UC SANTA CRUZ

REVIEW

Fall 2006

Electrical engineer Holger Schmidt

Biochemist David Deamer

Molecular biologist Harry Noller

when *Nano* meets *Bio*

An interdisciplinary team develops tiny technology with big biomedical potential

ALSO: UCSC's acting chancellor...silent earthquakes...a retired professor's gift...an alumnus's Iraq documentary...and more

UC SANTA CRUZ REVIEW

UC Santa Cruz
Review

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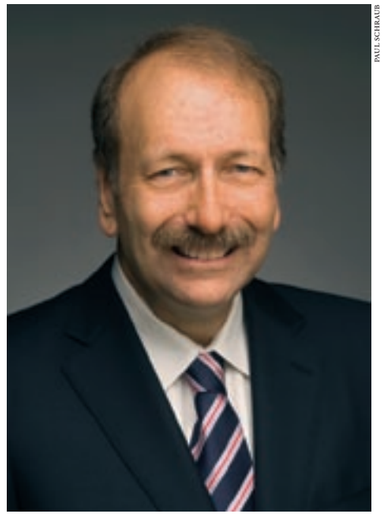
George Blumenthal named acting chancellor of UC Santa Cruz



PAUL SCHRAUB

Acting Chancellor George Blumenthal

Appointee has been on UCSC faculty since 1972

UC Santa Cruz professor George R. Blumenthal has been appointed the campus's acting chancellor, assuming the responsibilities of Denice Denton, who died in June.

Blumenthal is expected to serve as acting chancellor for much or all of the 2006–07 academic year, UC President Robert C. Dynes said. A national search for the late chancellor's permanent successor will be conducted over that period of time.

"George is respected throughout the university, and he has more than 30 years of deep working knowledge of the Santa Cruz campus," Dynes said.

Blumenthal, 60, has been a member of the UCSC faculty since 1972. He has chaired the Astronomy and Astrophysics Department and the Santa Cruz Division of the Academic Senate. In 2004–05 he served as chair of the UC systemwide Academic Senate, and he was faculty representative to the Board of Regents for the years 2003–05.

"This appointment is difficult because it has come about through such a tragic circumstance," Blumenthal said. "But I have enormous respect for the faculty, staff, and students of UC Santa Cruz, and I am honored to assume this responsibility.

"Over the past decade, UCSC has been on a positive trajectory, moving upward among the top tier of our nation's universities. I am determined to continue that momentum."

> **UC Santa Cruz has been on a positive trajectory, moving upward among the top tier of our nation's universities. I am determined to continue that momentum.**
>
> *—Acting Chancellor George Blumenthal*

Blumenthal received a B.S. degree from the University of Wisconsin–Milwaukee and a Ph.D. in physics from UC San Diego. The research of Blumenthal, a theoretical astrophysicist, encompasses several broad areas, including the nature of the dark matter that constitutes most of the mass in the universe, the origin of galaxies and other large structures in the universe, and the structure of active galactic nuclei such as quasars.

The new chancellor meets with staff and faculty (below); he has also met with members of the local community.

LOUISE DONNAHUE

More information about Acting Chancellor Blumenthal can be found on his web page: chancellor.ucsc.edu. The page also provides a link enabling members of the UCSC community to share an idea, concern, or suggestion with the acting chancellor.

Acting Chancellor outlines his priorities

On his first day working in the Office of the Chancellor in mid-July, George Blumenthal issued the following statement:

Our primary mission as an institution is to serve the state of California through teaching, research, and public service. Therefore, the priorities on which I will focus include:

- Recruiting and retaining the outstanding faculty, staff, and students that characterize our campus;
- Building on our academic strengths as we refine and implement our academic plan;
- Expanding graduate programs and enrollments, and considering the creation of additional professional schools;
- Maintaining our distinction and achievements as an outstanding undergraduate institution;
- Ensuring diversity among all segments of the university;
- Building positive relationships with the local community and community leaders; and
- Spreading the word about our campus's distinctions to various groups around the state and the country.

George Blumenthal, *Acting Chancellor, UC Santa Cruz*

MATT PITT

Seven faculty members and 10 graduate teaching assistants who have demonstrated "exemplary and inspiring teaching" have received top honors from UCSC's Academic Senate. The 2005–06 Excellence in Teaching Awards were presented by the late chancellor Denice D. Denton (fourth from right) and Committee on Teaching chair Charles McDowell (far left) at University Center at the end of the academic year. Also pictured are the faculty winners (l–r): Ruth Hoffman, Kenneth Pedrotti, Hilde Schwartz, Ana Maria Seara, John Isbister, Dean Mathiowetz, and Martin Berger.

Prestigious academies select UCSC faculty

Two UCSC faculty members were elected to the National Academy of Sciences, and three are among the new fellows of the American Academy of Arts and Sciences.

David Haussler (biomolecular engineering) and Stan Woosley (astronomy and astrophysics) are among 72 new members elected to the National Academy of Sciences.

The three faculty members elected to the American Academy of Arts and Sciences are Haussler, Harry Berger Jr. (English literature/history of art and visual culture), and Harold Widom (mathematics).

Haussler, a Howard Hughes Medical Institute Investigator, directs the Center for Biomolecular Science and Engineering at UCSC and is scientific codirector of the California Institute for Quantitative Biomedical Research.

Woosley, a theoretical astrophysicist, is a leading authority on supernovae and gamma-ray bursts, the most violent explosions in the universe. He directs the UCSC-based Center for Supernova Research, funded by the Department of Energy.

Berger was recognized for his contributions to literary criticism. A UCSC founding faculty member, he is known for an interdisciplinary approach extending past academic boundaries.

Widom has made contributions in an area of math called random matrix theory. His work with Craig Tracy of UC Davis led to the discovery of a new class of functions called Tracy-Widom distributions.

Honored: *David Haussler, Stan Woosley, Harry Berger Jr., and Harold Widom*

PAUL SCHRAUB

TIM STEPHENS

ANN GIBB

VICTOR SCHIFFRIN

Another UCSC grad, Dana Priest, receives Pulitzer Prize

Dana Priest, who visited UC Santa Cruz in March to accept the Division of Social Sciences' first Distinguished Alumni Award, has received a 2006 Pulitzer Prize.

Priest, who graduated from UCSC (Merrill College) in 1981 with a bachelor's in politics, received journalism's highest honor in the category of "beat reporting."

A *Washington Post* reporter, Priest was recognized "for her persistent, painstaking reports on secret 'black site' prisons and other controversial features of the government's counterterrorism campaign." The prize includes a $10,000 award.

Priest is the fifth UCSC graduate to receive a Pulitzer, following Hector Tobar (1992), Laurie Garrett (1996), Annie Wells (1997), and Martha Mendoza (2000).

JON KERSEY

Dana Priest lectured on "The CIA's Secret War" during her visit to UCSC in March.

Economics undergrad wins scholarship to fight TB in India

Like his grandfather, Saurabh Mishra is a visionary. Mishra, a senior in economics, wants to raise public awareness about tuberculosis (TB) and provide treatment to at least 10,000 sufferers in his native India.

With a $10,000 scholarship from the Donald A. Strauss Public Service Scholarship Foundation, Mishra is organizing a fund-raising drive that will help him launch a major public health campaign in the Bihar region of India.

JENNIFER MCNULTY

Saurabh Mishra

Mishra's work builds on the legacy of his grandfather, who opened a TB sanatorium in 1951. To date, the 100-bed facility has treated more than 80,000 people.

"In 1950, my grandfather left the luxuries of the United States for one of the poorest areas in India because he had this vision 50 years ago of eradicating tuberculosis," said Mishra. "But TB is still a problem. It is inspiring to me to see all his work and to try to complete his vision."

Each year, the Strauss Scholarships fund at least 14 public-service projects proposed by California college juniors.

UCSC creates new major in computer game design

UCSC has approved a new major in computer game design, the first of its kind in the UC system. The new major, leading to a B.S. degree, provides students with a rigorous background in the technical, artistic, and narrative elements of creating interactive computer games.

"We are pleased to be able to offer this new degree program, which provides a unique combination of technical and artistic training," said Ira Pohl, professor and chair of computer science in the Baskin School of Engineering.

The Department of Computer Science will administer the new interdisciplinary program, which will also involve faculty in the Department of Film and Digital Media in UCSC's Arts Division. Students are able to enroll in the new major beginning this fall.

"Millions now play massively multiplayer online games, which constitute a new cultural force—a new medium. Digital media courses will provide students with the tools they need to understand this cultural transformation in conjunction with its technological and artistic possibilities," said Warren Sack, assistant professor of film and digital media.

A highlight of the major is a yearlong game design project in which students work in teams to develop and polish a substantial video game. The campus is creating a new instructional laboratory for computer game design to support these projects.

MICHAEL MATEAS/ANDREW STERN

Trip and Grace are characters in Façade, *a computer game developed by Michael Mateas, who will be teaching students in UCSC's new program.*

Study documents marathon migrations of sooty shearwaters

Every summer, millions of sooty shearwaters arrive off the coast of California, their huge flocks astonishing visitors who may have trouble grasping that the dark swirling clouds over the water consist of seabirds.

Scientists have long known that sooty shearwaters breed in New Zealand and Chile and migrate to feeding grounds in the Northern Hemisphere. But the details of this remarkable transequatorial migration are only now emerging from a study using electronic tracking tags to follow individual birds.

The flights of sooty shearwaters documented in this new study represent the longest animal migration routes ever recorded using electronic tracking technology: around 65,000 kilometers (39,000 miles). Taking advantage of prevailing winds along different parts of the migration route, the birds trace giant figure eights over the Pacific, said Scott Shaffer, a UCSC research biologist and first author of a paper describing the findings. The paper was published in *Proceedings of the National Academy of Sciences.*

Shaffer worked with an international team of scientists from UCSC and other institutions in the United States, New Zealand, and France.

Support for the sooty shearwater study was provided by the Gordon and Betty Moore Foundation, the David and Lucile Packard Foundation, and the National Science Foundation.

COURTESY SCOTT SHAFFER

This map shows the tracks of 19 sooty shearwaters tagged in early 2005 and tracked for an average of 262 days during their breeding period (light blue lines) and subsequent migration.

Still teaching, UCSC's pioneers honored for their service

Tradition was heralded with fond recollections at a May 19 Academic Senate celebration honoring 22 campus pioneers.

The pioneers—professors who are still teaching today and who were hired before July 1, 1970—recalled a smaller, vibrant, and growing campus community in which interests were wide and responsibilities wider.

"In those days, the scientists, the social scientists, the humanists in the colleges talked to each other and enjoyed each other's company," remembered literature professor Murray Baumgarten, hired in 1966.

"It was a great combination across disciplines, across international boundaries," he said.

Economics professor David Kaun, also hired in 1966, recalled that "we didn't just speak truth to power, we spoke to each other. We said what we wanted to say with a little bit of humor."

Baumgarten and Kaun were joined by anthropology professor Adrienne Zihlman (1967) and Earth sciences professor Gary Griggs (1968) in reminiscing with their fellow pioneers and colleagues who had gathered at University Center for a reception after the final Academic Senate meeting of the term.

The four speakers were selected from the 22 to speak on behalf of their fellow honorees.

Academic Senate Chair Faye Crosby and UCSC's late chancellor Denice Denton presented each pioneer with a plaque.

For a list of attendees, see currents.ucsc.edu/05-06/05-22/pioneers.asp

New deans lead three academic divisions

UCSC has appointed three new deans of academic divisions: Stephen Thorsett (physical and biological sciences), Georges Van Den Abbeele (humanities), and Sheldon Kamieniecki (social sciences).

