Helping hands

Alumna Adilah Barnes is one of hundreds of volunteers who help the campus flourish

Plus: the ethics of fetal surgery, Peter Gizzi on poetry, the subatomic world of particle physics, alumni notes, and more
The value of volunteers
Hundreds of volunteers, including nine profiled in this issue, lend time and expertise to support UCSC's academic offerings, activities that serve students, and the campus's popular public facilities.

In his own words
UC Santa Cruz assistant professor Peter Gizzi, one of this country's leading young poets, shares his thoughts about writing and reading poetry—and, in the process, demystifies his creative craft.

Dissecting fetal surgery
In a compelling new book, UC Santa Cruz sociologist Monica Casper examines the complex health and ethical issues behind the latest "medical miracle," fetal surgery.

Tools of their trade
The detectors developed by Robert Johnson and his colleagues at UCSC's Santa Cruz Institute for Particle Physics track and record the subatomic particles that fill our universe.

Auditing the atomic age
A new study directed by UCSC alumnus Stephen Schwartz tabulates a half-century of U.S. spending on nuclear weapons, including an "atomic cannon," tested just once, in 1953.
The success of a university depends not only on the excellence of its faculty, students, and staff members but also on a dedicated corps of friends who make so many special projects possible.

UC Santa Cruz is fortunate to have hundreds of devoted friends and volunteers who are attracted to our campus’s many high-quality programs. These individuals give generously of their time, energy, and resources in ways that contribute enormously to the depth and diversity of UCSC’s educational environment.

Individuals like Joseph Long and Jack Baskin have made major contributions that established our world-class marine laboratory and our new School of Engineering. Anne Neufeld Levin donated her family’s collection of Holocaust memorabilia to UCSC and created an endowed chair to ensure that UCSC will continue to offer Holocaust-related courses. At UCSC’s Farm & Garden, Louise Cain was a familiar face for years, lobbying the campus to support the apprenticeship program and quietly promoting the value of hands-on education years before it became fashionable.

UCSC thrives because of the work of individuals like these and the many others whose day-to-day contributions provide vital support to the campus and its many auxiliary programs. Most of these volunteers work behind the scenes where their efforts go unrecognized by all but those closest to them.

In this issue of the Review, we shine the spotlight on nine such individuals. For each of the volunteers profiled in these pages, however, there are hundreds more like them.

When I ask UCSC volunteers why they contribute so generously to the campus, they often mention the satisfaction that comes from helping others, the intellectual stimulation of being part of the life of a research university, the joy of working with young people, and the sense of contributing to something greater than themselves.

But almost always, these friends of UCSC mention that they feel personally enriched by their contributions. Many indicate that they are drawn to participate in the life of the campus for the sheer pleasure of the opportunity. Some even wonder if they give as much as they get back.

Nothing pleases me more than hearing such comments, and I believe they reflect the vitality of this campus.

To each of UCSC’s dedicated volunteers, I offer my sincere thanks and appreciation. As we approach the next millennium, UCSC is fortunate to have these valued partners at our side.

M.R.C. Greenwood
Chancellor
Astrophysics second in new national analysis

In the field of astrophysics, UCSC’s faculty are among the most frequently cited in scientific journals, according to an independent national science group. The group ranked UCSC second in the nation in terms of its impact in astrophysics, with Princeton University occupying the top slot.

The Institute for Scientific Information (ISI), based in Philadelphia, ranked the universities whose research papers attracted the most attention from other scholars in each of 21 fields between 1993 and 1997. The results, published in the organization’s newsletter ScienceWatch, are presented in a series of “top ten” lists showing the “highest impact U.S. universities” in the biological, physical, and social sciences.

ISI previously ranked the UCSC department 11th for the period 1993–95.

Work on bookstore, Grad Commons starts

A year and a half from now, the area of the campus that for years was occupied by the Bay Tree Bookstore and Whole Earth Restaurant will feature a modern bookstore, a new graduate student center, and an attractive pedestrian plaza.

Construction on the $13.5 million project started late last summer. When work in the “Core East” area is completed in spring 2000, project planners predict that members of the UCSC community will come to the redesigned area—in the very heart of the campus—to meet, eat, shop, or simply enjoy the atmosphere.

