Madison Nguyen: A first for San Jose

Also in this issue:
Chancellor Denton’s Investiture
and much more
UCSC students think you’re TOPs!

Among UC Santa Cruz’s student callers— the ones who contact you as part of the campus’s Telephone Outreach Program (TOP)—100% of them rated our donors as their favorite people... and for good reasons. They spoke to 18,000 of you last year, answering your questions about campus issues and happily accepting your pledges. By generously giving more than $1.1 million last year, TOP donors funded scholarships for undergraduates, fellowships for graduate students, and supported colleges, divisions, and departments.

You too can be TOPs when you say “Yes!” to one of our student callers.
Campus Update

Grad student works to save sea turtles

The critically endangered North Pacific loggerhead turtle nests only on certain beaches in Japan, where the number of females showing up each year to lay their eggs has dropped below 1,000. These long-lived sea turtles travel widely in the Pacific Ocean, and Hoyt Peckham, a UCSC graduate student in ecology and evolutionary biology, has been studying them in southern Baja California, where they congregate to feed. His research addresses questions about the migrations, habitat use, and life history of these remarkable animals, and the results are helping to guide conservation efforts. Peckham knows that research alone will not save the turtles, which die by the thousands as incidental “bycatch,” tangled in fishing nets and caught on longlines set out to catch fish. So he has helped develop an outreach and education project that fosters ocean conservation in small fishing villages along the Baja California peninsula.

Econ Department ranked ninth in international finance

UCSC’s Economics Department is ranked ninth in the world in the field of international finance in a survey of more than 300 public and private research universities. The ranking is based on the research productivity of faculty as measured by scholarly publications in 65 academic journals from 1993 to 2003. The results were published by espol.net, an online resource for prospective graduate students in economics. “These results reflect the work we’ve done to recruit top scholars and graduate students, and we are pleased to be at the top of the list,” said economics professor and former department chair Michael Hutchison, who is now interim dean of the Division of Social Sciences. “The Economics Department at UCSC has made a concerted effort over the past 15 years to develop complementary programs in the international field,” said Hutchison. “The concentration of scholarly research and teaching in international economics has led to a highly distinguished program.”

Physics course focuses on working in industry

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

The new course, called The Physicist in Industry, lets students know what kinds of job opportunities exist for people with physics degrees and how to go about pursuing those opportunities and succeeding on the job. “Most college students are not very aware of the job market and what they need to do to get those jobs,” said Fred Kuttner, a physics lecturer at UCSC. Kuttner and Bruce Rosenblum, professor emeritus of physics, designed the course and taught it for the first time last year. The course will be offered every year during spring quarter and is open to all students, although first preference is given to students in the program. Kuttner and Rosenblum have extensive experience working in industry, but they also wrote to a large number of physics alumni, hoping to hear from two or three who would be willing to come talk to the class. “We got about 40 replies,” Rosenblum said.

Exploring a neglected piece of Jewish and European history

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

University of California, Santa Cruz

UC Santa Cruz Review / Spring 2006
For years, psychology professor Bruce Bridgeman has taken UCSC students to the Mystery Spot, a popular tourist attraction, to demonstrate how the human brain works. But for Bridgeman, the site is a powerful—and entertaining—way to demonstrate the influence of the visual context on perception. “It shows that you can teach science in unexpected places,” said Bridgeman, who published a scholarly article that explains the perceptual effects at work at the Mystery Spot. His article, “Influence of Visually Induced Expectations on Perceived Motor Effect: A Visual-Proxiperceptive Interaction at the Santa Cruz Mystery Spot,” appeared in an issue of Psychonomic Bulletin and Review.

GRAD STUDENTS SHINE IN ARTS COLLABORATION

In Nightingale—the first thesis project of UCSC’s new graduate program in Digital Arts/New Media—dancers onstage trigger digital effects through their intricate movements, creating streams of light and colors that appear on images of their bodies projected on screens behind them. Featuring video illuminated on three screens, interactive digital media, theater improvisation, and original sonic compositions, Nightingale—which was performed on campus five times in November—is the result of an ambitious collaboration between Digital Arts/New Media graduate students and the Tanzanian project, which was directed by assistant theater arts professor Jess Damsen to pilot the use of a technology called ActiveSpace, developed by Professor John Crawford at UC Irvine. With computer hardware newly purchased by the Digital Arts/New Media program, UCSC students can now take advantage of an interactive dance system that allows dancers to generate digital effects from their movements onstage.

“The basic idea is that one camera captures the image of a dancer, another camera registers the movement of that dancer on-stage, and that movement triggers effects depending on how they are programmed,” explained Porter College lecturer and program alumnus Bob Giga. “The effects are then projected on screens behind the dancer.” Giga wrote the script for the production as his M.F.A. thesis project, taking the classic Hans Christian Andersen tale of “The Nightingale” and embedding it into a contemporary story about relationships in turmoil.

Nightingale was directed by program alumnus and UCSC professor Aída Hurtado, who both spoke on the topic: “Why a Women’s Center?”

Luncheon, activities mark Women’s Center’s 20th anniversary

T he UCSC Women’s Center in October observed its 20th anniversary with a luncheon, a new publication from the University Library, and an art exhibit by women staff and alumnae. The luncheon, which was opened by Chancellor Denton, featured Santa Cruz County supervisor Mardi Wormhoudt and UCSC psychology professor Aída Hurtado, who both spoke on the topic: “Why a Women’s Center?”

Crossing Borders: The UCSC Women’s Center, 1985–2005, a new oral history from the library’s Regional History Project, was also celebrated. Two of the center’s founding faculty—Helena Moglen and Maggie Franz—as well as five staff women who served as directors are featured in the publication.
Ecologist investigates role of plant roots in carbon cycling

SINCE ECOLOGIST WEIXIN CHENG took lead at the leading edge of scientific efforts to quantify the impacts of plant roots on the cycling of carbon between the atmosphere (where carbon dioxide contributes to global warming) and terrestrial ecosystems (where large amounts of carbon are stored in soil organic matter), Cheng, an associate professor of environmental studies at UCSC, studies complex above- and below-ground systems to gather data on the movement of carbon in terrestrial ecosystems. Plant roots contribute as much as 50 percent of the total carbon dioxide produced by terrestrial ecosystems, and they also much play a major role in adding organic carbon to soil. But many studies show soil carbon is often measured in incubated soil samples that lack roots and vegetation. “We’ve been oversimplifying the ecosystem,” said Cheng, who has developed techniques for measuring below-ground carbon cycles.

