timing of the book—a lot of people were trying to read about and were wondering about the military."

In the book, Priest warns of a dangerous trend toward having the military handle quasi-diplomatic missions, filling a vacuum left by underfunded civilian agencies. "The face of America is becoming a face with a helmet on," she observed on one TV program.

"On the one hand, you can't help but like the troops, in the sense that they are trying hard, with the wrong tools, to do something they weren't trained for in a culture they don't know," she says. "They don't want to be doing it, and yet they have this very American can-do spirit about them so they're not going to sit around and do nothing."

But despite the soldiers' best efforts, Priest says, "they make some mistakes, and they make some bad mistakes, which gives me pause about what they are doing there." As an alternative, Priest proposes the creation of civilian nation-building forces that are as well organized and well funded as the military. The U.S. experience in postwar Iraq has, if anything, strengthened her view. The U.S. government "grossly underestimated" the need for peacekeepers and a civilian component in rebuilding Iraq, she said. "They didn't send in a lot of troops that could just keep the peace. I wish everything were working better, but I think it will get a lot worse before it gets better—if it gets better at all," she said in June.

While Priest critiques the trend toward soldier-peacekeepers, her high regard for the troops is clear throughout the book. In fact, Priest sees bridging the civilian-military gap as her own personal mission as an author. She cites two key trends she has witnessed as a reporter: "The military was taking on more and more nontraditional duties, while at the same time the civilians who were supposed to tell the military what they should be doing knew less and less about the military."

This lack of knowledge can lead to unhealthy stereotypes—something Priest says she witnessed during her years in college. "The antimilitary feeling, I believe, is often totally misplaced. It is not the military's decision to go anywhere—it is the civilians' decision to send them there. All these missions are not their choosing; they get sent there by somebody not in uniform."

Following years as the *Washington Post's* Pentagon correspondent, Priest spent eight months on the newspaper's investigative reporting team for a series about America's regional military commanders. The series, "The Proconsuls," earned her the Gerald R. Ford Prize for Distinguished Reporting on the National Defense and forms the basis for part of her book. She also received a research and writing grant from the MacArthur Foundation to write the book.

Priest has traveled widely with both military leaders and troops in the field. Whether in Colombia, Afghanistan, Kosovo, or Nigeria, Priest says she did not feel in danger, but did have "some hair-raising experiences." One time in Nigeria, she took a two-hour ride in an old Soviet helicopter from the capital into the bush. The helicopter was "combat flying" she explains—"They go as low as they possibly can, because it's harder to shoot at a helicopter if it's flying past you quickly. So you really hug the Earth—or the trees, or the river, whatever." She sat up front, in the "place of honor" without so much as a door to shut next to her. "There were times when I put my feet up—it just felt like we were coming so close to the water."

Priest, who took a leave from the *Post* to write *The Mission,* stays a little closer to home these days. She lives in Washington near the White House with her husband, William Goodfellow, executive director of the Center for International Policy, and their two children. Still, Priest keeps a hectic pace—she barely took time to unpack from her book tour before she was back in the newsroom breaking major intelligence stories that appeared in newspapers around the nation in the days leading up to the invasion of Iraq.

Those stories made her a frequent guest on TV news and discussion programs during the war and its complicated aftermath, and she is now an analyst for NBC.

Not one to slow down, Priest would like to do another book, though she declines to go into detail for fear of jinxing the project. Writing a book appeals to her reporter's curiosity, she says. "You peel back the onion, keep peeling it back, and really get closer to the truth about a subject."

—Louise Gilmore Donahue

continued from page 24

teaching junior high science in Washington and helping to design a local environmental learning center; she earned her teaching certificate from Western Washington State University and was on track to finish her master's in creative arts and learning in May 2003.

'80 Janice ELPERS is a massage therapist, health consultant, and long-distance cyclist; she completed the 110-mile El Tour de Tucson ride in November 2002 and raised $2,700 for the Leukemia and Lymphoma Society.