The new Bay Tree Bookstore will offer an expanded selection of books, supplies, and services; a convenience store with extended hours; and a copy center. The Graduate Commons will provide recreational and office space for graduate students. The Whole Earth Restaurant, which will move into the ground floor of the commons building, will feature patio tables for people to eat on the plaza.

The project will also provide space for conference rooms and new offices for Student Affairs programs and services.

Several other major campus construction projects began in the second half of 1998, including student apartments at Social Sciences 1 and 2. The apartments will house 280 undergraduate students when they are completed next academic year.

Work is also continuing on a new Fitness Center in the East Field area of the campus. The 12,000-square-foot center is sited immediately to the south of the existing tennis courts. The facility will feature window-filled exercise areas, and work is expected to be completed this coming fall.

Construction started in fall 1997 on the Marine Discovery Center, which the UC Santa Cruz Foundation is funding at the Joseph M. Long Marine Laboratory. Work is expected to be completed this coming summer on the 20,000 square feet of aquarium and exhibit hall space, a seawater teaching laboratory, a conference and meeting room, and office space.
Per Gjerde

Adult depression often has childhood origins

When UCSC psychologist Per Gjerde began looking for early-childhood roots of adult depression, he didn’t expect to find much.

After all, the passage from childhood to adulthood is so complex and varied it seemed unlikely that any precursors evident during the toddler years would hold up through adolescence and into young adulthood.

But he was wrong. His findings were surprisingly robust, particularly for boys, who exhibit distinct personality characteristics even at age three that correlate strongly with depression later in life. For girls, too, a path toward depression emerges early on, although that path appears to be more complicated and more difficult to understand.

Intelligence turns out to be a key indicator for both sexes, said Gjerde, whose findings are based on an in-depth study of 100 individuals from the age of three to 23.

International media coverage of this study on depression, including reports on CNN and by the Associated Press, prompted many people to write Gjerde about their own experiences.

Peregrine population is flying higher

In 1970, wildlife biologists knew of only two pairs of peregrine falcons nesting in California. Now there are approximately 150 nesting pairs and an estimated total population in the state of about 750 birds, believes Brian Walton, coordinator of the Santa Cruz Predatory Bird Research Group (SCPBRG) at UCSC.

In August, the U.S. Fish and Wildlife Service (USFWS) announced a proposal to remove the peregrine falcon from the endangered species list. For Walton and his coworkers in the SCPBRG, this move represents the realization of a dream they have steadfastly pursued for almost 25 years.

“Our goal when we started was to build back the peregrine population until they could be removed from the endangered species list, so it’s very satisfying,” Walton said.

Peregrine falcon populations throughout North America crashed in the 1960s due to widespread contamination of the environment with the pesticide DDT. Peregrines absorbed the pesticide from their prey and accumulated high concentrations of it in their tissues.

The toxin caused female peregrines to lay thin-shelled eggs that dried out or broke under the weight of the nesting adults. DDT was banned in the U.S. in 1972, but its residues still persist in the environment.

The SCPBRG was the brainchild of Santa Cruz veterinarian James Roush, who teamed up with the late UCSC biologist Kenneth Norris, professor of natural history, to establish the self-funded research group at UCSC in 1975. They asked Walton to run the program. Captive breeding was one technique Walton used to restore peregrine falcon populations. From 1976 to 1992, the SCPBRG operated a captive breeding facility at UCSC.

In addition to peregrine falcons, the group successfully bred aplomado falcons, Harris hawks, and elf owls.

Peregrine chicks produced through captive breeding were typically raised by captive adult falcons for about five weeks and then released into the wild at a “hack site” when they reached the fledgling stage (the age at which birds learn to fly, 40 to 42 days for peregrines). Chicks were placed in a hack box high on a cliff and fed through a hatch for about one week until they were ready to fly, at which point the box was opened.

1973 alumnus elected mayor of San Jose

Ron Gonzales, a 1973 graduate of UCSC’s Kresge College, was elected mayor of the city of San Jose in California’s general election this past November.

Gonzales, who graduated from UCSC with a bachelor’s degree in community studies, was sworn in on January 12.