Thorsett, a professor of astronomy and astrophysics, has served as physical and biological sciences' acting dean since 2005.

"Our students and faculty already make important contributions to environmental science, biomedical science, and the development of advanced technologies. An important goal for me will be to better connect our programs to partners both inside and outside our local region who share our interest in these societally important research areas."

Van Den Abbeele comes to the Humanities Division from UC Davis, where he was a professor of French and Italian and held a number of significant administrative appointments overseeing academic departments and directing local and regional interdisciplinary research centers.

"UC Santa Cruz is a wondrous exception in today's higher education—a distinguished research university that consistently maintains a high premium on learning for its own sake, whether through classroom teaching or scholarly inquiry," Van Den Abbeele said.

Kamieniecki, who has been a professor of political science at the University of Southern California, specializes in environmental policy, elections, voting behavior, and public opinion.

"I look forward to helping raise even higher the national stature of the departments, research centers, and programs of the division," said Kamieniecki.

JIM MACKENZIE

KAREN HIGGINS/UC DAVIS

JIM MACKENZIE

New deans: *Stephen Thorsett, Georges Van Den Abbeele, and Sheldon Kamieniecki*

UCSC receives gift of Brett Weston photos

UCSC has received a donation of over 200 photographs by acclaimed American photographer Brett Weston (1911–1993), valued at more than $1 million. The photographs are a gift from Oklahoma collector Christian Keesee, who acquired the Brett Weston archive in 1996 and describes Weston as "one of the true American masters of photography."

The gift enhances the university's substantial holdings of contemporary photography and greatly expands its photographic collection of the Central Coast's dynastic Weston family. The University Library's Special Collections photo holdings were initiated at UCSC in the late 1960s with the donation of more than 800 project prints by Edward Weston, Brett's father.

Brett Weston's 1950 White Sands *is among the photos donated to UCSC.*

NSF funds research on 'informal science education'

For many parents, taking the kids to the aquarium or a hands-on science museum combines fun and learning. "Museums make science accessible and engaging," says Doris Ash, an assistant professor of education at UCSC. "Visitors sometimes don't recognize they're 'doing science,' but they are."

Called "informal science education," the learning that takes place at aquaria, zoos, and natural history museums enriches classroom learning and engages people in ways that schools sometimes can't. Such venues have become laboratories for Ash and other researchers eager to gauge the impact of museums on the learning process.

Ash recently received a $1.8 million grant from the National Science Foundation to conduct a five-year study of informal science education with Judith Lombana, vice president of research and institutional development at the Museum of Science & Industry (MOSI) in Tampa, Florida.

"There's value in looking at real objects and living things," says Ash. "It enhances the quality of learning in ways we don't even understand." A trained biologist and former classroom teacher, Ash is especially interested in the impact of informal science learning on "nontraditional" visitors, including the poor and those with limited or no English skills.

Youngsters at the Seymour Marine Discovery Center have a chance for hands-on investigation of sea creatures.

MARENY PFLUGER

SVGSA

Woody Allen *and his New Orleans Jazz Band is one of the featured artists performing in the 2006–07 academic year as part of UCSC's Arts & Lectures program. For information about the season's many A&L offerings, please go to:* artslectures.ucsc.edu

UCSC receives gift to support Hindi/Urdu language program

A CONSORTIUM of donors has committed to funding Hindi/Urdu language courses at UCSC through spring of 2010. The combined gifts in support of the program total $75,000 and will enable the university to provide courses that would otherwise be eliminated due to budget cuts.

The gift was initiated by Silicon Valley entrepreneurs Kamil and Talat Hasan, who put together a group of 15 donors who have each committed $1,000 a year for the next five years to support the language classes.

Kamil Hasan noted that the Hindi/Urdu language program is the anchor for UCSC's South Asia initiative—a project established in 1999 to create an enduring resource for understanding the region and its cultures. "History, economics, literature, music—all depend on knowledge of these languages," he said.

The addition of second-year Hindi/Urdu courses provides the essential language preparation necessary for UCSC students who plan to continue their education in graduate programs. Funding for the classes initially began in January, and two UCSC students have already benefited from the generosity of the donors. Maia Ramnath, a graduate student in history, and Max Bruce, a 2005 graduate in philosophy, were awarded fellowships to study the Urdu language at the American Institute of Indian Studies program in India, after completing two years of Hindi/Urdu study at UCSC.

PHOTOS: RACHEL CLICK

Attending a donor recognition event were: (left photo, l–r) John Mock, lecturer in Hindi/Urdu; Kamil Hasan, UCSC Foundation trustee; and Gildas Hamel, director of the Language Program; and (right photo) fellowship recipient Maia Ramnath, left, with Anu Luther Maitra, president of the UCSC Foundation.

Engineering undergrads inspire high schoolers

THE BASKIN SCHOOL of Engineering hosted about 100 students from San Jose area high schools for a week of campus tours and workshops last spring. Teams of undergraduates organized and ran the workshops, which used fun and challenging projects to convey different aspects of engineering.

The "nanomouse" workshop involved a mobile robot the students had to program to make its way through a maze. The "clay building" workshop involved constructing a tower out of clay and toothpicks. The projects were designed to inspire the students and get them interested in studying engineering and pursuing careers in science and technology.

"The kids absolutely loved it," said Young Kim, undergraduate outreach coordinator for the engineering school.

Two Antarctica sites named in honor of UCSC biologists

COSTA SPUR and Terrie Bluff, once nameless features of the austere Antarctic landscape, have been named in honor of Daniel Costa and Terrie Williams, UCSC professors of ecology and evolutionary biology. Both scientists have done extensive field research on marine mammals in Antarctica.

The U.S. Board on Geographic Names approved the names last year, but Costa and Williams only recently found out about the honor when they received official letters and photos of the sites.

Costa Spur, Antarctica, is officially described as a "prominent spur located 4 miles southwest of Quetin Head, Daniell Peninsula, Borchgrevink Coast. The spur descends eastward to the Ross Sea and marks the southern extent of Mandible Cirque."

Costa studied seals at McMurdo Sound, South Georgia, and Livingston Island for seven field seasons starting in 1978.

On the side of Mt. Terror overlooking a large penguin rookery, "Terrie Bluff is a rock bluff that rises to 1,000 meters in height. It is located 1.5 miles south-southeast of Ainley Peak, Kyle Hills on Ross Island."

Williams was a U.S. Antarctic Program coprincipal investigator of hunting behavior of free-ranging Weddell seals in McMurdo Sound sea ice areas for several seasons between 1984 and 2002.

COURTESY DANIEL COSTA

Costa Spur in Antarctica is named after UCSC professor Daniel Costa.

In Memoriam

PAUL SCHRAUB

Denice D. Denton, a trailblazing engineer who broke through numerous barriers in her academic career to become chancellor of the University of California, Santa Cruz, died June 24 in San Francisco.

Denton took the helm at UC Santa Cruz in February 2005 after serving nine years as the dean of the College of Engineering at the University of Washington in Seattle—the first woman to hold the post at a top research institution. It was one of many "firsts" Denton acquired throughout her career, and she became a powerful role model and mentor for women and minorities in science and higher education.

An accomplished electrical engineer who held three patents, Denton earned a Ph.D. and three other engineering degrees from the Massachusetts Institute of Technology. One of four children raised by a single mother in Texas, Denton discovered her passion for science and math during a high school summer program. That life-transforming experience fueled her passion for outreach programs and her commitment to making similar opportunities available to others. As her accomplishments catapulted her to the center stage of higher education nationally, she became an outspoken advocate for diversity in academia.

"Denice was an accomplished and passionate scholar whose life and work demonstrated a deep commitment to public service and to improving opportunity for the disadvantaged and underrepresented," said UC President Robert C. Dynes.

As he prepared to bestow the President's Medal during Denton's November 2005 investiture ceremony at UCSC, Dynes called Denton "a trailblazer in pursuit of equity and multiculturalism."

At UCSC, where she served for 16 months, Denton was remembered by Campus Provost and Executive Vice Chancellor David S. Kliger for her dedication "to opening doors for countless young people, particularly for women and minorities who wanted to pursue careers in engineering and science."

"She led this campus with clear statements of the importance of education in transforming lives and in creating opportunities for all," said Kliger. "She, herself, had lived that experience, rising from modest means to achieve with distinction at every stage in her life."

Student leaders hailed Denton's openness and advocacy. "She was at the forefront of the UC Sweatshop Free Campaign, and showed her commitment to diversity by providing funding for student-initiated outreach programs," wrote representatives of the UCSC Student Union Assembly, Graduate Student Association, and UC Student Association.

This past May, Denton won the Maria Mitchell Women in Science Award for her work advancing opportunities in science for women and girls.

A campus celebration of the late chancellor's life was held June 29 in the UCSC Music Center Recital Hall.

At UCSC, a fund has been established to honor Chancellor Denton's vision and priorities for the campus. The Denice D. Denton Memorial Fund will pay tribute to her achievements as a leader in science and engineering, her advocacy for diversity, as well as her commitment to community.

To make a memorial gift, please use the enclosed envelope or go to: www.ucsc.edu/administration/denice_denton

SIMULEI THALER

ELIZABETH LEWIN

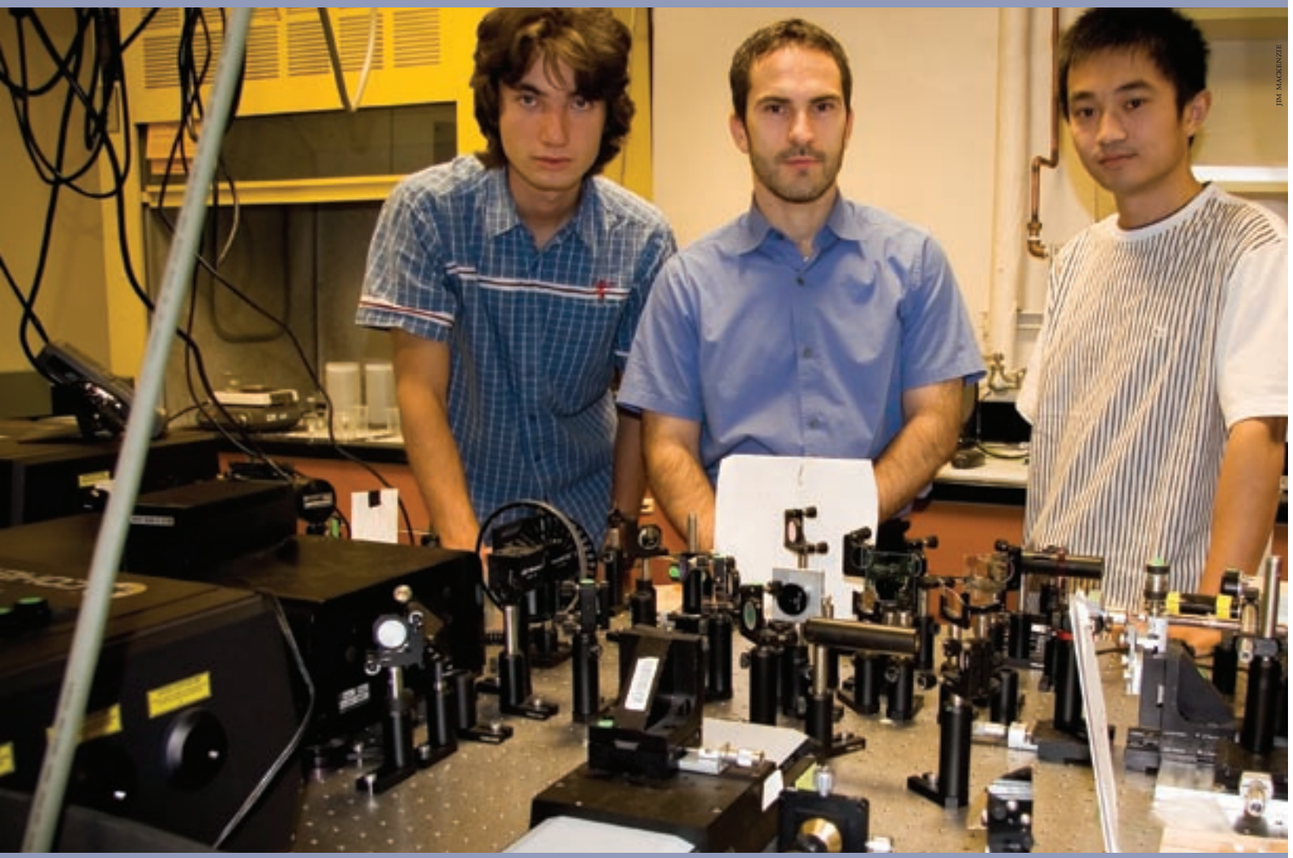
ROD SEARCY

ALL PHOTOS NOT INDIVIDUALLY CREDITED BY JIM MACKENZIE

when *Nano* meets *Bio*

By Tim Stephens

An interdisciplinary team of UCSC scientists is developing a tiny tool to analyze disease organisms one molecule at a time.