'82 Brad HUBBARD lives in Mountain View, Calif., and has been unemployed due to the high-tech slowdown.

'86 Michael SHIPLEY has been working for several years as a writer/producer on TV shows such as *Family Guy, Andy Richter Controls the Universe*, and *Oliver Beene*; he is a board member of the Tasmam Koyom Indian Sanctuary Foundation, and he is working on "Mending the Sacred Hoop," a documentary about a Lakota Indian peace movement.

'87 Lance BERNARD earned an M.A. (1993) and a Ph.D. (2002) in history and married a terrific woman (2000); he is now searching for work on the academic job market and submitting his dissertation to publishers.

'92 Lori HURWITZ lives in Oakland and works for an educational nonprofit doing professional development with middle and high school teachers; she taught high school English for four years in San Francisco and cowrote a book titled *Reading for Understanding: A Guide for Improving Reading in Middle and High School Classrooms* (Jossey-Bass, 1999). **Daria PENNINGTON** is teaching English at San Mateo High School and living in San Francisco. **Sabrina SOLIN Weill** became editor-in-chief of *Seventeen Magazine* in November 2002, leaving her position as executive editor of *Cosmogirl!* magazine; she is the author of *We're Not Monsters: Teens Speak Out about Teens in Trouble* (HarperTempest, 2002).

'93 Caryn NARDELLO Suehowicz spent two years in Italy, studying, traveling, and teaching English; now she lives in Sacramento with her husband, Matt, and works as a senior training consultant with a consulting firm in Folsom.

'95 Lucretia MILLER is still working in television production, primarily on reality TV shows; she just finished working on *The Bachelor* and a show shot in France.

'96 After completing a graduate program in college counseling at UCLA and working as a college admissions counselor at Chapman University, **Joanne EHRET** went back to school and earned a Pupil Personnel Services Credential and has taken a counseling position at Foothill High School; former classmates can contact her at *airit2@hotmail.com.* **Jennifer HENDERSON-Mayer** and her husband have settled in Phoenix, Ariz., where she is resuming her grad studies in education; old friends from Stevenson may e-mail her at *jennmhender@cox.net.*

'98 Joshua CAULKINS has relocated to Vancouver, B.C., to study hydrogeology within the Department of Earth and Ocean Sciences at the University of British Columbia. **Michelle FRANCO** is working at MODVEC, a film/video company run by fellow alum **Jay KENSINGER** (Crown '93); Michelle is celebrating her first decade in remission from leukemia.

'02 Crystal ELCON has been chosen for a yearlong fellowship with the Great Valley Fellows Program; the program includes a series of apprenticeships with leaders in Central Valley agriculture, media, government, business, and the nonprofit sector.

Crown College

'71 After wandering in the desert for a few years, **Rick SIEM** is back on the West Coast putting his psychology degree to good use as an industrial psychologist for a prominent aerospace company.

'73 David ACUFF is a professor of environmental sciences and a consultant, and he's having a great time on trips to the nearby Anza Borrego Desert and occasionally to the Austrian Alps; he shares a house in San Diego with two cats and a variety of other flora and fauna.

'86 Bernard WAHL is a Fulbright Fellow in Asia attached to Multimedia University and living in Cyberjaya, Malaysia's "Intelligent City," which he describes as a mini Silicon Valley without traffic; he is teaching classes in cyberpreneurship, e-business, entrepreneurship, and management.

'89 Kathleen Kavarra CORR received the Rites of Shaman in the Inca tradition, and she is doing a Ph.D. in geoscience at the University of Massachusetts–Amherst; she writes that she is "recovering well from the blows of youth."

'92 Robert GROPP has joined the Public Policy Office of the American Institute of Biological Sciences (AIBS) as a senior public policy representative.

'93 Ben SALTZMAN is a performance coach, public speaker, author of *Rules for Visionary Leaders,* and producer of several audio training programs; he is the founder of Create Your Vision, a business that helps train organizational leaders to be more effective.