Prior to his election as mayor, Gonzales was education program manager for the Hewlett-Packard Company.

He was also a mayor and member of the Sunnyvale City Council before serving on the Santa Clara County Board of Supervisors (1989–96).
Geologist receives $625,000 Packard fellowship

For the fifth consecutive year, a UCSC researcher has garnered one of the nation's most prestigious honors for young faculty members: a David and Lucile Packard Fellowship for Science and Engineering, worth a total of $625,000.

Geologist and paleoclimatologist Lisa Sloan, an assistant professor of earth sciences, is receiving $125,000 in each of the next five years to support her research on global and regional climate change. She is one of 24 scientists and engineers chosen this year by the Packard Foundation for their exceptional promise and creative research.

UCSC is one of only four institutions that have earned at least one Packard Fellowship in each of the past five years. The others are the California Institute of Technology, the University of Chicago, and UC San Francisco.

Sloan, 38, joined the UCSC faculty in 1995. She has several ongoing research projects aimed at understanding the causes and effects of climate change. Her work combines studies of past climates based on geologic evidence with computer modeling of earth's climatic systems.

UCSC art historian is recipient of twin honors

Catherine Soussloff has been named chairholder of UCSC's Patricia and Rowland Rebele Endowed Chair in Art History. During her five-year appointment, Soussloff will put in place a program that includes collaboration with Santa Cruz's Museum of Art and History. At the same time that Soussloff has been named chairholder, she has also been named a recipient of a prestigious Getty Fellowship for the 1999–2000 academic year. Twelve scholars from around the world are selected each year to hold the distinguished fellowship. Getty Fellows work in residence at Los Angeles's Getty Research Institute for the History of Art and the Humanities. Soussloff and her fellow scholars will work on their own academic projects and meet weekly to investigate the topic of “Humanities in Comparative, Historical Perspective.” During her residency, Soussloff will continue to oversee the activities of the Rebele Chair.

As chairholder, she will launch a program titled “Visual Cultures on the California Border.” The five-year program will involve students, scholars-in-residence, UCSC faculty, and curators from the Museum of Art and History. Symposia, classes, public lectures, and an exhibition and production of a catalog are planned.

“It’s important for art history students to have a connection to a museum,” says Soussloff. “It’s a practical relationship that many academic programs offer.”

Educational Partnership Center opens

One of the most concrete developments to come out of the University of California’s new effort to reach out to elementary and secondary schools can be found on the west side of Santa Cruz. That’s where you’ll find UCSC’s new Educational Partnership Center, which will oversee UCSC’s work with K–12 schools in the Monterey Bay Area, Santa Clara County, and Merced, where UC’s next campus is being planned.

The center is the operational arm of the Chancellor’s Educational Partnership Advisory Council (CEPAC), which charts the campus’s course regarding school collaborations. Its executive committee will oversee the center’s performance and ensure that the council’s intentions are carried out.

“CEPAC is where faculty help shape the campus’s outreach policies,” said CEPAC chair Martin Chemers, dean of the Division of Social Sciences.

Lisa Sloan

Catherine Soussloff

UCSC astronomers have determined the age and chemical composition of two recently discovered dwarf galaxies. Eva Grebel, a Hubble postdoctoral fellow, and Raja Guhathakurta, an associate professor of astronomy and astrophysics, also confirmed earlier suspicions that the Pegasus (Peg dSph) and Cassiopeia (Cas dSph) galaxies are companions of the Andromeda spiral galaxy. By analyzing the light emitted by stars in the two galaxies, the researchers showed that they do not contain any young, massive stars and show no traces of recent star formation. Instead, these galaxies are dominated by very old stars, mostly older than 10 billion years.

The astronomers used the Keck Ten-Meter Telescope to capture images of the Cassiopeia (above) and Pegasus (right) galaxies, appearing as blue clusters.

Focusing on our galactic neighbors
New major prepares students for business careers in info tech

A new major offered by UCSC will produce graduates with a combination of business, technical, and communications skills. The information systems management (ISM) major was created to meet the increasing demand for professionals who not only understand information technology but also know how to apply it to meet the specific needs of a business.

The ISM major, which began admitting students in the fall quarter, was jointly developed by the Departments of Computer Science and Economics.