In the greenhouse, Cheng is evaluating numerous plants, including soybeans, corn, wheat, Ponderosa pine, cottonwood, and amaranth. By focusing on the rhizosphere—the soil that surrounds the roots of a plant—Cheng has documented changes in the rate of soil organic matter decomposition that vary from 70 percent suppression to 300 percent stimulation, a range that under- scores Cheng’s assertion that soil processes cannot be understood under plantless conditions.

UCSC and Los Alamos form partnership for data management

UCSC and Los Alamos National Laboratory have agreed to establish a collaborative Institute for Scientific Data Management (ISSDM) that will address looming issues of data storage and management for projects that involve large-scale simulation and computing. This new partnership builds on a history of fruitful scientific collaboration between UCSC faculty and students and Los Alamos scientists. The educational and research programs supported by the institute will benefit both partners while addressing major challenges in scientific computing, said Chancellor Kent. The institute will provide opportunities for UCSC graduate students to gain specialized experience and expertise in this area by working on large-scale computing projects at Los Alamos. In addition, the students who take advantage of these opportunities will provide a pool of potential employees for the laboratory with skills in key areas of computer science and data management, where the lab foresees significant staff needs in the future.

California’s iconic oak woodlands face new threat: Climate change

California’s iconic oak woodlands have endured many assaults over the years—they’ve been cut for fuel, cleared for vineyards and housing developments, and their seedlings face intense grazing pressure and competition from invasive grasses. But the future will bring a new threat—climate change. Using computer models, UCSC researchers have taken a closer look at the implications of climate change for two familiar California oak species—blue oak and valley oak. Their findings were published in the Proceedings of the National Academy of Sciences in November. The study was led by Lara Kueppers, a postdoc- toral researcher working with Lisa Sloan, professor of Earth sciences. The researchers found that the areas of the state where the climate is suitable for these species will shift northward. Cheng said, “We’ve been oversimplifying the role of plant roots in climate change.”

Historian finds women’s labor movement in Latin America

In 2001, history professor Dana Frank was asked by the U.S. Labor Education in the Americas Project (US/LEAP), a Chicago nonprofit, to develop a union label for the U.S. banana market. Frank signed on as a consultant and traveled to Central America to attend union workshops and regional conferences. She stayed with women banana workers in Honduras and went on road trips to Guatemala and Nicaragua to observe workshops designed for younger members of the union. Frank has dealt with the workers and visited their packing plants and union offices. As she conducted her research in Latin America, Frank discovered a powerful, sophisti- cated, and highly successful network of women’s banana worker activism that is largely unknown to the rest of the world. The result is Bananeras: Women Transforming the Banana United Fruit Corporation, a new book that traces the growth of this transnational labor movement. "It’s an amazing story, and I just happened into it," said Frank, an expert on U.S. and international labor issues. "I didn’t go down there intending to write about it—I just went down to work with the banana unions, and I was stunned by all of the women’s projects. My book is about the history and development of these projects for gender equity and power in the banana unions, and how these women were able to build them up and win the support of the men."
Leading at the Edge

Embracing the campus’s 40-year record of achievement and presenting an inclusive view of its future, Denice D. Denton was invested as chancellor of UC Santa Cruz in November. The swearing-in ceremony was preceded by a two-day academic symposium on “Achieving Excellence Through Diversity.”

Serving as UCSC’s ninth chancellor since last February, Denton had worked with a committee of students, staff, and faculty to create a series of inaugural events that would ensure campus and community engagement.

The symposium, underscoring the chancellor’s twin commitments to excellence and diversity, included a number of well-attended workshops.

Later, Dynes officially invested Denton and presented her with the UC Santa Cruz Chancellor’s Medallion.

“UC Santa Cruz does things differently but for a purpose,” said Chancellor Denton in her inaugural address. She hailed UCSC’s leadership in interdisciplinary research and challenged the campus to “lead at the edge.”

As he introduced Denton, Dynes described the new chancellor as forthright, honest, and a “trailblazer in the pursuit of equity and multiculturalism.” She has the “capability to raise this campus to the next level.”

Denton received a standing ovation as she took the podium at the Music Center Recital Hall. She praised UCSC’s founding pioneers who challenged the “multiversity model” and promised to build on their achievements. UCSC’s colleges are undergoing a renaissance, she said, in which students and faculty are engaged in “scholarly activities that are changing the world for the better.”

Denton, who received her Ph.D. in electrical engineering from the Massachusetts Institute of Technology, thanked her mother, a high school math teacher, who raised three children on her own. She told the audience she never imagined the opportunities that awaited her when she took her first engineering class at Rice University as a high school student. “I appreciate those opportunities and I pledge my dedicated and passionate commitment to doing everything humanly possible to advance our great university.”

“What is excellence,” she asked her audience. “What is diversity?”

“For me, excellence is achieving the best possible results by engaging the strengths and talents of people from varied backgrounds and personal experiences.” Diversity “embraces ethnicity, gender, race, gender identification, sexual orientation, culture, religion, academic discipline, class, ability/disability, nation of origin, diversity of perspective, age, socioeconomic status, and any other aspect of difference which characterizes humanity.”

A day earlier, symposium keynote speaker Jackson, the first African-American woman to receive a doctorate from M.I.T., noted discussions of diversity can be “turbulent and uncomfortable.” But, she said, “it is also clarifying, illuminating, leading to today, we begin again. Our campus was born of a pioneering vision, which yet endures. Replete with stellar achievements, UC Santa Cruz is but a brilliant intuition of even more greatness to come.”