JIM MACKENZIE

The 'Nano' side of the team: Electrical engineer Holger Schmidt and graduate students Mikhail Rudenko (left) and Dongliang Yin (right) in Schmidt's optical lab

In 2004, UCSC engineer Holger Schmidt reported an exciting advance in optical technology. His team had found a way to build onto a silicon chip a mechanism for guiding light through tiny volumes of liquid or gas. Schmidt, an associate professor of electrical engineering, knew that this technology held great potential for a wide range of applications, including highly sensitive chemical and biological sensors.

Since then, Schmidt has teamed up with faculty in other departments at UCSC and won a $1.6 million grant from the National Institutes of Health to develop new sensor technology for biomedical applications.

"We aim to develop a new type of instrument that can do both electrical and optical sensing of single biomolecules, with all the components of the sensor ultimately integrated onto a chip," Schmidt says. Collaborators on the project include David Deamer, professor of chemistry and biochemistry, and Harry Noller, Sinsheimer Professor of Molecular Biology.

The new instrument could prove valuable for basic research in molecular biology and biochemistry, as well as for medical diagnostic testing and other applications. Used to detect viruses, for example, the instrument could allow rapid diagnosis of patients infected with a new strain of the flu virus in the event of a pandemic.

"The idea is that you would be able to take a throat swab from a patient and detect the virus within 10 minutes instead of hours," Deamer says.

Initially, however, the researchers will test the new sensor platform on ribosomes, the complex biomolecular machines that serve as the protein factories in all living cells. Noller, a leading authority on ribosomes, says he hopes the project will help him realize a long-sought goal: to make a movie of the ribosome in action as it translates the genetic code from messenger RNA and makes proteins.

"Studying ribosomes is just one application for this device," Noller says. "It has tremendous potential."

At the heart of the device is Schmidt's invention, a new type of "optical waveguide" that transmits light through a hollow core that can be filled with liquid or gas. The optical fibers that have revolutionized the telephone system, cable TV, and the Internet are solid-core waveguides that transmit signals over long distances. Guiding light waves through liquids and gases is a challenge because they lack crucial properties that make the solid core of an optical fiber effective.

"But if you can guide light through water and air, all of the fields that rely on nonsolid materials can take advantage of integrated optics technology. Liquids and gases are the natural environment for molecules in biology and chemistry," Schmidt says.

A major advantage of his hollow-core waveguides is that they are made using the standard silicon fabrication technology used on an industrial scale to make computer chips. As a result, the waveguides can be integrated into a silicon chip along with electronics, fiberoptic connections, and other components. A compact, affordable device based on the hollow-core waveguide could perform optical analyses that currently require expensive and bulky microscopes set up on a laboratory benchtop.

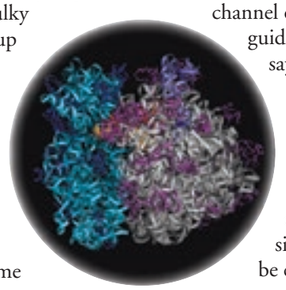
The 'Bio' side of the team: Biochemist David Deamer and molecular biologist Harry Noller

Fabrication of the waveguides is done at a facility at Brigham Young University by Schmidt's longtime collaborator Aaron Hawkins.

Shortly after he had developed the hollow-core waveguide, Schmidt visited Deamer's lab, where researchers have pioneered the development of "nanopore" devices for electrical sensing of single molecules. Soon, Schmidt and Deamer were making plans to combine their two devices.

A nanopore is a tiny hole with dimensions on the order of nanometers (a nanometer is one billionth of a meter). The researchers plan to incorporate a nanopore into the waveguide, using it to feed samples into the core one molecule or particle at a time for optical analysis. Schmidt's group has already demonstrated optical detection of single molecules using hollow-core waveguides on a chip.

"The nanopore will act as a smart gate for entry of individual molecules into the channel of the waveguide," Schmidt says.

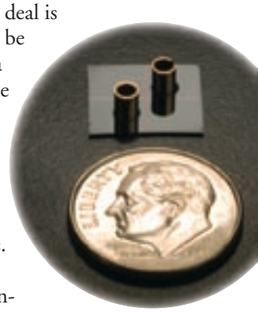


The Target: The sensor will be used to study the dynamics of the ribosome, a complex biomolecular machine that manufactures proteins in living cells.

As molecules pass through the nanopore, they produce an electrical signal that can be captured and analyzed, giving the device the capacity for both electrical and optical characterization of single molecules.

The optical analysis will rely on fluorescence methods that are commonly used in molecular biology and biomedical tests. To detect viruses, for example, fluorescent tags can be attached to antibodies that bind to specific viral proteins.

"What makes our approach a big deal is that it could be done using a little portable machine, instead of sending the sample to a laboratory," Deamer says.

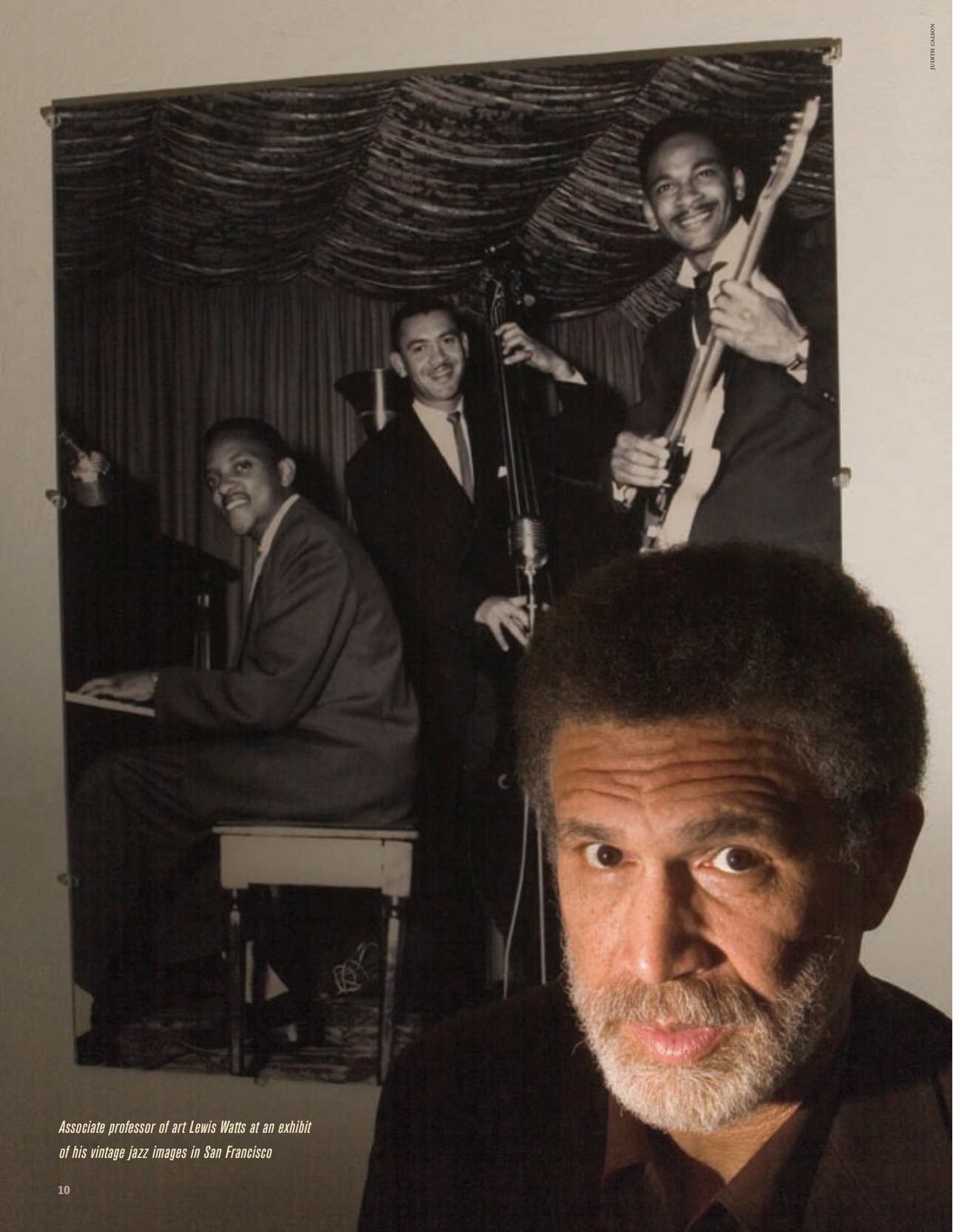


The Technology: A prototype of Schmidt's dime-sized sensor device integrates two fluid reservoirs, microfluidic channels, and intersecting optical waveguides.

Noller points out another noteworthy aspect of the project—it highlights the kind of interdisciplinary interactions that UC Santa Cruz seems especially good at fostering.

"This is the sort of thing that people talk about all the time, but in most universities it never really happens," says Noller. "I think Santa Cruz may be a place that attracts creative people who are interested in working with people in other disciplines. It's an environment that's very inspiring."

PHOTOS: PAUL SCHRAUB (TOP AND RIGHT), COURTESY HARRY NOLLER (BOTTOM)



JUDITH CASSON

Associate professor of art Lewis Watts at an exhibit of his vintage jazz images in San Francisco

Jazz Detective

By Scott Rappaport

Most people know San Francisco's Fillmore District because of its historic auditorium, immortalized by legendary rock promoter Bill Graham in the late 1960s. But long before the neighborhood attracted bands like the Grateful Dead and Jefferson Airplane, the Fillmore was home to a booming jazz scene—a community so laden with clubs and virtuoso players in the 1940s and '50s, it became known as the Harlem of the West.

With more than two-dozen venues located within one square mile, it was not unusual to spot jazz greats like Billie Holiday, John Coltrane, or Dexter Gordon hanging out or taking the stage to jam with local musicians after returning from their gigs "for whites only" in downtown Bay Area clubs.