“The ISM major represents an important collaborative effort between departments in the social sciences and the Jack Baskin School of Engineering,” said Marc Mangel, associate vice chancellor for planning and programs. “The ISM major combines computer science with business management and economics courses. It is a rigorous, challenging major for students who want to pursue a career of solving business problems through the use of information technology,” added Jack Callon, director of new program development in the Jack Baskin School of Engineering.

The recommendations of industry representatives played a prominent role in designing the new major.

Alumni Association names annual award winners

A politics professor, a scientist, and a staff employee on campus have won the highest awards given annually by the UCSC Alumni Association. J. Peter Euben, Brent Constantz (Graduate Studies ’86), and Pam Lawson were nominated for the awards by students, alumni, faculty, and staff and were selected by the Alumni Council.

Euben, who won the Distinguished Teaching Award for 1998–99, was praised for his energetic, fast-paced, and often uproariously funny lectures; commitment to challenging his students intellectually; and generosity in teaching, mentoring, and supporting undergraduates.

Constantz, who won the Alumni Achievement Award, is the founder of Norian Corporation, which has developed a paste that dramatically speeds the healing of broken bones.

Lawson, who won the Outstanding Staff Award, was praised by her literature colleagues for her leadership abilities and commitment to students, faculty, and staff.

In Memoriam

Kenneth S. Norris, acclaimed marine-mammal researcher, founder of UC’s Natural Reserve System, and beloved teacher of natural history at UCSC, died in August at age 74 after several months of illness.

As a champion of the natural world, Norris left a rich and varied legacy. He retired in 1990 after 18 years as a professor of natural history at UCSC, but remained active until shortly before his death.

Norris’s research contributions alone reflect the remarkable range of his accomplishments. Much of what we know about whales and dolphins, particularly their social patterns and echolocation skills, stems from groundbreaking investigations by Norris and his various research teams over the years.

As a desert ecologist at UCLA, he discovered circadian rhythms in snakes and the function of color changes in reptiles and amphibians. Even his doctoral dissertation on how water temperatures affect intertidal fish won an award from the Ecological Society of America.

His stature as a scientist enabled Norris to influence public policy in significant ways. He helped write the Marine Mammal Protection Act of 1972 and spearheaded a national campaign to reduce the numbers of dolphins killed in tuna-fishing nets. For these and other contributions, he was named “Man of the Year” by the American Cetacean Society in 1976 and received the California Academy of Sciences’ Fellows Medal for his studies of marine mammals.

Barbara Sheriff, a longtime UCSC staff member, died in Santa Cruz last summer at the age of 73. In 1961 she was asked by Dean McHenry to come to Santa Cruz to be his assistant at the new campus, where she served a succession of chancellors until her retirement in 1981. Sheriff was instrumental in founding the UCSC Affiliates.

Patrick Elvander, a biology instructor for 17 years, died in October. He was 48. He taught a wide range of courses with an emphasis on plant and fungal biology. His students consistently described him as an enthusiastic, knowledgeable, and inspirational teacher. His colleagues described Elvander as an articulate lecturer and genuine educator who wove interesting references from philosophy and literature into his plant lectures. He gave talks to extension classes and friends groups from the Arboretum and the Farm & Garden.
HELPING HANDS

WITH A LOT OF HELP FROM OUR FRIENDS. . .

At UC Santa Cruz, we’ve rewritten the song to honor the hundreds of volunteers who help with everything from selling theater programs to serving as mentors for prospective students. Volunteers invigorate just about every program at UCSC, providing energy, support, and friendship. Often, they’re the spark behind a new initiative, or the link that transforms a good idea into reality. Many have contributed to physical changes at UCSC, while others work tirelessly on less visible projects. All of these hardworking and generous individuals share one attribute: They help make UCSC the exciting and productive place that it is.

NINE WHO SHINE:
Adilah Barnes
Shirley Beneke
Michael Bush
Ann Gibb
Delorah Hall
Jim Katzman
Graydon Livingston
George Malloch
Tony Jiménez Morfin
Signs of Graydon Livingston are everywhere at the UCSC Farm & Garden—literally. His hand-carved sign welcomes visitors to the Alan Chadwick Garden, and apprentices use his hand-turned redwood dibbles for planting. His arbors grace both the Farm and the Garden, and he built a memorial bench in honor of early Garden supporters Page and Eloise Smith.