'95 Jake AKIN and his wife, Kim, have launched a new clothing line, damfashion, which promotes the beauty in diversity, adheres to environmentally sound business practices, and sells shirts manufactured in a non-sweatshop environment; find out more online at *www.damfashion.com.*

'02 Sarah PRATT is working as a biologist for the Department of Agriculture in San Mateo County, monitoring for exotic insects and inspecting nursery shipments.

Merrill College

'71 After 25 years as a blue-collar worker, **John DURY** is pursuing a master's in counseling at San Francisco State University; he's in a second-year internship as a therapist working with HIV-positive gay men.

'74 Robert GRIES is taking care of his mother in Washoe Valley, Nevada, south of Reno; he enjoys mountain biking at Lake Tahoe and is developing a computer consulting business.

'79 After working in information technology for Bank of America for 20 years, **Chery THOMAS Armstrong** retired and is now substitute teaching and raising a daughter and two granddaughters.

'86 Alfred KWOK suffered a severe head/brain injury as result of a rock-climbing accident in May 2002, and he is very grateful for all the prayers and get-well wishes he has received, including a visit by **Chris CHANG** (Merrill '87), who stopped by the hospital on his way from Germany to Taiwan.

'87 John TOROK is a J.S.D. candidate at Columbia Law School in legal history and an aspiring law teacher; his most recent article, which is on critical race theory, is in the *Berkeley La Raza Law Journal* (vol. 13, Dec. 2002). He also serves on the board of an Asian Pacific Islander AIDS services organization in N.Y.C.

'90 Pamela LERI recently moved to midtown Manhattan, where she is senior vice president of HR and manager of corporate organization effectiveness for Mellon Financial Corporation.

'91 Krista MAYNARD Robinson has moved to Anderson Valley to run the family winery, Husch Vineyards. **Jennifer WALL** has released a wealth of double gold and gold medal–winning wines in her post as winemaker, general manager, and director of exports for Grape Links in Sonoma County, Calif.; Grape Links produces Barefoot Cellars and Mistle Toe Cellars wines.

'92 Christopher GERTEIS is continuing his life between Japan and the U.S.; friends can drop a line at *gerteis@attglobal.net.*

'95 Toni AVILA Hunziker is the technology coordinator at her school in Los Angeles, and she is beginning a second master's degree so she can become an administrator; she is married, with three cats and three dogs. **Michele MINSUK** lives in the Bay Area with her husband, Rachid, and her daughter, Kenza, and she works as a Spanish interpreter.

'98 Jessica VODAK worked at UCSC for three years after graduation and recently relocated to Marin County; she is now working in the Resource Development Department for Chinatown Community Development Center in San Francisco; she would love to hear from the Merrill Class of '98 at *jessicavodak@hotmail.com.*

Porter College

'73 Larry CUMMINGS has been living in Eugene, Ore., since 1985 and working with computers, Intranets, and the Internet; he spends his spare time on photography, camping, hiking, backpacking, and kayaking rivers and lakes. **William EVERSON**, who received a B.S. in chemistry from UC Berkeley in 1929 and retired as a chemist from Shell Oil, is still getting around at age 94.

'74 Bess EIERMANN recently turned 50 and took her 14-year old daughter on a driving tour of England and Scotland; she's been running an AIDS organization for seven years and is still dancing, writing, scuba diving, and ocean kayaking. **Eric HAMBURG**'s book *JFK, Nixon, Oliver Stone and Me* has been published by Public Affairs Books (2002).