The San Francisco Redevelopment Agency tore down the neighborhood in the mid-1960s—ostensibly to improve it—and the community literally vanished. But a new book *Harlem of the West: The San Francisco Fillmore Jazz Era,* coauthored by UC Santa Cruz associate professor of art Lewis Watts, unearths the community's glorious past. Filled with rare archival photographs of such jazz legends as Dizzy Gillespie, Duke Ellington, Johnny Mathis, and Charlie Parker—plus accounts from neighborhood residents and musicians who were there at its peak—the book celebrates a nearly forgotten chapter in jazz and African American history on the West Coast.

"This is the first time that this history has seen the light of day," observes Watts, who spent more than a decade collecting and painstakingly restoring more than 200 photos for the book. "Any physical trace of that community is long gone."

The spark for the book was ignited in 1990 when Watts was working on a photography project in the Fillmore District—located between the city's Haight District and Pacific Heights. As he explored the neighborhood, Watts came upon Red Powell's Shine Parlour, across the street from the Fillmore Auditorium.

"I wandered into Red's shoeshine shop, and on the walls were all these great photos of people like Martin Luther King, Bobby Kennedy, Duke Ellington, and Ray Charles," recalls Watts. "I asked Red if I could photograph his wall. But he was having none of it—he basically threw me out of his shop."

When Watts returned to Red's only a few months later, the shop was empty, with no sign of either Red or the photographs. Although he feared that the collection was lost for good, Watts continued to inquire about the photos. Finally in 1996, while doing additional research for the city's redevelopment agency, Watts asked a barber working across the street from Red's if he had any idea where the priceless photos might be. "I was thrilled by his response," says Watts. "He told me they were in his back room."

It turned out that Red had suffered a fatal stroke just a few weeks after Watts had visited. The landlord had closed up the store and took everything off the walls. But as he was preparing to dump it all in the trash, the barber—Reggie Pettus—had rescued all of the photos and memorabilia from certain oblivion. Pettus kindly allowed Watts access to the archive.

"There were a lot of snapshots and 8-by-10 glossy photos pinned on walls," says

Images from *Harlem of the West*

Eartha Kitt with neighborhood children, 1950s

R&B singer Ruth Brown at the Booker T. Washington Cocktail Lounge, circa 1950s

Dexter Gordon jamming at Bop City, 1950s

Duke Ellington (front row, center) and friends in the Manor Plaza Hotel, circa 1950s

Jazz Detective *continued*

Watts. "Some were framed and mounted, but a lot more were stuffed in Safeway bags and in boxes. Shoeshine parlors, barbershops, and beauty parlors have traditionally been the historical archives of the African American community."

Watts arduously took on the process of digitally restoring the images, many of which were damaged and faded with marks and waterstains, or had corners ripped off. "The idea was to bring back the detail and represent the intent of the photographs," explains Watts. "That was my responsibility to the original photographers."

Watts used the photo collection for his agency report on the Fillmore neighborhood and also curated an exhibition of them that was displayed outside the City Hall Office of then–San Francisco mayor Willie Brown, and later in the Arts Commission Gallery across the street. This generated even more photos and memorabilia.

"When I first found Red's photos, there were no labels, no identification," says Watts. "But as we exhibited them in the community, we built the history. People began sharing their stories, and we ended up discovering other photographers or their families, as well as their photographs.

By 1998, Watts had joined forces with coauthor Elizabeth Pepin, whom he met when she was conducting research for a PBS documentary on the history of the Fillmore District. Pepin had been employed by Bill Graham Presents as manager and historian of the Fillmore Auditorium in the mid-1980s. Since both Watts and Pepin were making plans to create a book about the Fillmore community, they decided to collaborate on *Harlem of the West.*

"Elizabeth primarily handled interviews and text, and I handled obtaining, restoring, and curating the photos," says Watts, who joined the UC Santa Cruz faculty in 2001, halfway through the 10-year project.

The book was published in January by Chronicle Books and celebrated with an exhibition, reception, and concert in February at the San Francisco Performing Arts Library & Museum. Performing at the event was the Fillmore Jazz Preservation Big Band, a 20-piece orchestra featuring many top Bay Area jazz musicians under the direction of UC Santa Cruz director of jazz studies Karlton Hester.

Harlem of the West captures a joyful and momentous era in the country's African American musical history. It serves as a reflection of a magical place at a remarkable time. And, as Watts optimistically notes: "Knowledge of the past can hopefully lead to a renaissance in the future."

***Harlem of the West** is available from Bay Tree Bookstore; see page 29.*

Advertisement for Louis Armstrong at the New Orleans Swing Club, 1950s

Charles Sullivan (left), one of the most active promoters of African American music west of the Mississippi. In the middle is Lionel Hampton wearing Wesley Johnson Sr.'s cowboy hat.

Billie Holiday, her beloved Chihuahua, and Wesley Johnson Sr. at the Club Flamingo, in the early 1950s

Patrons of the Texas Playhouse, early 1950s

John Handy, Pony Poindexter, John Coltrane, and Frank Fisher at Jimbo's Bop City, 1950s

FLIGHTS *of* FANCY

Retired mathematics professor Gerhard Ringel gives his world-class butterfly collection to UCSC

By Jennifer McNulty

The treasures inside each wooden case are dazzling: iridescent green, shimmering turquoise, velvety orange, and sprays of teeny pink speckles compete for the eye.

Case after case is filled with butterflies and moths of every shape and size from all over the world. Each specimen is perfect, mounted with precision by a world-class collector.

Gerhard Ringel has collected butterflies for most of his 86 years. The cases that still fill cabinets of his Santa Cruz home are the leftovers, duplicates of specimens he donated to the UCSC Museum of Natural History Collections. It was the logical home for a museum-quality collection that could easily have landed in New York or Washington, D.C.

"He prepared his collection with German precision, and because he reared so many of the butterflies from the egg or caterpillar stage, they are perfect—no scales are lost, there are no bird bites," says Tonya Haff, curator of the UCSC Museum of Natural History Collections, housed in the Environmental Studies Department.

The collection's value to scientists is enhanced by the data Ringel carefully recorded regarding where and when specimens were gathered. "It's an amazing collection," sighs Haff, who still marvels at the treasures inside each case. In fact, the museum had to order handcrafted cabinets to accommodate Ringel's 5,000-specimen collection.

Eighty years ago, as a boy in Czechoslovakia, Ringel loved butterflies and mathematics. Unfortunately, his teachers didn't share his passions, and World War II interrupted his studies. He was taken prisoner just as the war was ending and spent four-and-a-half years in a Russian POW camp. Upon his release in 1949, he returned to the University of Bonn, where he earned a doctorate in mathematics and joined the faculty. His research was solitary, and he longed for a colleague with whom to exchange ideas.

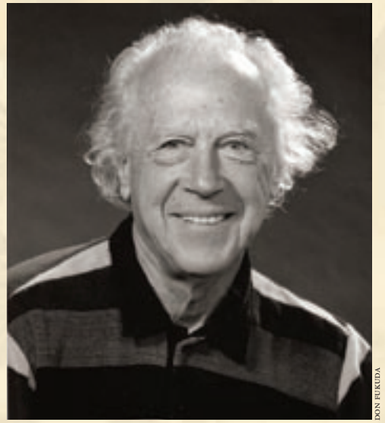
Twice he received invitations to work in the United States. The first time, he declined. "I spoke Czech, German, and Russian, but not English," he explains. A year later, when an invitation came from Ted Youngs, a professor of mathematics at UC Santa Cruz, Ringel accepted, eager to learn English to facilitate collaboration.

Ringel is credited with advancing the famous "map problem," which vexed the world's greatest mathematicians for decades: the development of a mathematical theorem to prove that only four colors are needed to create a map with no two adjacent countries the same color. A mathematical brainteaser of monumental proportions, the four-color theorem was the first to be proved using a computer. Ringel brought the same persistence and perfectionism to his passion for butterflies.

Every chance they got, Ringel and his wife, Isolde, traveled the world in pursuit of butterflies—South America, Bali, Jamaica, Africa, New Zealand. Their architect literally designed the Ringel home around built-in butterfly-storage cabinets. And although Ringel caught many specimens in nets, he preferred to hand-raise them from eggs in his garage, where perfection was guaranteed.

These days, well into his retirement, Ringel has slowed his pace, but he still participates in a weekly chess club. "Timed chess," interjects Haff. And yes, he concedes humbly, his blue eyes twinkling, he's better than most of his opponents.

Ringel says butterflies brought joy and balance to his life, a gift of nature that complemented his intellectual interests. Now his gift will benefit students, researchers, and illustrators for generations to come.



DON FURUDA

JIM MACKENZIE

Listening for SILENT Earthquakes

By Tim Stephens

Costa Rica's Nicoya Peninsula is known for good surf and beautiful beaches. Among seismologists, however, it is better known for earthquakes. The peninsula lies directly over an active fault zone that generated major earthquakes in 1853, 1900, and 1950. The next big one could hit any day.

Or not.

Susan Schwartz, director of the Keck Seismological Laboratory at UC Santa Cruz, and her collaborators have detected a different kind of movement on the Nicoya Peninsula—a slipping of the fault that doesn't generate seismic energy. It's the same fault motion as an earthquake, but it happens so slowly that no ground-shaking occurs.

Known as a "silent earthquake" or "slow slip event," this phenomenon was first observed in Japan and off the coast of Washington and southern Canada. It can only be detected with networks of modern instruments that use the Global Positioning System (GPS) to obtain highly accurate measurements of movements of the Earth's crust over time.

A slow slip event may reduce the risk of a major earthquake by relieving stress on a fault, or it may increase the risk by adding stress to an adjacent fault segment that remains locked up. It all depends on the details of what's going on deep beneath the surface of the Earth.

"Most subduction zones with good networks of modern instrumentation have now observed this slow slip mode, but we don't really understand it at all yet," says Schwartz, a professor of Earth and planetary sciences. "We need to know a lot more about where it's happening in order to understand its implications for earthquake hazards."

JIM MACKENZIE

Prior to transport, professor of Earth and planetary sciences Susan Schwartz and colleague Dan Sampson inspect and pack the GPS and seismographic monitoring instruments they will be installing in Costa Rica.

Schwartz's team detected the Costa Rican event in data from a limited array of three GPS stations installed several years ago by Japanese researchers. Now, with funding from the National Science Foundation, Schwartz and her collaborators are determined to learn more about what's going on beneath the Nicoya Peninsula. She is working with Timothy Dixon of the University of Miami, Costa Rican scientists Marino Protti and Victor Gonzales, and UCSC instrument specialist Dan Sampson to establish an extensive network of seismic and GPS monitoring stations in the area.

With this project, Schwartz is continuing a long tradition of UCSC involvement in earthquake and volcano research in Costa Rica. Protti, who earned his Ph.D. at UCSC, is one of three alumni affiliated with the country's geophysical observatory, Observatorio Vulcanológico y Sismológico de Costa Rica, Universidad Nacional (OVSICORI-UNA).

Karen McNally, professor emerita of Earth and planetary sciences, led the team that helped establish OVSICORI-UNA in the 1980s and worked to develop the country's program for the reduction of earthquake hazards. In 2004, she received the University Medal from Universidad Nacional for her contributions, and she continues to work with Costa Rican researchers to expand and improve the country's seismographic network.

Schwartz, who has been working in Costa Rica since 1991, says McNally's efforts laid the groundwork for ongoing research by herself and other UCSC faculty and students. "Costa Rica has tremendous earthquake hazards, and UCSC's involvement in the area is pretty impressive," she says.