— Chancellor Denice D. Denton

Chancellor Denton’s Six Priorities

At her investiture, Chancellor Denton outlined six priorities she said were developed over several months of campus conversations. They will inform decisions and influence the commitment of resources. They are as follows:

1. Expand educational opportunities for undergraduate and graduate students; continue to revitalize and refine the colleges to express the 21st-century version of UCSC’s founders’ original vision; acknowledge and support graduate students; and establish professional schools that will attract the world’s leading scholars.

2. Build on the quality of existing academic programs to develop new offerings that play off UCSC’s existing strengths and enhance research. Emphasize interdisciplinary connections. Developing new academic programs will enhance competitiveness for additional extramural funding.

3. Bolster fundraising and organizational effectiveness by increasing partnerships among campus units and with companies, educational institutions, and governments in Santa Cruz, the Monterey Bay Area, Silicon Valley, and beyond. This will help advance a culture of philanthropy, with the goal of increasing private support for students and faculty.

4. Renew UCSC’s commitment to its community, continuing to work with local governments to address shared concerns for affordable housing, appropriate transportation systems, and a vital economy; underscore the benefits of a great university for schools, volunteerism, cultural activities, and economic growth and stability. Honor the university’s commitment to the people of California by offering access to the students of tomorrow.

5. Increase national and international recognition for the innovation and other contributions of the UCSC community. Showcase the achievements of students, staff, faculty, and alumni who are making a positive difference in our world.

6. Invest in people. Develop new strategies to attract, recruit, retain, and promote outstanding and diverse students, staff, and faculty. Nurture talent with a leadership development program to ensure a steady progression of future leaders.
a deeper understanding of one’s self and one’s world. Diversity advances innovation—diversity powers excellence.”

“Just throwing people together does not necessarily create innovation,” Jackson said. It requires smart, focused people who can and will challenge each other. “It requires excellence, leadership, and community,” she said.

Conditions in today’s world demand nothing less, Jackson said. College graduates now confront population growth, energy demand, and resource consumption. It is a “thriving, though turbulent, global environment” in which nations and corporations are struggling for advantage. Corporations get it, she said. “Corporations are embracing diversity because it is essential to maintain their market edge.”

UC Foundation president Anuradha Luther Maitra presented Jackson with the third UCSC Foundation Medal, recognizing individuals whose achievements illustrate the ideals of UCSC.

Jackson’s speech was followed by a panel discussion and the next day by three forums: “What is Diversity? Thinking at the Edge,” “Teaching to a Diverse Student Body,” and “Update on the UC Faculty Diversity Study.”

Speaking at the Scholarships Benefit Dinner, on the final day of Celebration2005, Tremain Jones, a 2005 UCSC graduate, described the rigors of growing up in East Palo Alto. A Pister Scholarship helped him complete a B.A. in anthropology. “Now a kid from East Palo Alto will be going to Borneo,” he said. Jones plans to study orangutans in the natural environment.

Chancellor Denton said that a record $2.7 million to support undergraduate scholarships and graduate fellowships had been raised in the past year. She announced that the campus Cornerstone Campaign had raised more than $67 million, nearly $18 million over its goal.

Jack Baskin, a key contributor to UCSC since the 1970s, was presented the first Fiat Lux Award. Chancellor Denton announced that Baskin’s family, friends, and UCSC colleagues have created the Jack Baskin Engineering Scholarship in his honor.

Inspired by these events, the campus and community are poised to embrace the opportunities and challenges ahead.

Read Chancellor Denton’s inaugural address, watch a video of the address and Shirley Ann Jackson’s symposium keynote, or download podcasts of either at celebration2005.ucsc.edu.
**Elected to make a difference**

By Jennifer McNulty

During her recent run for a seat on the San Jose City Council, Madison Nguyen was puzzled by the way her campaign signs were disappearing from signposts. Confusion turned to pride when she learned why: Young children turned to pride when they learned why they were removing the signs and taking them to school, boasting, “Look, it’s my last name!”

Nguyen (“Nwin”) went on Vietnamese radio to beg residents to leave the signs up until after the election. She proceeded to win the seat handily, becoming the first Vietnamese American elected to the council in the nation’s 10th-largest city, home to more Vietnamese residents than any city outside of Vietnam.

For Nguyen, 30, City Hall is a long way from the farm fields of California’s Central Valley, where she harvested crops as a girl. Born in Vietnam, Nguyen was a young child when her parents fled the country by boat in 1979. Rescued at sea by a Philippine freighter, the family spent time in a refugee camp, moved to Arizona under church sponsorship, and eventually settled in Modesto, where the Nguyens were one of four Vietnamese families laboring in the fields alongside Latino farm workers.

Nguyen says she has spoken out against injustice since she was a child. “I saw so many things I just did not like, and no one else would speak up,” she recalls. “Working in the fields, we were looked down on. We didn’t speak much English. We were working like dogs, and I didn’t like the fact that we were looked down on. I didn’t want to live my life like that. I decided at a young age that whatever I do in life, I wanted to change that.”

Nguyen learned early about government services because her parents volunteered her to translate for newly arrived immigrants. When she turned 18, she became a U.S. citizen and maintained the family tradition of changing her first name. She admits she was inspired to choose Madison by the Daryl Hannah movie *Splash*, which she watched over and over on video as a child—though her father prefers the association of Founding Father James Madison.

Nguyen’s parents encouraged their children to pursue higher education—eight of nine graduated from college—and Nguyen says UCSC was the perfect school for her. “I’d heard it was one of the most liberal campuses in California, and that students could voice their opinions without discrimination or being looked down upon,” remembers Nguyen.

Although UCSC had fewer students of color than some other UC campuses, Nguyen says diversity is about more than numbers. “More important than a diverse student body is an atmosphere where you can say what you want to,” she says. “In most of my classes, I was the only Vietnamese American, and maybe there were one or two other Asian Americans, but it was an opportunity to educate the students in our class about our backgrounds and experiences.”