Livingston, 79, is a man whose love of aesthetics combines with his problem-solving nature to create functional items of beauty. Decades in the display industry—including 30 years of sculpting high-fashion mannequins for Saks Fifth Avenue—gave him a professional outlet for his talents. Now, as a regular volunteer at the Farm & Garden, Graydon says simply, “I’m happiest when my hands are busy.”

Livingston discovered the Farm nine years ago when he was planning his own garden, and he’s been showing up several times a week ever since.

“At a place like this, there are always projects no one has time to get to,” says Livingston, who designed and crafted a bee observatory for children, dreamed up ingenious devices to expedite planting, and single-handedly started hundreds of gourd plants for sale at the annual spring plant sale.

Yet this gentle man maintains that he gets as much as he gives.

“Sure, I’ve done a few things up here,” he says modestly, “but I think I take away as much in energy as I put in.”

—Jennifer McNulty
During his freshman year, Tony Jiménez didn’t see a single person on campus from his multiethnic San Diego neighborhood.

Now a senior, Jiménez often runs into people from southeast San Diego—studying at UCSC’s McHenry Library, waiting for a campus shuttle bus, or just walking downtown. Many of them tell Jiménez he’s one of the reasons they came to Santa Cruz. Some even ask him for a ride to the airport when they want to visit home.

The free taxi service is one of the incentives Jiménez offered when he talked to their high school classes about attending UCSC. A participant in the campus’s “Taking UCSC Home” program, the sociology major at UCSC’s Oakes College started visiting schools when he was a freshman. The program sends student ambassadors to their former high schools to discuss the value of higher education.

After speaking at Point Loma High School that first year, Jiménez decided to extend his reach into communities with even higher concentrations of minority students. He has subsequently visited schools in San Diego’s inner city and in East Los Angeles.

Jiménez estimates he’s spoken to some 1,000 students, from grammar to continuation schools. He describes college life and tells the students he’ll support them if they come to UCSC. Mostly, he relays a simple but powerful message: If he can go to college, they can too.

“They see the university almost like an ivory tower,” Jiménez says. “When they meet me, they see that there are people at college that they can relate to—people just like them.” —Francine Tyler
Jim Katzman  
**Deans’ Advisory Council**

Jim Katzman, cofounder of Tandem Computers and a Silicon Valley venture capital investor, has served on the Deans’ Advisory Council for ten years, providing a valuable industry perspective to the deans of UCSC’s Division of Natural Sciences and Jack Baskin School of Engineering.

Katzman, an amateur astronomer, was first drawn to the Deans’ Advisory Council by the opportunity to work with renowned radio astronomer Frank Drake, then dean of natural sciences. He also provided financial support for the Katzman Automatic Imaging Telescope at Lick Observatory.

Katzman describes the deans’ council as a group of “friendly observers” who can offer impartial advice because they are not directly involved in the university. “It’s good for the university to have an independent sounding board that gives support and advice,” he says.

Katzman also served on the committee that investigated the feasibility of establishing a school of engineering at UCSC. He has been friends with Jack Baskin since the two met 15 years ago while both were vacationing in Hawaii.

Katzman, who is semiretired, doesn’t limit his volunteer activities to UCSC. He also serves on the boards of directors of several nonprofit organizations and has been closely involved with Hospice of the Valley in San Jose, including a stint as president from 1986 to 1987.

“It feels good to give back to the community something meaningful,” he says. —Tim Stephens
Delorah Hall
Long Marine Laboratory

Born in a coastal Oregon town 69 years ago, Delorah Hall jokes that the ocean must have left an indelible imprint on her. Indeed, she feels a deep connection to the sea and has spent most of her life within earshot of the breaking waves of the Pacific.

Since 1980, Hall has shared her love of the ocean and marine life with visitors to UCSC’s Long Marine Laboratory. Now a retired schoolteacher, Hall delights in her role as a docent.