Flanked by active tectonic margins on both the Pacific and Caribbean coasts, Costa Rica is one of the most earthquake-prone and volcanically active countries in the world. Just off the west coast is the Middle America Trench, where a section of the seafloor called the Cocos Plate dives beneath Central America, generating powerful earthquakes and feeding a string of active volcanoes. This type of boundary between two converging plates of the Earth's crust is called a subduction zone—and such zones are notorious for generating the most powerful and destructive earthquakes.

COURTESY SUSAN SCHWARTZ

The seismogenic zone Schwartz is studying runs beneath the Nicoya Peninsula, on Costa Rica's west coast.

The Cocos Plate and the Caribbean Plate that overrides it are converging steadily at about three inches per year, but the subducted slab of the Cocos does not go down smoothly. It scrapes against the overriding plate, catching and locking up, pulling the edge of the Caribbean Plate down with it. When the fault finally breaks, the upper plate springs back up. In an earthquake, this takes place in seconds to minutes, whereas a slow slip event takes place over days or weeks.

At most subduction zones, the part of the plate boundary where earthquakes originate—the seismogenic zone—lies beneath the ocean. But in Costa Rica, the seismogenic zone runs right beneath the Nicoya Peninsula.

"It's a perfect opportunity to study the seismogenic zone using a network of land-based instruments," Schwartz says.

Installing the instruments is a major undertaking, however, especially in a region where access is limited. Most of the roads on the Nicoya Peninsula are impassable during the summer rainy season. And the instruments have to be anchored in solid bedrock, which means a lot of digging. Starting last year, Schwartz and her team have been making regular trips to the region, scouting locations and carefully installing GPS and seismic stations.

At the same time, they have been trying to educate the population of Nicoya about earthquake hazards. Protti, who has written a book about the peninsula, feels strongly that the area is overdue for a major earthquake. Nicoya is now being heavily developed for tourism, however, and not everyone is receptive to his message, Schwartz says.

"He is really trying to raise awareness of the risks, but it's not something people like to hear about," she says.

Ultimately, the information the researchers gather from their network of monitoring stations will lead to better assessments of the region's earthquake hazards, as well as a better understanding of subduction zones in general.

"We've known for a long time that when you look at how fast the plates are moving with respect to each other, versus how much slip occurs in earthquakes, it doesn't match up. There's a very large slip deficit," Schwartz says. "But if we find that there are a lot of these slow slip events, it may mean the next earthquake is farther off than we had thought."

Death on the Border

A graduate student's promising technique offers hope of closure for loved ones

By Jennifer McNulty

Chelsey Ann Juarez's father was a young man when he crossed the border from Mexico into the United States. He was lucky: He survived. Today, his daughter devotes herself to helping the families of those who don't.

Juarez, a doctoral candidate in forensic anthropology at UC Santa Cruz, is developing a method to help authorities identify the remains of those who perish on the border, anonymous and far from home.

Identifying the dead is a grim and largely thankless task. Few migrants carry identification, and the number who die is growing as the U.S. crackdown on illegal immigration redirects the flow from San Diego east to a deadly stretch of isolated desert. "U.S. immigration policies haven't reduced the number of people trying to enter the country illegally—they have just changed where they try to cross," says Juarez.

Dehydration, heatstroke, hypothermia, and snake bites claim the lives of many. No one knows exactly how many have died trying to enter the United States from Mexico, but estimates range from 5,000 to 10,000 since 1985. The remains of one out of three have never been identified.

Authorities in border towns are overwhelmed. More than 450 people lost their lives last year, and both Arizona and New Mexico declared states of emergency and appealed for federal help managing the remains of those who don't survive the crossing. One medical examiner had to buy a $150,000 refrigerated trailer to store bodies until he could take DNA samples and compile a profile of each individual.

For Chelsey Juarez, the tragedy of lost lives is compounded by the fact that most families never learn the fate of their loved ones. She wants to change that.

Most who cross the border are Mexican—56 percent, compared to 24 percent from Central and South America. Mexicans who head for El Norte come primarily from the southern and central agricultural states of Jalisco, Michoacan, Guanajuato, Veracruz, and Oaxaca, where job opportunities are scarce. It turns out that variations in the soil chemistry of those states may shorten the path to identifying those who don't survive.

Juarez has borrowed a technique from archaeologists to identify the "soil signatures" of individual regions. Just as archaeologists are able to match ceramic shards to their place of origin by analyzing the chemistry of soils, pottery, and glazes, Juarez hopes to match human remains to their place of birth by examining teeth. Strontium, an element similar to calcium, is absorbed by bones and teeth, providing a "signature" of the soil where a child spends his or her first years.

By collaborating with dental clinics that serve Mexican immigrants in northern California, Juarez has so far collected more than 50 donated teeth from volunteers. Patients provide essential biographical information, including their age, sex, and place of birth, and Juarez utilizes the latest technology to analyze the isotope "signatures" of each tooth. That information is enabling her to build a database of soil profiles across Mexico.

The amount of variation in soil makeup will determine just how fine-grained her map will be. But the results look promising enough to have attracted the attention of Mexican officials when Juarez presented her work at the Binational Health Symposium in Salinas in 2004. Currently, the Mexican Consulate relies mostly on old photographs, sketches, and family descriptions when contacting medical examiners in border states on behalf of relatives searching for lost loved ones.

Juarez credits her father, the man who crossed the border in search of a better life 30 years ago, with encouraging her schooling. Now a legal citizen living in California's Central Valley, Juarez's father is a mechanic. "He and my mom didn't have any other kids," she says. "They got divorced when I was two years old." Juarez wears the mantle of high-achieving only child with ease.

After earning an undergraduate degree from UC Davis, Juarez spent a year analyzing artifacts and slave remains recovered from a former plantation in Louisiana. The experience hooked Juarez on forensic science—and brought her to UCSC to work with Alison Galloway, one of the leading forensic anthropologists in the country.

"This technique has never been applied systematically to a forensic collection," says Galloway, who sees enormous potential in the project, which ultimately will entail analyzing nearly 300 teeth. "Border crossers are so similar in sex and age that our biological profiles inevitably describe a large number of people—we have hundreds of males aged 20 to 40." With Juarez's data, Mexican officials could work within specific regions to get the word out on local television, radio, and newspapers about a death, eventually enabling U.S. authorities to return remains to survivors.

Northern Californians may be removed by geography from the crisis of border issues, says Juarez, but border communities face the stark realities every day. Even as Border Patrol officers scour the desert for bodies, volunteers from churches and nongovernmental organizations have organized to provide rescue services to save those on the brink of dehydration. "In the Southwest, you can't turn your back on it," says Juarez.

According to the Immigration and Naturalization Service (INS), border deaths increased from 270 in 2001 to 463 in 2005, the highest number in a decade, despite tripling the number of Border Patrol agents under the Patriot Act of 2001.

When U.S. authorities cracked down on the Tijuana–San Diego border, they assumed the harsh desert to the east would provide a natural boundary. "They never imagined people would try to cross there, but they were wrong," says Juarez. During the 12-month period that ended in October 2005, the vast majority of deaths were concentrated in Arizona and Texas, where 261 and 140 people died, respectively, compared to only 49 deaths in California and 13 in New Mexico.

Critical of immigration policies she believes have contributed to the rising death toll, Juarez is now preparing for law school. "As a forensic scientist, my job is to provide justice to the deceased," says Juarez. "But I've realized I need to expand into the world of policy to make the kind of broader changes that are needed."

Chelsey Juarez

JIM MACKENZIE

Just as archaeologists match ceramic shards to their place of origin by analyzing soils, pottery, and glazes, Juarez hopes to match human remains to their place of birth by examining teeth.

Embedded

By Scott Rappaport

In the winter of 2004, UC Santa Cruz alumnus Ian Olds and a film colleague flew to the Middle East with the hope of shooting a behind-the-scenes documentary on the Iraq War. Two months later, they returned to the United States, armed with footage they would edit into an award-winning film that provides a rare glimpse into the days leading up to a violent insurrection in Falluja.

JIM MACKENZIE

Built around surprisingly candid interviews with soldiers from the U.S. Army's 82nd Airborne squad, *Occupation: Dreamland* captures the soldiers as they struggle to adhere to the army's code of conduct—and simply survive—in an often ambiguous and always lethal environment. That the film was shot just before the city was nearly destroyed in one of the bloodiest battles of the war, makes the documentary even more compelling.

Occupation: Dreamland was released nationwide in 2005, screening in more than 20 cities to critical acclaim; it is still being shown in selected theaters today, as well as on the Sundance cable television channel, and a DVD was released in March. *New York Magazine* noted that the film "recalls Stanley Kubrick's *Full Metal Jacket*—except with real kids."

Last spring, Olds and his codirector Garrett Scott were honored with a 2006 Independent Film Spirit Award in the "Truer than Fiction" category at a Santa Monica ceremony televised nationally the night before the Academy Awards. Presented annually to an "emerging director of nonfiction features," the award comes with an unrestricted grant of $25,000.

"The film is an attempt to break through the vast wall between the American public and the war in Iraq," says Olds, who received a bachelor's degree in film/video and anthropology from UC Santa Cruz in 1998. "It provides a hole in that wall, a look in to get a better sense of the war."

Olds's motivation for undertaking the project was not only the U.S. invasion of Iraq, but the rapidly changing face of war coverage.

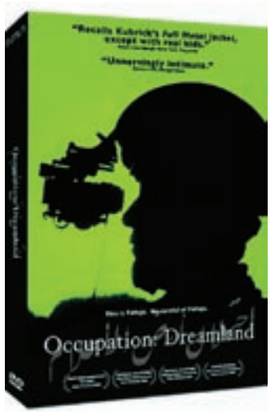
"To me, the world seemed like a different place—more so after the invasion than it did after September 11," says Olds. "It seemed like a world with new kinds of wars and new sets of consequences. There was also unprecedented access because of the military's embedding program. But the media was not taking advantage of it, and much of the reporting about the invasion was jingoistic and simplistic."

With only tape stock, body armor, and airplane tickets, the two filmmakers flew to Jordan and drove 10 hours to Baghdad, looking for contacts. "You couldn't call from the U.S. to arrange embedding with the Army because we would just be denied," explains Olds. "But it's a strange phenomenon. Once you're there, it's kind of like you belong—why else would you be there?"

Olds and Scott eventually arranged

"The film is an attempt to break through the wall between the American public and the war in Iraq. It provides a hole in that wall, a look in to get a better sense of the war." *—Ian Olds*

to join a three-day mission with the Alpha Company's 2nd Platoon from the 82nd Airborne, after explaining to the battalion commander that they wanted to make a movie about a day in the life of an American soldier. They ended up staying six weeks.



"It was strangely easy to get access to the soldiers," recalls Olds. "There was no censorship—nobody ever looked at a single frame of our footage. They felt they had nothing to hide, and that the longer we stayed, the more accurately we would represent them. It's changed now. That was only nine months after the invasion. There is much more control of information now by the military."

At first, Olds and Scott just hung out with the eight squad members; but as the filmmakers spent more time living with the soldiers, the conversations became more intimate. "When you come back from a mission, all the walls are down because you have shared an intense experience—maybe a firefight or a bomb going off," says Olds. "So they began to trust us. We also agreed from the beginning there would be no voiceovers in the film, so it would all be in the soldiers' own words. We thought that if we could just reflect the reality we saw without editorializing, that would speak for itself."