She pursued grassroots community activism, marching with farm workers during the drive to unionize strawberry workers, and she enjoyed working with faculty historians Gail Hershatter and Alice Yang Murray and sociology professor Helen Shapiro. “They were pretty amazing women, immersed in the academy but with a realistic approach,” says Nguyen.

“I wanted to earn my doctorate and teach at the university level,” says Nguyen. “I thought that was my calling until I got into this political scene.”

An elected member of the Franklin-McKinley School Board, Nguyen was an outspoken critic of how the San Jose Police Department handled an officer’s accidental shooting of a disarmed Vietnamese American woman. When a City Council seat opened up, Nguyen had the experience and credibility to make a successful run.

“As a professor, you do influence people, but it’s a very small circle,” says Nguyen. “What I do now, I get to influence people from all walks of life, regardless of class, race, gender.”

Forty-five percent of the residents of Nguyen’s district are Latino, 35 percent are Vietnamese American, and many are recent immigrants who work more than one job to make ends meet. “I don’t see race. I see a reflection of myself growing up in Modesto,” Nguyen says of her constituents. “I see the struggle and the desire to move forward.”

Nguyen knocked on each door in her precinct twice during her grassroots campaign—three or four times, if you count the primary and runoff races. “People who’d lived there 20 years said they’d never met a candidate before,” marvels Nguyen. Asked if she feels she is inspiring a generation of Vietnamese American girls, Nguyen replies, “Not just Vietnamese—minorities in general.” Children as young as eight years old joined her on the campaign trail after school, and students in high school and college volunteered every day.

Because Nguyen was elected wayward through the four-year term, she faces a primary challenge in June. For now, her agenda is focused on public safety, renovation of dilapidated community centers, building partnerships with neighborhood associations to improve blighted areas, and getting stalled plans for the first Vietnamese American Cultural Garden off the ground.

“I’ve read a lot of Gandhi, and my favorite quote is, ‘You must be the change you want to see in the world,’” she says. “That’s what I want to do. I want to have a positive impact.”

San Jose Mayor Ron Gonzales (B.A. Community Studies, Kresge ’73) was profiled in the Summer 1999 issue of Review magazine at www.ucsc.edu/summer99/alumni-gonzales.html.

**By Jennifer McNulty**

**Madison Nguyen**

B.A. History, College Eight ’97

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San Jose Mayor Ron Gonzales (B.A. Community Studies, Kresge ’73) was profiled in the Summer 1999 issue of Review magazine at www.ucsc.edu/summer99/alumni-gonzales.html.
Akhtar conducts her research in a developmental psychology lab outfitted to resemble a family room, with a couch, a toddler-sized table and chairs, and colorful posters on the walls. Only the 3-by-4-foot mirror that conceals a one-way window confirms what insiders know: It is here that Akhtar’s clever experiments have revealed the powerful language-learning abilities of young children.

In one of Akhtar’s most revealing studies, 24-month-old visitors were welcomed to the lab, given a fan pop-up toy to play with, and then basically ignored by Akhtar and graduate student Carmen Martinez-Sussmann. The two women went through a scripted exchange about four unfamiliar objects, one of which they referred to as a “toma”—a made-up word that was at the heart of the experiment. The children readily learned the novel word after merely overhearing it while engaged with the toy.

“Even at 24 months, children are keen observers of third-party interactions, and they’re taking in a lot more than a little relief. Those utterances are the keys to the kingdom: “Ball!” “Book!”” says Akhtar. “We think we’re responsible for what children learn, but they are very motivated to communicate,” says Akhtar. “Even when we’re not talking to them, they’re trying to figure out what’s going on.”

Experiments reveal just how motivated toddlers are to join the conversation

By Jennifer McNulty

Akhtar has established that young children are much more engaged in their environment than researchers ever suspected. It turns out that they are so eager to join the conversation that they approach their “work” with the focus of codebreakers, picking up signals and learning all the time, even without instruction.

Professor Nameera Akhtar entices research subject Natasha Mullins to play with a distracting pop-up toy.

Akhtar and grad student Katherine Herald intentionally ignore Natasha, whose focus soon moves from the pop-up toy to Akhtar and Herald.

A child’s first words evoke joy, pride, and often more than a little relief. Those utterances herald the beginning of a new era of communication between infant and adult, as words take the place of crying and tantrums.

To hasten that developmental leap, many parents attempt to “teach” their children. Eager mothers and fathers point to everyday objects, enunciating carefully and offering up words as if they were the keys to the kingdom: “Ball!” “Book!” “Dog!”

And infants love it. At about 18 months, their vocabularies take off, and by two years, they are “word-learning machines,” says Nameera Akhtar, a professor of psychology at UCSC and a pioneer in the study of language acquisition in young children.

But the process isn’t as parent-driven as mommies and daddies might think. In a series of clever experiments conducted over the past decade, Akhtar has established that young children are much more key players in their own communication than researchers ever suspected. It turns out that they are so eager to join the conversation that they approach their “work” with a tireless learner’s mindset, and she is already piloting studies to establish developmental milestones such as the age at which children begin to teach others.

She can’t wait to study the differences in how toddlers learn from strangers compared to family members.

In one new study, Akhtar and graduate student Katherine Herald will see if youngsters imitate the actions of people they’re not directly involved with, like they pick up new words. “Some researchers don’t believe children at 14 months can learn from an interaction that doesn’t involve them,” says Akhtar. “But I want to see if children at that age can identify with the other person. Can they acquire an action through observation alone, or do they need to be interacting with someone to learn from them at this young age?” Akhtar expects to see differences among toddlers who acquire a new level. “We really haven’t been giving children enough credit,” Akhtar says with a shy smile that belies her determination to set the record straight. Akhtar’s work shows that children play an active role in their own development, and it establishes that the process begins much earlier than researchers thought. As a graduate student, Akhtar began working with 24-month-olds. She has since studied 18-month-olds and is now gearing up to assess 14-month-olds—a prospect she loves. The children with good humor will be logically even more challenging. But, like her subjects, she is a tireless learner, and she has already established that children never develop language skills in part because they lack the strong desire to connect with others that motivates most children learning to communicate. Akhtar’s research is not only contributing to our understanding of the fundamental understanding of child cognitive and social development, it may indirectly benefit autistic children, as well. Half of all autistic children never develop language skills, in part because they lack the strong desire to connect with others that motivates most children learning to communicate. Akhtar’s work may shed light on strategies that would help these youngsters. Far from Akhtar’s lab, in many cultures around the world, adults do not teach infants language directly. Yet the absence of focused, one-on-one parent-child instruction doesn’t appear to hamper their development.