'75 Jonathan TRENT is a molecular biologist at NASA Ames Research Center in Mountain View investigating life in extreme environments; he and his colleagues published their recent work on ordered nanoparticle arrays in the Dec. 2002 issue of the journal *Nature Materials.*

'77 In winter 2002–03, **Tom POSTER** was in New Mexico working on the movie *Blind Horizon* with Neve Campbell and Val Kilmer. **John YEWELL** is editor of the *Salt Lake City Weekly (slweekly.com).*

'78 Jeffrey GLUCKSON Briar received a grant from an Oregon foundation to create and produce an eight-lecture series for school-age children on the ability of music to move us emotionally; two years ago he received an award from the same foundation to support his work as a composer. **Martin GANTMAN** is an artist working out of Los Angeles; his project, "See you when we get home," is featured in the winter 2002 issue of *Art Journal* magazine and another project: "DuSable Park: An Archeology" is in the winter 2002 issue of *Midnight Mind Magazine.*

'81 Beth KOPPES Riggs and her husband, **Kevin RIGGS** (Porter '81), were planning to celebrate their 20th anniversary with a trip to the Galapagos Islands in June 2003 with their son, Chris (11); Beth recently completed an M.A. in teaching.

'82 Michael HAND married **Anne Marie DALTON** (College Eight '88) in July 2002; they met and live in Santa Monica, where Michael is an attorney and senior director of business affairs at Activision; Anne Marie, who has a master's in public health, is a consultant for the California Family Health Council.

'83 Jean PETERSON tied for first place in a poetry contest sponsored by the National Endowment for the arts and received a $500 prize.

'85 Roxanne SOHNS Klein, called the "raw food movement's most celebrated chef" by the *Chicago Sun-Times,* has her own restaurant, Roxanne's, in Larkspur, Calif., and she is working on a raw foods cookbook. **Rebecca ROBERTS** married Alan Galloway in August 2002 at Cardiff House on the UCSC campus, and they held the reception at the Seymour Marine Discovery Center; the couple has purchased a new home in the Willow Glen neighborhood in San Jose.

'87 Deb ABBOTT was chosen "Woman of the Year" by Assemblymember **John LAIRD** (Stevenson '72); winners from all the districts were presented their awards at a Sacramento ceremony in March; Abbott is director of UCSC's Gay, Lesbian, Bi, Trans Resource Center.

'88 David OGILVY is producing and engineering music recordings, and he works part-time at KQED-FM, public radio in San Francisco. **David (Berry) WEST** became licensed as a chiropractor in 1995 and is now exploring American Sign Language at Ohlone College in Fremont.

'89 Robert NATTER has been granted tenure at Gettysburg College, where he has been an assistant professor of music and director of choral activities since 1998; before that he served as assistant director of choral activities and assistant professor at Clemson University. **Dung NGUYEN** graduated from Kennesaw State University in Georgia in December 2002 with a B.S. in art education; he and his wife, Kathy, live in the Atlanta area with their nine felines, and he is teaching art at Keheley Elementary School in Marietta.

'92 Sean AARON and his wife have been in Scotland for a year and have bought their first flat in Stirling. **Susannah COPI** and **Jim DAVIS** (Porter '91) met at UCSC in 1990 and are engaged to be married in Malibu next year. **Vicki TRENT**, who started judo at UCSC, is now a fourth-degree black belt and a national judge; she is also an attorney and has a women's trio that plays Afro-Cuban music.

'93 David CEASER and **Matt GRIFFITHS** (Porter '93) are working to create the first car-free city in the U.S.; visit their web site at *www.carfreecity.us.*

'94 Matthew BAUGHMAN attended USC film school and is presently working at Universal Studios; he celebrated his 10th wedding anniversary in July.

'95 Jocelyn MARKLE lives in Marin with her 15-year-old son, Inigo, her dog, Josie, and three cats; she works as a senior web producer for a software company and would love to hear from old friends, especially from the Porter dorms (1984–85) and family student housing (1992–95).

'97 After living for a year in South America and for two years in Chicago, **Molly AREVALO** joined Teach for America and is teaching a bilingual second-grade class in a small town in the Rio Grande Valley.

'01 Joe DePAGE writes that he "has recently been elected head of Lemurco, a grassroots political organization that seeks to establish a nation free for glam rock revolution."