The filmmakers shot 130 hours of footage and Olds edited it down to a 79-minute documentary. Because they couldn't get insurance in a war zone to rent gear, they purchased their own cameras. All the night vision footage was shot with a consumer camera—they borrowed night vision goggles from the soldiers and secured them to the camera with pieces of wood and duct tape. Olds says they just kept shooting footage because it was usually too dangerous or hectic to review the tapes along the way.

"When I first got there, I was very frightened," notes Olds. "My first day I was at the site of a car bomb; it was a very gruesome scene. Another day, a mortar landed 100 feet from me. I went over and saw how the shrapnel tore into the walls and it was terrifying to see the 'kill radius' of the shrapnel—that kind of haunted me."

"But it was also scary how quickly we got used to it," Olds adds. "There was this weird adrenaline. It was almost dangerous because it made you act reckless. So we would look at how the soldiers acted to see how scared we should be."

KEVIN WINTER/GETTY IMAGES

Actors Willem Dafoe and Lili Taylor present Ian Olds (left) with a 2006 Independent Film Spirit Award, which includes an unrestricted grant of $25,000.

Tragically, after surviving the Iraq experience, codirector Garrett Scott died unexpectedly of a heart attack, two days before the Independent Spirit Awards show in March. Olds reacted by taking half the money they were awarded at the ceremony and using it to create a grant in Scott's name to support independent documentary filmmakers. Olds then returned to Columbia University to successfully complete his M.F.A. degree in film.

Olds is planning a trip to Afghanistan this fall to shoot a new documentary, and he is also working on a script for a feature film centered around a hotel for journalists in Iraq. But it's clear that *Occupation: Dreamland* represents more than a turning point in his filmmaking career.

"I didn't know what to expect when I went to Iraq," reflects Olds. "I had never been in a war zone—I'd never even been to the Middle East. And when I got back, I felt an overwhelming sense of futility for both the soldiers and the Iraqi people. But I also had more respect for the soldiers as individuals. I had always thought of the military as a machine, but I was struck by the fact it was just a bunch of guys who were trying to figure it out as they go along."

Paving the Road to Graduate School

Michael Eccleston meets with faculty mentor Aída Hurtado in UCSC's Chicano/Latino Research Center.

By Jennifer McNulty

Michael Eccleston is going to graduate school this fall. A devoted single father, Eccleston earned a bachelor's degree in psychology from UC Santa Cruz in January and was prepared to put off graduate work until his 2-year-old son is older. But psychology professor Aída Hurtado recognized Eccleston's talent and encouraged him, pointing out the advantages of starting his Ph.D. while his little boy is in preschool.

"I really wanted to go to graduate school, but I didn't think I could because of my commitment to my son," recalls Eccleston, who shares custody with his son's mother, who lives 80 miles away. "Talking with Aída, I realized I could do it because I'll be in a position to relocate when he starts kindergarten. I'll be done with course work at that point."

In one frenzied week, Eccleston wrote a statement of purpose, took the Graduate Record Examinations (GRE), and applied to UCSC's doctoral program in social psychology. Eccleston aced the exams, was accepted, and received a generous fellowship to enroll this fall.

That conversation with Hurtado opened up a world of possibilities for Eccleston, and exchanges like it are happening more often at UC Santa Cruz as a result of the Chicano/Latino Research Center's Undergraduate Research Apprenticeship Program (URAP).

Under Hurtado's direction, URAP pairs undergraduates with faculty mentors who encourage students to "think beyond the B.A." The program gives participants an insider's view of academic life with the aim of diversifying the next generation of professors.

Nominated by professors, students gain valuable research experience working several hours a week as paid assistants to their faculty mentor. They participate in skill-building workshops on topics like library research and applying to graduate school, and many attend academic conferences and professional meetings with their mentors. Professors receive small stipends, and a current Ph.D. student coordinates the program and serves as an influential role model.

Established in 2000 to help open the academic "pipeline" to Latinos, URAP is available to students interested in careers in cross-border studies of the Americas. It is "suggested and recommended but not required" that students come from underrepresented backgrounds, says Hurtado.

A small program, URAP has served only 67 students so far, and 13 are pursuing advanced degrees. The program also appears to have a profound impact on undergraduate success: URAP participants have a 100 percent graduation rate, compared to about 65 percent of Latino students campuswide. "An unintended consequence of the contact with faculty and the coordinator is graduation," says Hurtado. "Whatever hurdles students are facing, they come talk with us."

Fernanda Coppel says URAP has been a lifeline as she's struggled to find her place in higher education. Coppel says she "didn't feel smart enough to go to college," but a cousin urged her to apply, and URAP has sustained her.

"No one in my family has gone to graduate school," says Coppel, who was born in Mexico. A junior majoring in literature with a minor in theater arts, Coppel has embraced URAP's goal of earning a Ph.D. "I really see the need for people of color in academia."

Alma Martínez is Coppel's mentor. An associate professor of theater arts who specializes in Chicano and Latin American theater, Martínez says URAP would've made a "world of difference" to her as an undergraduate at the University of Southern California. "I enrolled straight out of high school with a full scholarship, but I dropped out because I felt alienated and isolated by this large private university," she recalls. "Nothing in my upbringing prepared me to handle the university experience."

Martínez relied heavily on input from Coppel when she designed the first Chicano dramatic literature course in the Theater Arts Department. "The class was very successful, thanks to Fernanda's research," says Martínez, a veteran performer and scholar of El Teatro Campesino who sought Coppel's input regarding which plays and scholarly articles to include in the course.

Coppel, meanwhile, is finding her voice as a playwright, embracing the traditions of Teatro Campesino and incorporating Spanish into her works. Yet Coppel describes feeling like an outsider in some classes.

"As a person of color, a lot of times what you say is invalidated because of the ways you choose to communicate it," she says. "My form of communication is different because of the different experiences I have faced, being a first-generation Mexican immigrant."

When the Theater Arts Department declined to produce Coppel's play *Strong Women Cry Poetry* in part because it was "too culturally specific for their season," Martínez affirmed Coppel's artistic vision and urged her to produce it herself in a different campus venue.

"It was hard," Coppel says of producing *Strong Women,* a largely autobiographical play that tells the story of Dora, a performance poet in her 20s who immigrated illegally to the United States at the age of 11. Seeing her work performed on stage was "surreal," recalls Coppel.

"It really is like putting yourself out there," says Coppel. "It's a lot of hope. It's a lot of faith. But Alma told me 'You learned the secret to theater, which is producing your own work.' It's a blessing that I've had to struggle. It builds character."

Those challenging experiences underscore the value of URAP, says Coppel, who also benefited greatly from the support of current program coordinator Ranu Sinha, a doctoral candidate in psychology. "I don't know if Alma and Ranu realize how much it means to me to have had the kind of guidance they've given me," she says. "I want to continue the cycle."

Professors are selective about whom they nominate for URAP and tend to choose students who might otherwise fall through the cracks, explains Hurtado.

"Students get overlooked for varied reasons—maybe because they're quiet, or they don't know how good they are, or they're intimidated about talking to their professors," she says. The good news is that URAP provides the individual attention that builds confidence and breeds success—and changes the face of higher education.

"Getting Latino students here is only half the job," says Martínez. "Keeping them here and offering them an education that reflects the diversity of the state is a big challenge. URAP is a positive force in the transformation of the academy, and it can be a catalyst for even greater social change."

Eccleston and Hurtado celebrate the conclusion of his undergraduate years.

Jim MacKenzie

Alumni News

Alumni Association Councilors, 2006–07

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Karen Rhodes '77, *Vice President for Internal Affairs*

Stevenson
David Brick '69
Amy Everitt '92, *Vice President for External Affairs*
Paul H. Mixon '71
Joan Fitting Scott '69, *Executive Vice President*

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Jerry Ruiz '77
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Mary Doyle '74
John Gutierrez '73
Rob Sawyer '72

Kresge
Panda Kroll '81
Paul D. Seeman '76
Sharif Traylor '85

Oakes
Filomena Trindade '85, *Vice President for Administration*
Ruth P. Wilson '75

College Eight
Susan Brutschy '80
Aaron Cole '91

Graduate Division
Emily Moberg Robinson '04

Ex Officio
Ray J. Austin, *Chair, Student Union Assembly*
George R. Blumenthal, *Acting Chancellor*
Carolyn Christopherson, *Executive Director*
Faye Crosby, *Chair, Academic Senate*
Berra Yazar, *President, Graduate Student Association*

Mark your calendar for reunion weekend

MATT FITT

At the All-Alumni Reunion Luncheon held during the April 2006 reunion weekend, California Assemblymember **John Laird** (Stevenson '72, center) shared a laugh with **Bryan Gross** (Stevenson '69) and **Stephanie Wood Coleman** (Merrill '70) while looking at photos of students and faculty from the 1960s.

Banana Slug Spring Fair reunions planned April 28–29

Colleges, academic departments, and affinity groups of all kinds are planning receptions, panel discussions, and student mentoring opportunities for Banana Slug Spring Fair reunions, April 28–29. Among the events already planned are:

- **40th reunion for the Class of '67**—UCSC's first 40th reunion
- **Alumni Vintners Wine Tasting**
- **Alumni Reunion Luncheon** with special recognition to '67, '72, '77, '82, '87, '92, '97, and '02 graduates
- **Alumni Panel Discussion**
- **Distinguished Faculty Lecture**

The Alumni Association welcomes reunion suggestions from grads (see contact information on the next page).

Invite your friends to join you at the reunion, and check the web site for up-to-the-minute news.
alumni.ucsc.edu

Summer Bridge Program to hold first reunion

A reunion for participants in UCSC's Summer Bridge Program will be held next April. Begun in the 1980s, the program brought students from low-income and ethnic minority families, some the first in their family to attend college, to campus for five weeks prior to enrollment.

Now held during the academic year, Bridge helps students develop their math and writing skills, introduces them to university life and campus services, and forges lifelong friendships.

"The academic expectations were so intense that we 'Bridgees' were forced to bond," recalls Pepperdine faculty member Gregory Canillas (Cowell '90), a member of the UCSC Alumni Council. "Twenty years after participating in the program, my closest friends are still those Bridgees."

Among those invited to the reunion will be former staffers, including Michelle Handy (Oakes '80), director of UCSC's Educational Opportunity Programs (EOP), and Rosalee Cabrera, director of El Centro, UCSC's Chicano Latino student resource center.

Alumni and friends support college funding

Former UCSC Alumni Association president Ken Doctor graduated from Merrill 35 years ago, just three years after the college was founded. His experience there made an enduring impression.

"The UCSC college system is absolutely unique," he says. "The proximity to classes, faculty, and friends seeded the atmosphere with interaction and engagement."

With leadership from Doctor and former UCSC Foundation President Ken Feingold (Cowell '71), the Alumni Colleges Fund (ACF) was founded in 2003 to support and strengthen UCSC's college programs. Since then, nearly 150 generous alumni, faculty, staff, parents, and others have donated $203,000 to the fund, which will be used to establish a permanent endowment at every college. Each donor gave $1,000 or more to purchase a personalized tile that will be prominently and permanently displayed at the donor's college of choice.

The fund's goal is 100 tile donors for each college. A 6-by-6-inch tile recognizes a gift of $1,000; a 12-by-12-inch tile recognizes a gift of $5,000. Once more than 20 tiles have been donated to a college, a display area will be built.

To donate to the ACF, contact Jennifer Wood, director of development, Annual Fund and Colleges, at (831) 459-2489, or *jmwood@ucsc.edu*. Donations may also be made online at *giveto.ucsc.edu*. A "virtual tile wall" can be viewed at *giveto.ucsc.edu/tile_donors*.