“Our understanding of language learning is missing a great deal if we focus only on speech addressed directly to the child,” says Akhtar. Which isn’t so say all those well-meaning parents should back off. It may not be necessary in terms of a child’s intellectual development for mommy or daddy to label the cat, the boat, and the shoe, but it’s fun, and that’s good. “Both babies and parents enjoy spending that time together, which is wonderful,” says Akhtar. “But it may be more about pleasure than instruction. Children really are the engines of their own development.”
One evening last year, UC Santa Cruz graduate student Abram Stern logged on to the C-SPAN web site to gather information for an art project. Stern knew that the cable television network had been providing live, gavel-to-gavel coverage of U.S. Senate and House of Representatives proceedings for more than two decades as a public service, and he was looking to obtain some older footage from its archive.

But Stern made an interesting discovery. He found that footage from the House and Senate floor is only posted on the C-SPAN web site for one week—with the size of the video image slightly larger than a postage stamp. You can’t keep it, store it, or use it in any way. But you can buy it from C-SPAN—at prices ranging from $3,450 for a two-day, nine-hour, and 27-minute 1988 Senate session about federal election campaign financing, to $29.95 for a four-minute piece of footage from a 2004 House proceeding.

A student in UCSC’s new Digital Arts and New Media graduate program (DANM), Stern shared his finding with a fellow classmate, Michael Dale. Both students were doing research on the structure and organization of archives, and they were amazed that a comprehensive public record of the country’s congressional proceedings did not exist on a free, user-friendly web site.

In response, they hatched a new plan for their thesis project—to create an enhanced and easy-to-access archive of the video feed from the C-SPAN sessions on the House and Senate floor, the only part of the network’s wide-ranging footage that legally resides in the public domain.

The project would be ambitious: They would capture the feed of C-SPAN’s static coverage of the House and Senate sessions, design a system that would enable participants to add contextual layers of information to the footage, and create a foundation for long-term access and modification.

Like Wikipedia, the popular communal online encyclopedia, the archive would be designed as a nonpartisan, open-source web site that applies innovative technology and art for the public good. “It’s about opening up access to the public,” Dale says. “It shouldn’t take a multimillion-dollar corporation to do that anymore.”

Stern and Dale will both earn master of fine arts degrees in June along with 11 other candidates as the first graduating class of UCSC’s DANM program. Students and faculty are drawn to the program from a wide variety of disciplines including the humanities, computer engineering, arts, and social sciences.

“The goal is to enlarge our collective imagination through an investigation of the boundaries and possibilities of digital art and new media,” says theater arts professor and DANM faculty member James Bierman, who helped write the proposal that launched the program.

The two students’ project is a prime example of the program’s potential. Their archive—which they began collecting on January 1—has been creatively configured to become a flexible tool that can be used for both educational and artistic purposes.

When users visit www.metaavid.org, they will be able to watch the C-SPAN archive—which requires space to record up to 16 hours of video a day, five days a week. “There are also lots of technical reasons for building your own computer,” notes Dale. “For example, if one of your hard drives goes down, the others can kick in so you have uninterrupted footage.”

Stern and Dale employ a TiVo-like recording device—to store the C-SPAN footage on their computers. They utilize free software and the Linux open-source operating system to make the project universally adaptable. “Someone, for example, could download the source code and modify it to launch a system that covers their own town’s city council meetings,” says Dale.

But Stern notes that the archive is more than just a research tool. It also has almost unlimited potential for artists and humorists. “If someone is so inclined, they could average out the collective images of Senate faces to get a comical face representing a senator from the Republican or Democratic Party,” adds Stern.

“Or set up a comic overlay of a report card grading the literacy level of a particular politician. The possibilities are virtually infinite.”

After Stern and Dale graduate, the archive will continue to be maintained by DANM under the supervision of assistant professor of film and digital media Warren Sack. “My intention is to keep the project going—the web site will stay on a server in my Social Computing Lab,” notes Sack. “I think it’s a great project; they found something that should be a public resource. And public universities like UCSC should be able to host projects like this that are in the public interest.”
In the creeks and woodlands around San Francisco Bay, garter snakes and newts are engaged in a biological arms race—the snakes eat newts, the newts produce a potent neurotoxin in their skin, the snakes evolve resistance to the toxin, the newts evolve to produce more toxin, and so on. While the newts still fall prey to toxin-resistant snakes, even a resistant garter snake may be incapacitated for hours after eating a highly toxic newt.

This situation has evolved over time as a result of “tit for tat” evolutionary changes driven by natural selection—a classic example of the coevolution of two interacting species.

Coevolution shapes all kinds of interactions between species—not only the antagonistic interactions of predators and prey or parasites and their hosts, but also mutually beneficial partnerships like those of flowering plants and their pollinators. In fact, most plants and animals depend on coevolved interactions with other species in order to survive, says John Thompson, an internationally recognized authority on the subject.

“Much of evolution turns out to be coevolution, and ecological communities are based on these deeply coevolved relationships between species,” says Thompson, a professor of ecology and evolutionary biology at UC Santa Cruz.

Thompson’s research explores the role of coevolution in organizing the web of life on Earth. The potential applications extend from medicine and agriculture to conservation of the Earth’s biodiversity.

“It turns out that many of the major societal problems we face in biology are problems involving coevolution,” he says.