'02 Senta COX recently moved to San Francisco and is working in an art gallery.

Kresge College

'72 Jim PALMER, a landscape ecologist and an associate professor at SUNY College of Environmental Science and Forestry, was one of 42 researchers and scholars honored with a SUNY Chancellor's Award in 2002 for the outstanding quality of their work; he is also the coeditor of *Landscape Journal*, the only research journal of landscape architecture in North America.

'79 Doug FRIEDMAN is represented by Marian Berzon Talent for acting and screenwriting; he lives in Orange County and sings and plays guitar; friends may contact him at *doug.friedman@pdsd.ocgov.com.* **Blanca PORTELLA** lives in San Diego, where she owns the Zen Bakery and the Ultimate Cinnamon Roll; she invites everyone to stop by for goodies.

'89 Suzanne WALDMAN obtained a second master's degree in administration/supervision from Montclair State University in 2000; she is in private practice, counseling families, couples, and individuals.

'94 After earning an M.A. in history and a M.S.Ed. in educational technology, research, and assessment at the University of Illinois, **Jes CISNEROS** is loving his job as the assistant director of the Honors Program at Northern Illinois University; he is married, with no

continued on page 28

continued from page 27

kids, and still bike racing.

'95 After selling her fiction thesis to a mainstream publisher, **Shelley BATES** sold two more books in the inspirational women's fiction market, the first of which is due to be released in March 2004 from Steeple Hill Books in trade paperback. **Joan PODOLSKY Sinclair** is living in San Francisco and looking for classmates and those connected to the legendary Blue House.

'00 **Elizabeth CAROLLO Littrell** graduated from N.Y.U.'s Tisch School of the Arts in 2002 with an M.F.A. in dance; she and her husband, **Daniel LITTRELL** (Stevenson '00), live in New York. **Tori PORTER** works for an international software company, Curious Labs, in Santa Cruz; the firm recently released Poser 5, and she received product manager credit on the application; friends can get in touch at *tori@curiouslabs.com.*

Oakes College

'82 **Rebecca GARCIA** was chosen by Assemblymember Simon Salinas of Salinas as "Woman of the Year" from the 28th Assembly District for her long history of public service to the community; she is currently assistant director of the Beginning Teacher Support and Assessment Program in the Pajaro Valley Unified School District, and she has worked to improve migrant education and adult education as a teacher and an administrator.

'84 **Gregory FRANK** is director of marketing and business development in the Biopharmaceutical Division at SRI International in Menlo Park, Calif.; he and his wife, Eliana, eloped in Cuba, and they are buying a house.

'92 **Erik ALM** is a senior planner with the California Department of Transportation in the Bay Area; he and his wife, **DeAnna BUECKERT Alm** (Kresge '92), live in Fremont with their one-year-old daughter.

'94 Since 1997, **Carolina RAMOS** has been living in Sofia, Bulgaria, where she is working as a contractor at the U.S. Embassy; previously she spent two years in Oslo.

College Eight

'77 **Cynthia SCONTRIANO Schildhauer** received an M.A. in expressive therapy from Lesley College in Cambridge, Mass., (1982) and an M.F.A. from CSU Chico (2002); she is a painter, whose work has been widely exhibited, and she is the founder of a center for art therapy.

'78 **Hope BARR Smith** is coaching middle school distance runners for cross-country in the fall and track in the spring.

'81 **Mark BLUMENTHAL** is medical director for four rural counties in Tennessee; he and his wife, Mindy, have two daughters, Nila (6) and Ilana (4). **Roland WRIGHT** retired from the U.S. Air Force as an F-16 pilot at Hill Air Force Base in Utah in December 2002, and he and his family have moved to North Las Vegas.