JIM MACKENZIE

Ken Doctor holds the tile with his name that will become part of a display at Merrill College.

TONY NGUYEN

Participating in UC Day 2006 *are (from left) San Diego-area high school counselor Andrés Martín (Oakes '98), California Governor Arnold Schwarzenegger's director of public affairs Margaret Fortune, and UC President Robert C. Dynes. UC Day brings alumni volunteers to Sacramento to advocate for UC and higher education. Volunteers meet with their legislators, take part in briefings by top UC officials, and meet Sacramento-area alumni. UC Day 2007 will take place in Sacramento on March 27, and alumni are invited to participate by contacting Allison Garcia at the UCSC Alumni Association.*

Contact the Alumni Association

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

Web: **alumni.ucsc.edu**
E-mail: **alumni@ucsc.edu**
Toll free: **(800) 933-SLUG**

Online library program for association members

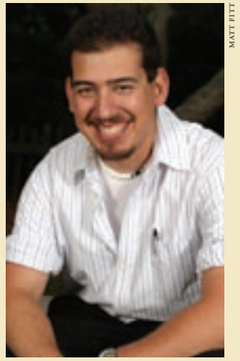
A new pilot program gives all UC Alumni Association members and Friends of the Library free access to ProQuest Research Library, an electronic data service featuring thousands of online journals and magazines covering a wide array of subjects.

Offered through the University of California Digital Library, online library services are being offered at no charge through June 30, 2007, as a pilot test to determine interest and develop the program's mechanics.

ProQuest Research Library is a searchable collection of more than 4,000 full-text online journals and magazines. Most provide coverage beginning in 1992 (or 1995 at the latest) and offer access to the full text or text and graphics of covered articles.

For more information about this new library electronic data service, go to *library.ucsc.edu/.test/alumni*.

To join the UCSC Alumni Association, contact the Alumni Office (contact information listed above).



MATT FITT

UCSC Alumni Association College Service Awards

During his senior year, Rafael Valadez (Merrill '06) was honored with the $500 Merrill College Service Award. Valadez, who served as a resident assistant, peer adviser, and role model at Merrill, was one of 10 students (one per college) who received such an award in 2005–06 for their contributions to enriching community life. In all, the association provided undergraduates with $96,000 last year for college-service and financial-need-based scholarships.

ALUMNI ONLINE COMMUNITY

- **Become a member—be highlighted in the Alumni Directory.**
- **Help old friends find you—update your data online.**
- **Develop your career—explore online mentoring and career services.**
- **Stay in touch—find out about reunions and events near you.**

alumni.ucsc.edu

Alumni Notes

Cowell College

'71 Donna FELDMANN Marbach has two poems in a new poetry anthology titled *The Dire Elegies: 60 Poets on Endangered Species of North America* (FootHills Publishing); she is the president of Just Poets, a literary organization in the Rochester, N.Y., area, where she lives.

'73 Scott CRASK recently celebrated his ninth year of employment at Buckelew Programs, which provides services and housing for adults with mental illness in San Rafael, Calif.

Kathryn SULLIVAN has been elected to the position of vice chair of the National Science Board, which provides oversight of, and establishes policies for, the National Science Foundation, as well as advising the president and Congress on policies related to science and engineering research and education. Sullivan also serves as science adviser to the Center of Science and Industry in Columbus, Ohio.

'74 Joel SCHAFFER, a commissioner with the Federal Mediation and Conciliation Service, was recently awarded his agency's highest honor, the Directors Award, for assisting in the successful mediation of the 2002 West Coast port lockout and the 2006 lockout of dancers of the Washington Ballet; he has also been instrumental in the creation of national mediation services in Hungary and Croatia. He and his wife, Donna, live with their son, Adam, in Orinda, Calif.

'77 Michele GERARD, a psychologist with a practice in Boulder, Colo., has completed a three-year cutting-edge trauma program, Somatic Experiencing; she has a 21-year-old stepdaughter and an 11-year-old stepson.

'81 After earning a master's degree in public health from UC Berkeley, **Lisa GELLING** worked for the California Emerging Infections Program on numerous disease surveillance projects funded by the U.S. Centers for Disease Control and Prevention. Since 2005 she has been working on Kaua'i as a communicable disease epidemiologist for the Hawaii State Department of Health.

'83 Richard TURMAN is serving as deputy assistant director for budget at the U.S. Department of Health and Human Services in Washington, D.C.

'84 Carlos PAGÁN earned a doctorate in education from Columbia University in 2005.

'93 Carrie PAFF holds a master's degree in educational theater from New York University and is the cofounder of StageWrite, Building Literacy through Theatre. She was last seen as Emma in *Betrayal* at the Aurora Theatre Company in Berkeley, and other recent Bay Area credits include the world premiere of *The Haunting of Winchester* at San Jose Rep, *Becoming Memories* (Shellie Award nomination for best supporting actress) and *Picasso at the Lapin Agile* at Center REP, and the world premiere of Charles Grodin's *The Right Kind of People* at the Magic Theatre.

'01 Jane ROSENTHAL, a student adviser and learning specialist at New York University, is pursuing a Ph.D. in education.

We'd like to hear from you

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

Stevenson College

'68 Allan HARRIS is wrapping up his last year with Bayer (Cutter/Miles) in Berkeley after 29 years in various financial positions.

'69 Joan FITTING Scott assumed her duties as president of the UCSC Alumni Council in July; her new book, *Skinning the Cat: A Baby Boomer's Guide to the New Retiree Lifestyles*, is due out this fall (*bbotw.com*).

'73 Winton CASS's book *Fairbanks Station* was due out in June and is about his involvement with the CIA as a special technician from 1955 to 1985.

'78 Linda GRAY Schmale was recognized at the 2005 Colorado Art Educators Association conference as Charter/Private/Independent School Art Teacher of the Year; she is teaching ceramics and jewelry at Gateway High School in Aurora, Colo. Her husband, **Michael SCHMALE** (Stevenson '76), works for Quest and was honored twice in 2005 for top sales and service.

'84 Shari ANDERSON Allison was recognized as an Outstanding Research and Writing Attorney by the National Association of Federal Defenders at the association's conference in San Francisco in May; she has been with the Federal Defender's Office in Las Cruces, N.M., for the past nine years, specializing in the appellate defense of indigent persons charged with committing federal crimes. She lives with her husband, **Greg ALLISON** (Stevenson '83), and their son, Nathan, in Las Cruces.

'86 Richard NUNES received a master's degree in public health from Harvard University in 2005; he is now chief adolescent psychiatrist for Santa Clara County.

'88 Robin DONOVAN's new book, *Campfire Cuisine: Gourmet Recipes for the Great Outdoors*, was published in May by Quirk Books (*www.campfire-cuisine.com*); she is a San Francisco–based freelance journalist specializing in the subjects of food, cooking, and travel.

'89 Lisa LEVINE Whelan and her husband, Bob Whelan, are proud to announce the birth of their baby girl, Evie Levine Whelan, in January; she reports that her three-year-old, Grady, is doing great and they're all adjusting to the joys and exhaustion of having an infant in the house.

'92 Daniel TERDIMAN is a staff writer covering the culture of technology for CNET News.com and living in San Francisco with his wife, Kathleen; he has an M.S. from Columbia University Graduate School of Journalism and has been a freelancer for *Wired News*, the *New York Times*, and many other publications.

'96 Jennifer HENDERSON Mayer is living in Fresno with her true love of four years, Doug, and their two mutts and pursuing an M.A. in English composition.

'98 Andrea VAN NOTE King is expanding her private practice in career and educational counseling services and offering a 50 percent discount for UCSC alumni (visit *careerful.com*).

'01 Stefano BLOCH completed an M.A. in urban planning at UCLA in 2005 and is now bound for the University of Minnesota, Twin Cities, to pursue a Ph.D. in geography.

Crown College

'72 Stephen VINCENT planned to marry his good friend Alla Trufanova in May, and he was getting a delightful daughter and son in the deal; they will continue to live in Boston.

'73 Bill ALLAYAUD got married last year to Jennifer Beckman, and they had his first child, Juliette; he is still state director of Sierra Club California.

'80 Gael GRAHAM is the author of *Young Activists: American High School Students in the Age of Protest* (Northern Illinois University Press, 2006), a study of how the civil rights movement, the Vietnam War, and the antiauthoritarian spirit that was so pervasive on college campuses in the 1960s infiltrated American public high schools and created student activists. Graham is an associate professor of history at Western Carolina University.

'87 Todd SAED has been a "bit marooned" in Asia for the past 10 years and considers it a fair trade for being less vulnerable to those in power in the U.S.; he is now a professor at Kookmin University in Korea.

'89 Akil KHALFANI's book *The Hidden Debate: The Truth Revealed about the Battle over Affirmative Action in South Africa and the United States* was published by Routledge in 2005; he is an assistant professor of sociology at Essex County College in Newark, N.J., and president and founder of ATIRA Corp., a think tank that develops solutions to African problems globally.

After nearly 20 years as a master's-level social worker, **Andrea BERNASCONI Moore** is now raising her two sons and handling the administrative responsibilities of her and her husband's two companies, Kollabra.com and ioSafe.com.

'01 Amy JENKINS Johnsonbaugh and her husband, **Brian JOHNSONBAUGH** (Crown '01), celebrated their first wedding anniversary in October 2005.

'03 Nathan CARDOZO is in his first year at UC Hastings law school.

'04 Jamie WINSLOW is working in Santa Rosa for Canine Companions for Independence, a national organization that trains assistance dogs for people with disabilities.

Merrill College

'75 Ronald WEITZER is a professor of sociology at George Washington University and has published a new book, *Race and Policing in America: Conflict and Reform* (Cambridge University Press, 2006), a comparative analysis of the perceptions of and personal experiences with police officers of Latinos, African Americans, and whites, along with a discussion of police reform. He has also written several recent articles on the growing moral panic in America over sex trafficking and prostitution.

'78 Joseph HOBBS, a professor of geography at the University of Missouri at Columbia with expertise in Southeast Asia, is traveling to Vietnam this fall to establish research ties with universities and recruit students.

'79 Ron KAPLAN's recording *Saloon: The Ron Kaplan * Weber Iago Album* received reviews in the December 2005 *JazzTimes* and the March issue of *DownBeat*, as well as in the February/March issue of *JazzHot* in Paris; a digital remastering of his 2000 recording *Lounging Around* was released this year.

'80 Cathy CALFO is campaign manager for Democrat Phil Angelides who is running for governor of California; she has helped him run three campaigns for state treasurer and served as a top executive under Angelides in the treasurer's office. **Lori PLAGER** is the senior director of licensing at Activision, a video game company; she lives in Studio City and just celebrated her ninth year as a breast cancer survivor.

'84 Sharon CARLSON is a Spanish-language interpreter in Los Angeles.

'85 Persis KARIM has edited an anthology about the experiences of Iranian women, titled *Let Me Tell You Where I've Been: New Writings by Women of the Iranian Diaspora* (University of Arkansas Press, 2006); she is an associate professor in the English Department at San Jose State University, where her research interests include comparative literature and ethnic American literature.

'92 Erika ENGELMANN Erhart is executive director of New Trier High School's educational foundation and manager of New Trier's alumni relations department. She lives in the Chicago area, is married with two boys, Nicholas and Jacob, and enjoys running along the Chicago lakefront; she completed the Chicago Marathon in 2005.

'96 Erin BROWN writes that UCSC was one of the best experiences of her life and advises students to enjoy it while they can because the "real" world is just not as fun.