“I really believe in education, and the lab is such a special place because there’s so much cutting-edge research taking place,” she says. “Graduate students speak to us about their unpublished research, and we pass it on to people of all ages. It’s very exciting.”

Volunteer docents are essential to the lab, which receives about 30,000 visitors each year. In addition to being a docent, Hall represents the lab at outreach events, conducts school tours, served on the Docent Council for two years, and helped launch Ocean Explorers, a summer day camp for youngsters begun three years ago.

Having volunteered at Long Marine Laboratory almost since day one, Hall has watched the facility and its programs blossom, just like the interest of visitors.

“Sometimes people show up expecting to see a show like at Marine World, but it’s amazing how interested they can become in invertebrates,” she says. “The public needs to be educated about the animals and plants that live here. If we’re ever going to save the planet, education is the way.”

—Jennifer McNulty

Michael Bush
Shakespeare Santa Cruz

For the past seven summers Michael Bush has donated untold hours to the task of selling theater programs. The job isn’t glamorous, but that’s often the nature of volunteer work. “The point of volunteering, for me, is not what I’m doing,” Bush says, “but that I’m supporting an endeavor I believe in.”

In Bush’s case, the endeavor is Shakespeare Santa Cruz (SSC), an internationally acclaimed theater company based at UCSC. Each season Bush can be seen traveling the lines of theatergoers in his wheelchair, holding programs aloft, cheerily working the crowd with his humorous patter.

Bush’s favorite part of the job is the schmoozing. “I love it. Everyone is there to have a good time, and it’s nice to be in the midst of that energy.”

An accessibility specialist for the Santa Cruz County Planning Department, Bush says several of his coworkers also volunteer for SSC. They are part of a cohort of more than 400 who ensure the day-to-day success of the summer festival by ushering, taking tickets, serving food and wine, selling souvenirs, and directing traffic.

In addition to his regular volunteer duties, last season Bush also consulted on the construction of wheelchair-accessible seating in the outdoor Sinsheimer-Stanley Festival Glen.

Whatever the task, Bush finds volunteering satisfying. “My dad always said to me, ‘Give a little back.’ I love theater, and I’m glad to be in a position where I can take my dad’s advice.” —Barbara McKenna
If there's a heart to an academic institution, it would have to be the library. Just ask Ann Gibb. A UCSC employee, Gibb feels so strongly about the value of the library that, after putting in a full work week on campus, she still makes time to serve as president of the Friends of the UCSC Library.

Gibb wouldn't have it any other way. "I think I'm pretty lucky," she says. "I have work that is important to me, and I volunteer for what I regard as a vital campus and community resource—one that is used by everyone from cafe managers to poets to physicists. And, on top of it all, I get to do both jobs without ever leaving this beautiful campus."

A former elementary schoolteacher, Gibb is assistant to the director of the campus's Center for Research on Education, Diversity, and Excellence. Three years ago, she joined the Friends Board supporting the UCSC library.

Gibb says the volunteer group has two main reasons for being: to provide library access to the community at large through memberships (which furnish borrowing privileges) and to expand the library's collection through book and materials purchases.

"What I love about our work," Gibb says, "is that we can make a substantial difference that lasts for generations. It's like throwing the proverbial stone in the pond. The ripples go out for a long time." —Barbara McKenna
George Malloch
UC Santa Cruz Foundation

George Malloch’s connection to UCSC goes way back. Growing up in preuniversity Santa Cruz, he Whiled away his days exploring the rock quarries, meadows, and caves on the property that would one day become a University of California campus. “There isn’t a time that I visit UCSC now that I don’t think of my years as a youngster playing around on the old Cowell Ranch,” says Malloch, the current president of the UC Santa Cruz Foundation.

Malloch marvels at what has become of his childhood playground. “UCSC makes a tremendous academic and cultural contribution to the community, and many of its students have gone on to do great things.”

A San Francisco attorney, Malloch has worked behind the scenes to support some of UCSC’s most visible programs. He has personally steered millions of dollars from other benefactors to UCSC’s Arboretum, Farm & Garden, Library, and to the Marine Discovery Center, under construction at the Long Marine Laboratory. He has also been a generous contributor to campus research on elephant seals and has donated countless hours of legal work.