Thompson, who published his third book on coevolution last year, has been a leading player in the field’s rapid growth over the past decade. One of his major accomplishments has been to establish a coherent...
This game of surrogate coevolution continues, going back and forth between plant breeders, who are constantly producing new disease-resistant crops, and the fungi, bacteria, and viruses that are constantly evolving to become more virulent. A current example is the emergence in East Africa of a new strain of wheat rust that, according to biologists who raised the alarm in September, could wipe out 10 percent of the world’s wheat production. Of course, work is already underway to breed and disseminate new resistant varieties of wheat to combat this new strain of rust.

### Controlled environment

Thompson inspects glass tubes used to conduct experiments with coevolving flowers and moths.

### Taking STEPS to advance environmental research

The theme of connectedness runs throughout the work of John Thompson, professor of ecology and evolutionary biology, and through the activities of the institute he directs at UC Santa Cruz—the STEPS Institute for Innovation in Environmental Research. The STEPS Institute encompasses science, technology, engineering, policy, and society in its approach to environmental research, which it supports through a variety of initiatives, workshops, fellowships, and grants.

An interdisciplinary approach to environmental research comes naturally to a scientist concerned with the interactions between species, the interconnected web of interactions within ecosystems, and the connections between human activities, ecosystem functions, and the global environment.

“Humans are creating changes in the environment that amount to a set of intertwined global experiments whose long-term effects are unknown. We don’t really know what’s going to happen down the road,” Thompson says. “The STEPS Institute fosters research and policy efforts that address these potential effects. Its efforts have coalesced into two initiatives—the Genes to Ecoregions Initiative and the Regional Climate Change and Water Initiative. Through these initiatives, the institute is forging new collaborations among faculty researchers, policy makers, and environmental managers.

Part of the Genes to Ecoregions Initiative, for example, is the Santa Lucia Gradient Study, which focuses on a region of California that is rich in both biological diversity and jurisdictional complexity. The STEPS Institute was established in 2002 with a $500,000 gift from UCSC alumnus Gordon Ringold and his wife, Tanya Zarucki. Since then, it has provided fellowships for interdisciplinary graduate research and research grants to faculty, graduate students, and undergraduate students. Most of the funds are for research projects that either link multiple research laboratories at UCSC or link UCSC laboratories with outside agencies or policy makers.

Thompson’s current focus for the institute is to increase support for graduate students interested in environmental research problems that span traditional disciplines. “We need to train the next generation of environmental scientists to think about problems in a more interdisciplinary way,” he says.
IN THE COMPTON neighborhood of Los Angeles in the 1960s, Kelvin Filer’s home was abuzz with conversations about civil rights and the struggle for racial equality. “My parents were both civil rights activists, and as a child, I’d listen in when the adults were talking,” recalls Filer. “Their discussions always ended the same way, asking ‘What do the lawyers say? Let’s run this by the attorneys.’ That’s when I decided I wanted to be a lawyer.” He was in the third grade.

Today, Filer is a highly regarded judge in the Compton district of Los Angeles Superior Court, dispensing justice with integrity and compassion. “No other profession ever crossed my mind—except basketball, and I knew that wasn’t going to happen unless I grew,” says the gregarious Filer, a diehard Lakers fan who stands 5 feet 10 inches. For 25 years, Filer has been making his mark in court rather than on the court, including arguing a landmark case before the California Supreme Court.

Filer earned a B.A. in poli- tics from UCSC in 1977 and decided I wanted to be a lawyer.” He was in the third grade.

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Filer earned a B.A. in poli- tics from UCSC in 1977 and graduated from UC Berkeley’s Boalt Hall School of Law. He was drawn to UCSC by the student-centered living and learning environment. “For me, it wasn’t so much about the professors as it was about learning from each other,” says Filer. Nevertheless, an experience during the Stevenson College core course stands out in his memory: “After the first assignment, the professor told me I had serious problems understanding Marxism concepts, and that really shook me up. No teacher had ever said anything like that to me before,” he says. “I was determined to show him—and to show myself—that I could do it.” Later in the quarter, Filer turned in a paper that the professor described as one of the best he’d ever read.

After law school, Filer spent two years working in the state Public Defender’s Office in Los Angeles before opening a private practice in Compton. “I love the practice of law,” he says. “I love the challenge of represent- ing the underdog, having them put their trust in you as you go up against the mighty people of the state of California. It’s a lot of pressure, especially in death penalty cases.”

During 13 years of private practice, Filer represented six clients charged with capital crimes. One is on death row, two were convicted of lesser crimes, and three had their cases dismissed. Filer acknowledges that mistakes sometimes result in guilty individuals being released. “That’s the irony, isn’t it? But anyone doing criminal defense work will tell you that everybody has the right to a fair trial,” says Filer. “That’s what makes ours the best legal system in the world.”

Filer’s landmark California Supreme Court case, People v. Taylor, established the right of the accused to wear street clothes in court, rather than “jail blue,” which could prejudice the jurors. The court’s 8–0 decision reversed Alonzo Taylor’s murder conviction. In the meantime, however, Taylor had been arrested and charged with another murder; he was convicted and remains incarcerated.

Filer moved to the bench in 1993 when he was appointed a commissioner of the Compton Municipal Court. He misses some aspects of criminal litiga- tion, particularly presenting closing arguments and cross-examining witnesses. “I love catching a witness in a lie. You can hear a pin drop,” he says, clearly savoring the memory. “And I love the thrill of victory!”

But Filer relishes his role as a judge and enjoys being a role model. His daughter, Kree, appears destined for a career in law. His other daughter, Brynne, is a student at Sarah Lawrence College. “I was born, raised, and educated in Compton. This is where I’m from and where my family is from,” says Filer, who visits schools every week to encour- age students to work hard and follow their dreams. “I may not be able to change the world, but I may be able to change my little corner of it.”

Although he moved to nearby Long Beach after be- ing named to the Superior Court bench in 2002 by then-Governor Gray Davis (it’s frowned upon for judges to live in the same community where they work), Filer is frus- trated by media coverage of Compton, which focuses on crime, violence, and corrup- tion. Success stories never get the media attention they war- rant, says Filer, rattling off a list of illustrious Comptonites, from tennis star Venus and Serena Williams to Michael Hamilton, an executive with AT&T, and Timothy Wright, a former aide to Bill Clinton. Add one more name to that list: Kelvin Filer.