'99 Brian CHERNICKY owns RealOnlineMarketing.com and MarketingSantaCruz.com, Internet marketing firms in San Diego and Santa Cruz; he is also an instructor of Internet marketing for the Small Business Administration's SCORE program.

Every astronaut is impressed by the view of Earth from space. For NASA astronaut Steven Hawley, though, the view in the other direction was just as impressive—an endless expanse of stars shining clear and bright, without the twinkling distortions of the atmosphere or the dimming effects of light pollution.

"As an astronomer, I always liked to look at the stars, but most of the other astronauts liked to look at Earth, so there was always a bit of a battle over which way we were going to point the shuttle," said Hawley, who flew on five space shuttle missions and now serves as director of astromaterials research and exploration science at NASA's Johnson Space Center.

JIM MACKENZIE

For profiles of Steven Hawley and other UCSC alumni, go to: **www.ucsc.edu/alumni_friends/profiles**

Porter College

'79 Suzanne OLMSTED was awarded tenure and appointed associate professor at San Francisco Art Institute; she will be taking a sabbatical in 2007, during which she will be a resident artist in Antwerp, Belgium.

'83 Michael DRINKARD's novel, *Rebels, Turn Out Your Dead*, was published by Harcourt in February; set during the Revolutionary War, the book tells a story of the conflict from the perspectives of a Long Island hemp farmer, his wife, and teenage son. Drinkard lives in Brooklyn with his wife and their three daughters; he is senior vice president at Cumberland Packing Corp. in the Brooklyn Navy Yard, the historical location of his novel.

'88 Danelle McDERMOTT works in the field of financial organizing in San Francisco; she belongs to the Bay Area chapter of the National Association of Professional Organizers.

'91 Matthew BOKOVOY's book *The San Diego World's Fairs and Southwestern Memory, 1880–1940* (University of New Mexico Press, 2005) looks at how two San Diego expositions displayed a portrait of the Indian and Hispanic Southwest for the American public and how these images had far-reaching effects on consumer society of the 1930s and on San Diego's modern development. Bokovoy is an acquisitions editor at the University of Oklahoma Press in Norman, where he lives with his wife, Tabetha.

'93 Charlotte GULLICK's first novel, *By Way of Water*, was published by Penguin Putnam in 2002; she has recently been named director of the Mendocino Coast Writers Conference.

'94 Josh BOOK is the supervising animator for the new show *Tak and the Power of Juju* at Nickelodeon Animation Studios.

Ryan GABRIEL and his wife, Liliana, are pleased to announce the birth of their first baby, Laura, in February; both parents work for the U.S. government in Bogota, Colombia.

'97 Robin KRIEGER Mejia, a freelance journalist, has won a Livingston Award for National Reporting for her story "Reasonable Doubt: Can Crime Labs Be Trusted?" which aired on *CNN Reports*.

'01 Mackenzie SANTIAGO is shaping surfboards for M10 Surfboards in Santa Cruz and going back to school to train as an R.N.

'02 Daniel STEINBOCK is pursuing a Ph.D. in learning sciences and technology design at Stanford University.

continued on page 28

Kresge College

'80 Seth SERXNER reports to all his friends from debate club that he is still a master debater.
'84 Martha GRAHAM is a freelance writer and works in the Advertising Department at the *Santa Cruz Sentinel;* she is married, has a daughter, and lives in the Santa Cruz Mountains.
'91 Andre DOUMITT has been named director of business development for BAE Systems (formerly British Aerospace) in charge of integrated navigation and flight control systems for military and civilian customers in the U.S. and international markets; he lives with his wife, Isabel, and their two children in Culver City, Calif.
'92 Jered LAWSON and his wife, Nancy Vail, who works for the UCSC Center for Agroecology, are partners in Pie Ranch, an organic farm near the coast north of Santa Cruz; their aim is to make the farm a model of sustainable agriculture and an educational center where urban children can learn about the practice.
'95 Shelley BATES has published seven novels since graduation, most recently *A Sounding Brass* (Time Warner, 2006); her book *Grounds to Believe* won a 2005 RITA Award for best inspirational novel from the Romance Writers of America.
'99 Reyna GRANDE's first novel, *Across a Hundred Mountains* (Atria Books, 2006), taps into the hopes and fears of children left behind in their native countries when their parents come to the U.S. to work.

Oakes College

'76 Kenneth COALE (also a Ph.D., biology '88), the director of Moss Landing Marine Laboratories, has been awarded a $20,000 California State University Wang Family Excellence Award; he teaches chemical oceanography and supervises the thesis research of eight CSU graduate students.
'82 Janice ROHN is vice president of user experience at World Savings Bank, where she's responsible for website design and usability and online banking; she has been president of the Usability Professionals Association and has given many keynote speeches and presentations at conferences.
'98 Christine PADILLA is a field representative for U.S. Congressman Tom Lantos in his San Mateo office; she is also the Filipino community liaison for Lantos's 12th District.
'02 Niketa CALAME graduated with a master of fine arts from Actors Studio Drama School at the New School University in New York in 2005; visit *www.niketacalame.com* for performance updates.

College Eight

'78 Joanne RATNER Foxxe is the president of the Northern California Chapter of Residential Specialists, a designation held by only 3 percent of realtors nationwide, she notes.
'85 Scott SHAFFER received his master's degree in physical therapy from Mt. Saint Mary's College and started his own business, North Bay Physical Therapy, specializing in aquatic rehabilitation, in Santa Cruz.

College Nine

'03 Tero ISOTALO is working on an M.S. in nanoscience in Finland.

Graduate Studies

'72 David TRAXEL (M.A., '74 Ph.D., history) is the author of *Crusader Nation: The United States in Peace and the Great War, 1898–1920* (Knopf 2006), which follows his book *1898: The Birth of the American Century* (Knopf 1998). Traxel teaches in the Humanities Department at the University of the Sciences in Philadelphia.
'75 Marc HOFSTADTER (Ph.D., literature), whose poems, translations, and essays have appeared in over 40 magazines, has published a new volume of poems, *Shark's Tooth*. Hofstadter won the 2004 Whetstone Poetry Award and served as the librarian of the San Francisco Municipal Railway from 1982 until his recent retirement. He lives in Rossmoor (Walnut Creek, Calif.) with his partner, David Zurlin.
'84 Doug EERNISSE (Ph.D., biology) is a professor at Cal State Fullerton, where he teaches marine biology and evolution courses; he was awarded a sabbatical fellowship to be at the National Evolutionary Synthesis Center at Duke University.
'91 Eberhard SCHEIFFELE (grad. cert., theater arts) is teaching psychodrama at Ekaterinburg Liberal Arts University in Russia on a Fulbright grant; interest in psychodrama there is huge, and he has held many trainings, lectures, and conference presentations. He has been interviewed for newspapers, radio, and TV, most recently for an article about his work in *Ural Airlines Magazine*.
'93 Miyoko CHU (grad. cert., science writing) is an ornithologist and staff science writer at the Cornell Laboratory of Ornithology; her first book, *Songbird Journeys: Four Seasons in the Lives of Migratory Birds*, was published in March by Walker & Co.
Sharon HELSEL Ghamari-Tabrizi (Ph.D., history of consciousness) is the author of *The Worlds of Herman Kahn: The Intuitive Science of Thermonuclear War* (Harvard University Press, 2006), in which she provides a portrait of the famous nuclear strategist in the context of the dramatic shifts taking place in military culture during the cold war.
'94 Kristal Brent ZOOK (Ph.D., history of consciousness) has a new book, *Black Women's Lives: Stories of Pain and Power* (Nation Books, 2006); she is a contributing writer for *Essence* magazine, a commentator for National Public Radio, and an adjunct professor at the Graduate School of Journalism at Columbia.
'99 Shawn GOULD's (grad. cert., science illustration) illustration of an ancient fish that walked on land, *Tiktaalik roseae*, originally done for the National Geographic Society, has been published repeatedly, accompanying *New York Times* and AP stories about the "missing link" fish fossil.
'00 Aureliano DeSOTO (Ph.D., history of consciousness) was appointed assistant professor in the College of Arts and Sciences at Metropolitan State University in Saint Paul, Minn., where he will develop and teach courses in ethnic and Chicano-Latino studies as well as advise students.
'03 Andrew JOLIVÉTTE (M.A. and Ph.D., sociology) is the editor of a new book titled *Cultural Representation in Native America* (AltaMira Press, 2006), a collection of essays on the contemporary experiences of Native American activists, academics, and community members; Jolivétte is an assistant professor in the American Indian Studies Department at San Francisco State University.

In Memoriam

'67 Tom CUTHBERTSON (Cowell College), an avid bicyclist and author of the popular bicycle fix-it manual *Anybody's Bike Book*, who enjoyed Scottish country dancing and body surfing, died of cancer at his home in Santa Cruz in October 2005; he was 60.
'69 Craig SCOTT (Stevenson College), who for the past few years had been living in Helensburgh, Scotland, where he and his wife owned a bookshop, died of cancer in April; he was 57.
'75 Malcolm BROWN (College Eight), a career commercial fisherman, avid photographer, and resident of Anchorage, Alaska, died at home in January of natural causes; he was 57. **Clifford (Kip) GATES** (Oakes College), a graduate of UCLA Law School, where he was editor of UCLA's *National Black Law Journal,* died in July.
'78 Colleen CROSBY (Kresge College), an early proponent of organically grown, fair trade coffee, who founded the Santa Cruz Coffee Roasting Company and testified on behalf of coffee farmers before the House Subcommittee on International Relations, died in April after a lengthy illness; she was 55.
'79 Carlos (Carl) WALKER (M.A., biology) died in Santa Cruz of complications from diabetes in August; he was 57. He and his wife, **Jeannie LOGAN** (College Eight), have been volunteers at the Seacliff State Beach Visitors Center. Carl is missed by his many friends.
'83 Jeanne MORRISON (Crown College), a librarian and bagpipe player, died in April 2005 of cancer; she was 57.
'86 Karl VEDDER (Cowell College), a tennis player and an aspiring writer with a novel close to completion, died in San Francisco in May; he was 44.
'99 Patrick CAURANT (Stevenson College), a middle school math and science teacher and a talented cyclist who was preparing for a national championship, died in July a week after he collided with a pickup truck while on a training ride; he was 28.

UCSC scholarships

Changing the world, one student at a time

Matt Bromage, age 23

- B.S., Computer Engineering, UCSC, 2005
- Ph.D., Computer Engineering (anticipated 2008)
- Developer, SEA-LABS Wireless Sensor Network

Supported by:

- UCSC Center for the Dynamics and Evolution of the Land-Sea Interface Graduate Fellowship
- Friends of Long Marine Lab Research Award
- Ferd Ruth Award, Myers Oceanographic and Marine Biology Trust

Undergraduate Matt Bromage developed SEA-LABS, a device that tracks environmental changes that are killing the world's coral reefs. Built at the request of UCSC biologist Donald Potts, Matt's sensor enables scientists to monitor remote environments affordably, in real time. Student-support gifts from donors helped make Matt's design and its real-world application possible.

The financial support Matt received expanded his educational opportunities—giving him the time, confidence, and encouragement to innovate. Now the recipient of a UCSC graduate fellowship, Matt plans to launch two SEA-LABS prototypes off the coast of Hawaii as part of his Ph.D. focus. Future applications for his device could include early detection of tsunami-sized waves and affordable habitat monitoring for developing nations.

Gifts that support UCSC students are gifts that change the world. The time to giveto.ucsc.edu is now. For more information, call Jennifer M. Wood at (831) 459-2489, or e-mail *jmwood@ucsc.edu*.

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