'82 **Sara ISENBERG** is the new volunteer chair of the Baskin School of Engineering Alumni Association; for more information write to *alumni_info@soe.ucsc.edu.*

'84 **Linda Rosewood HOOPER** has been working as a network analyst for more than a year at UCSC Communications and Technology Services and loves it; in her spare time she's organizing a union for staff professionals within UPTE, *www.upte.org.*

'88 **Mysti RUBERT** is back in San Francisco after a flirtation (ongoing affair) with screenwriting in L.A. and a year in Boulder visiting fellow sluggers **Doug DIRKS** (College Eight '89) and **Rise KELLER** (Porter '88); she is engaged to her first beau, Dale Berry, doing tech writing for "The Man," and would love to hear from any sluggers who remember her. **Debra MORSTEIN Sloss** is a licensed marriage and family therapist and cofounder of Santa Cruz Center, a center for collaborative therapies.

'89 **Jeanne BANTA Murphy** lives in Florida and teaches eighth-grade science; she's married with children.

'95 **Inemesit WILLIAMS** is still working at Chiron Corporation in Emeryville, Calif.; she's been working the graveyard shift for the past three years and is looking into making a career change.

'99 **Patrick CHANDLER** is working as a consultant for the California Legislative Black Caucus at the State Capitol Building.

'01 **Patrick LAPID** lived in the Washington, D.C., area for a year doing two internships, then working full-time for a policy think tank; now he has moved back to the San Francisco Bay Area, and his web site is *www.xanga.com/palapid.*

College Nine

'02 **Josue CANO** is self-employed as a personal trainer; his goal is to become the next famous fitness trainer and to serve the Spanish-speaking community.

Graduate Studies

'76 **Glenn LINDSEY** is vice president of R&D for International Dairy Queen in Minneapolis; in Jan. 2003, he won a Menu Strategist award from *Restaurant Business,* an industry publication, for his innovations to Dairy Queen's menu.

'88 The American Astronomy Association has awarded **Robert IRION** (cert., science communication) a prestigious journalism prize for an article on the mysteries of the inner lives of neutron stars, which was published in the September 27, 2002, issue of *Science* magazine; Irion is a freelance science journalist in Santa Cruz and a contributing correspondent for *Science* magazine.

'89 **Louise BEATTIE** (graduate cert., art) was employed by the U.S. Forestry Service for 33 years and worked oversees from 1968 to 1974; she retired in May 1974 and is now 91 years old.

'90 **Harryette MULLEN** (Ph.D. literature) has a new book, *Sleeping with the Dictionary* (UC Press, 2002), which was named a finalist for the 2002 National Book Critics Circle Award in poetry; in addition, *Sleeping* was one of five poetry books nominated for a 2002 National Book Award.

'92 **Bruce AVERY** (Ph.D. literature) is an associate professor of English at San Francisco State University; his son is a student at UCSC.

'00 **Charles (Josh) DONLAN** (M.A., biology), a Ph.D. candidate at Cornell University, has been selected by the Environmental Leadership Program as a 2003–04 fellow, based on his work with the Island Conservation and Ecology Group, which has preserved the fragile ecosystems of some 23 islands of the Mexican archipelago. He helped found the group while at UCSC.