By Jennifer McNulty
Enjoying the 2005 Banana Slug Spring Fair reunion luncheon were (l–r) guest Andrea Gourdin, alumna and College Eight prouser Roz Stafford (Merrill ’71), and Anne Rosenzweig (Cowell ’71).

UC Extension discounts: Another reason to join the Alumni Association

Join the UCSC Alumni Association and take advantage of its many membership benefits, including discounts at UC Extension, the continuing education resource of the University of California. Offering some 17,000 different courses each year, UC Extension is one of the world’s largest providers of continuing education, with campuses at Berkeley, Davis, Irvine, Los Angeles, Riverside, San Diego, Santa Barbara, and Santa Cruz. Some campuses are offering a 10 percent discount on one class per quarter, while others give a flat amount. The savings apply equally to Alumni Association members from all UC campuses, regardless of where they live or the campus from which they graduated. You don’t even have to be in California to take advantage of the UC Extension discount. Many online courses are offered, and the discount applies to them as well. For more information about this and other Alumni Association membership benefits, go to www.alumni.ucsc.edu/members.aspx.

Contact the Alumni Association
UCSC Alumni Association
University of California
1156 High Street
Santa Cruz, CA 95064-1077

Tel: alumni@ucsc.edu
Toll-free: (800) 933-SLUG

In performance, Camper Van Beethoven members (l–r) Frank Funaro, Jonathan Segel (Porter ’85), and Victor Krummenacher (Porter)

Alumni indie rock band returns to UCSC

By the time Camper Van Beethoven first played the Catalyn in downtown Santa Cruz in 1986, the band had already completed a national tour as the opening act for R.E.M. Camper won widespread critical acclaim and took college radio by storm with its first three albums—full of satiric, irony-laced lyrics and a dazzling array of musical influences. After the band’s first album hit the Top 30 in England and its first three recordings made all the Top 10 in Village Voice polls, Camper went on to make its major label debut on Virgin Records in 1989, releasing the landmark album Key Lime Pie before dissolving in 1990 during a tour in Sweden. Following a hiatus of more than a decade, the band got back together in 2002 and in 2004 released a CD-titled New Boner Times.

Original core members of the band are guitarist/vocalist David Lowery (B.A. math, Kroger ’84), bassist Victor Krummenacher (music major, Porter), drummer Chris Pederson (B.A. philosophy, College Eight ’93), violinist/guitarist Jonathan Segel (B.A. music, Porter ’85), drummer Chris Molna (B.A. music, Porter ’90), and guitarist Greg Liberia, part-owner of Artur’s, a store in downtown Santa Cruz. Read more about Camper Van Beethoven’s UCSC visit on the web at current.ucsc.edu/05-06/11-28/camper.asp.

GO TO WWW.ALBUMS.UMNI.EDU/40TH/REUNION/05/06/PAGES/CAMPUS/ Alumni Association Councilors, 2005—06

Cowell
GOODRICH, CASSANDRA ’90
KAREN RINDELL ’76, Vice President for Internal Affairs
Stevenson
DARWIN BUCK ’59
ANGELA EVETTS ’90, Vice President for External Affairs
Paul H. Miljan ’71
JEAN FITZGERALD SCOTT ’69, Executive Vice President for Finance
Crowne
Kris KOBORI FREEMAN ’81
JERRY ROSE ’77
RICK STEPHENSON ’75
STEVE VERRICK ’99, President
Merrill
KEN DICKINSON ’76, Past President
PABLO A. FORO ’81
DOMINGUEZ SANCHEZ ’71, President for Finance
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PHILIP KRAVIT ’81
PAUL D. SHUMAN ’76
SHARON TRAYLOR ’81
Oakes
FELICIA TANIBASHI ’83, Vice President for Administration
RUTH F. WILSON ’71
College Eight
SUZAN BRADLEY ’81
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EMILY MOBERLY ROBINSON ’04
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DEBBIE D. DENTON, Chancellor
JULIUS CORBISIO-DIXON, President, Graduate Student Association
SUSANNE PIRCH, Chair, Student Union Assembly

The 16th Annual UCSC Alumni Vintners Wine Tasting
Tasting during reunion weekend, this delectable event will showcase select wines, gourmet food, and music by talented alumni.

▲ Alumni Panel Discussion will feature Emmy Award-winning writers, an expert on nuclear strategy and nonproliferation, and an acclimated science writer discussing how UCSC changed them and how they are changing the world (see article, page 7).

▲ Alumni Reunion Luncheon will include classmates and favorite professors; special recognition will be given to ’71, ’76, ’81, ’86, ’91, ’96, and ’91 grads.


▲ Distinguished Faculty Lecture “Financial Crises Around the World,” by Michael Hutchison (Merrill ’76, economics), UCSC professor of economics and interim dean of the Social Sciences Division.

▲ Stevenson College 40th Anniversary Celebration and Dinner with provosts (past and present), staff, faculty, current students, and alumni for discussion, socializing, and more.

▲ Reception for alumni writers—poets, fiction writers, journalists, humorists, and other purveyors of the pen.

▲ Humanities Division “Classes Without Quizzes.”

▲ “The Future of Museums” panel discussion with alumni directors and curators of major national museums and art galleries.

▲ Administration’s Office “insiders session” for alumni parents of prospective students.

▲ Departmental and divisional reunions for economics, environmental studies, Earth sciences, the Jack Baskin School of Engineering, and all grades from the sciences.

▲ TWNAs (Third World and Native American Students) reunion.

▲ Latino, Asian American and Pacific Islander, GLBTI, and African American alumni and current student mentor circle.

▲ Santa Cruz Hillel Sunday night event for Jewish alumni, students, and friends.

▲ Slug Run reunion.

▲ Receptions and reunion events at the colleges.
We’d like to hear from you!