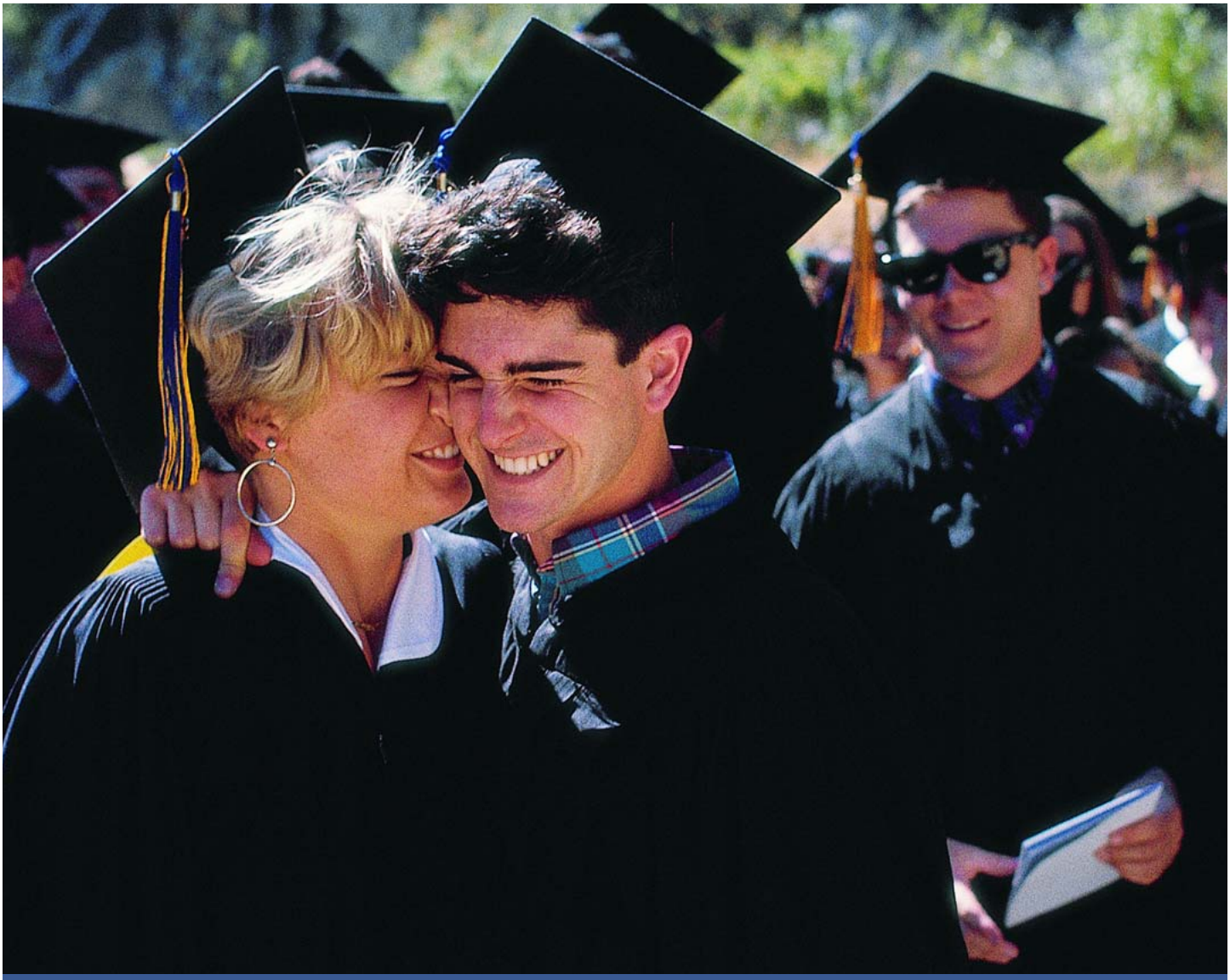
In Memoriam

Marcia HOWE (Crown '71), a visionary behind one of northern California's most ambitious museum projects, the 300-acre Turtle Bay Museum and Arboretum that opened in June 2002 on the banks of the Sacramento River, died of lung disease at her home in Davis, Calif.; she was 53.

Jeanie Cheroff REDDING (Oakes '78), a counselor and teacher at Aldea Children and Family Services in Napa, a private nonprofit organization dedicated to assisting children and special needs adults, died in March 2003 after a 15-month battle with breast cancer; she is survived by her husband, **Jeffrey REDDING** (Cowell '73) and their five children, who range in age from 13 to 23.

John CARAVANTES (Crown '84), a woodworker, chef, and world traveler, died at his home in South San Francisco on January 5, 2003; he was 45.

Jeffrey MARTIN (Cowell '92), a lawyer with John Hancock Insurance, a passionate fan of heavy-metal bands, and an avid traveler, died in a nightclub fire in Warwick, R.I., on February 20, 2003; he was 33.



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