> Use the envelope in the middle of this issue to send us your class note
> or send e-mail to dewey@usc.edu
> or submit a note via the web at alumni.usc.edu (go to Class Notes)

**Weinberg**

**2007**

Jonathan VOSBERGS is an operations engineer for Spirit Airlines, based at Fort Lauderdale, FL, and a member of the USC chapter of the Association of Professional Advancement. He graduated from USC in 1998 and spent the past five years working in operations and project management for a software company. Before that, he worked in marketing and sales at a biotech company, and he also served in the U.S. Navy as a cryptologic technician.

**2005**

Alice CHERNICK is a PhD candidate in musicology at the University of Toronto and is currently writing a thesis on songwriting in the Southern African jazz scene. She graduated from USC in 2005 with a degree in musicology and is currently studying under the supervision of Dr. Jonathan Stern. Her research focuses on the intersection of music and identity in the context of South African society. She plans to graduate in 2007 and hopes to continue her studies in South Africa.

**2003**

Daniel EDELSON, a computer science graduate of USC, works as a software engineer at Google. He received his degree from USC in 2003 and has been working at Google since then. He is currently based in New York City and is involved in various projects related to search and advertising.

**2002**

Joel SLOAN is a software engineer at Google in New York City. He received his degree from USC in 2002 and has been working at Google since then. He is currently involved in various projects related to search and advertising.

**2001**

Hilary HEFFERLIN is a project manager at Google in New York City. She received her degree from USC in 2001 and has been working at Google since then. She is currently involved in various projects related to search and advertising.

**2000**

Rachael BIRCH is a software engineer at Google in New York City. She received her degree from USC in 2000 and has been working at Google since then. She is currently involved in various projects related to search and advertising.

**1999**

Ann STEPHENSON is a software engineer at Google in New York City. She received her degree from USC in 1999 and has been working at Google since then. She is currently involved in various projects related to search and advertising.

**1998**

Valarie ELLIS is a software engineer at Google in New York City. She received her degree from USC in 1998 and has been working at Google since then. She is currently involved in various projects related to search and advertising.

**1997**

Kathleen CHERRY is a software engineer at Google in New York City. She received her degree from USC in 1997 and has been working at Google since then. She is currently involved in various projects related to search and advertising.

**1996**

Scott KENNELLY is a software engineer at Google in New York City. He received his degree from USC in 1996 and has been working at Google since then. He is currently involved in various projects related to search and advertising.

**1995**

Susan TRIMMINGS spent a month in service with the Peace Corps in Zimbabwe, where she worked in a health care clinic. She received her degree from USC in 1995 and has been working in health care since then. She is currently involved in various projects related to search and advertising.

**1994**

Mark CHRISTIANSEN is an experienced software developer. He graduated from USC in 1994 and has been working in software development since then. He is currently involved in various projects related to search and advertising.

**1993**

Michael KIMBALL is a software engineer at Google in New York City. He received his degree from USC in 1993 and has been working at Google since then. He is currently involved in various projects related to search and advertising.

**1992**

Alexis CANILLO is a software engineer at Google in New York City. She received her degree from USC in 1992 and has been working at Google since then. She is currently involved in various projects related to search and advertising.

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**1989**

Mark JACOBSON is a software engineer at Google in New York City. He received his degree from USC in 1989 and has been working at Google since then. He is currently involved in various projects related to search and advertising.

**1988**

Brendan SHAUGHNESSY is a software engineer at Google in New York City. He received his degree from USC in 1988 and has been working at Google since then. He is currently involved in various projects related to search and advertising.

**1987**

Jennifer WALL is a software engineer at Google in New York City. She received her degree from USC in 1987 and has been working at Google since then. She is currently involved in various projects related to search and advertising.

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**1985**

Kenneth BURKE is a software engineer at Google in New York City. He received his degree from USC in 1985 and has been working at Google since then. He is currently involved in various projects related to search and advertising.

**1984**

Randy ELLIS is a software engineer at Google in New York City. He received his degree from USC in 1984 and has been working at Google since then. He is currently involved in various projects related to search and advertising.

**1983**

Robert VOORHEES is a software engineer at Google in New York City. He received his degree from USC in 1983 and has been working at Google since then. He is currently involved in various projects related to search and advertising.

**1982**

Joseph TONG is a software engineer at Google in New York City. He received his degree from USC in 1982 and has been working at Google since then. He is currently involved in various projects related to search and advertising.

**1981**

Shawn McADAM is a software engineer at Google in New York City. He received his degree from USC in 1981 and has been working at Google since then. He is currently involved in various projects related to search and advertising.

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College Eight

18 Mylou RUBERT Berry has published a short story, “Reaction Shocks,” and a novel, except, “Strong Flavor,” in the Tidal Point Review. Rachel GOLDBERG is an instructor of conflict analysis and dispute resolution in the Department of Sociology at the Fulton School of Liberal Arts at Salisbury University; she completed her Ph.D. in social policy and syndrome University last May.

19 Donna SULLIVAN and her wife welcomed their sons, Shane, into the world in July.

Graduate Studies

94 Karen HANSEN (M.S., Earth sciences) has taken a new job with Grantrock, at the A. R. Wilson Quarry in Ammona, Calif.

95 Gregory HANCOCK (M.S., Earth sciences), an associate professor of geology at the College of William and Mary, was the winner of one of five Alumni Awards, which are presented annually, along with a $1,000 honorarium, to younger members of the faculty who “possess outstanding qualities as mentors of William and Mary students.

96 Linda FAIER (M.A., anthropology) has been awarded a prestigious Abe Fellowship from the Social Science Research Council, which she will use to research on human trafficking in Japan, the Philippines, and the U.S.

97 Rosapali PHADKE (Ph.D., environmental studies) has been appointed assistant professor in the Environmental Studies Department at Macalester College, her work over the last decade has focused on how river basin technologies, such as dams and canals, can be more sustainably implemented.
Reconnect at your reunion.

Banana Slug Spring Fair
April 22, 2006

See page 24 inside for details,
or check out our web site at
alumni.ucsc.edu/reunions

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