Like those long-ago days spent exploring the Cowell Ranch, Malloch’s adult association with UC Santa Cruz has brought him much pleasure. “Some of my best friends are people that I’ve met through my involvement with UCSC,” he says. “The faculty, other supporters, the administrative people have been great to work with. It’s been a very, very satisfying experience.”

—Jim Burns
An accomplished actress with numerous theater, film, and television roles to her credit—including five years on ABC’s *Roseanne*—Adilah Barnes (Cowell ’72) long ago left Santa Cruz for Hollywood. Nonetheless, she maintains her connections to her alma mater, driven by the influence that one of her UCSC mentors had on her life.

Herman Blake, founding provost of UCSC’s Oakes College, has Barnes’s lifelong gratitude for the counsel he provided to her and fellow African American students during their UCSC years. “He was our father, our therapist, our friend, our educator—he was everything to us,” Barnes says. “If I could give to another student half of what Herman gave to me, I would be happy with that.”

In many ways, Barnes has followed Blake’s example. As a participant in UCSC’s Career Advice Network, she makes herself available to students who are interested in the entertainment business. She also offers internships with the Los Angeles Women’s Theatre Festival, of which she is executive producer.

Barnes, who serves as an active member of the Alumni Council, also travels to UCSC yearly to dispense career advice at the Multicultural Connections Conference (formerly Students of Color Conference).

Like her UCSC mentor, Barnes sees the value of nurturing students outside the classroom—especially minority students who may feel isolated in the university environment.

“By hearing of their struggles and what they’re experiencing,” Barnes says, “I can let them know they are not alone in whatever challenges they face.”

—Francine Tyler

Respond to the following question: What is Adilah Barnes's profession and how has she maintained her connection to UCSC? Adilah Barnes is an accomplished actress with numerous theater, film, and television roles to her credit. She has maintained her connection to UCSC through the Career Advice Network, where she offers advice and internships to students interested in the entertainment business. She also travels to UCSC yearly to dispense career advice at the Multicultural Connections Conference and offers internships with the Los Angeles Women’s Theatre Festival, of which she is executive producer.
Words, in the hands of a poet, create a sensory experience more akin to music or art than literature. “Poetry is a tactile medium,” says Peter Gizzi, widely recognized as one of the country’s most powerful young poetic voices. “Look at a painting. What we admire about a Van Gogh sunflower is how he pushes yellow and green together along this rough, three-dimensional surface. We’re admiring his brush strokes, what he does with the actual paint, not the flower.

“In poetry it’s the same thing. We aren’t struck by what Shakespeare has to say but how he says it. What ‘takes the top of our heads off,’ to quote Emily Dickinson, is the gesture of language—a lyrical moment that weaves together cadence, sound, and syntax.”

What are those sounds in the dark?
—Another Day on the Pilgrimage

Most of us think of language in a utilitarian way—we use it to scan the aisle signs in our search for cereal or to reflect back on the events of the day with a loved one. A good poem, Gizzi says, disrupts such everyday usage.

“Poetry is not about information; it’s about communicating messages in a more ecstatic way. We know the distance between the sun and earth is 93 million miles, but we can’t comprehend such a vast space. The act of the poem is the act of trying to define that space.”

Gizzi, 39, has been defining poetic spaces for 11 years now, both as a writer and a promoter of the work of others. An assistant professor of literature at UCSC for the past three years, Gizzi edited several critically acclaimed projects, including the poetry journal o*blek (pronounced “oblique”) and The Exact Change Yearbook. In 1994 he received the prestigious Lavan Younger Poets Award from the Academy of American Poets and, last summer, a coveted Howard Foundation fellowship. The lat-
A 1996 National Book Award came on the heels of the publication of his two latest books, *Artificial Heart* (his second collection, published by Burning Deck) and a critical work on poet Jack Spicer titled *The House that Jack Built* (Wesleyan University Press).

**Inside the song, it’s weird glue tears, and a trail of crumbs**

—*Pierced*

Poetry scares most of us. We think we don’t get it. But “getting” a poem, Gizzi explains, is often as simple as reading it. “Poetry is not like a puzzle that you have to figure out; there’s no sum total that’s quantifiable to every reader. What you get out of a poem is what you’re supposed to get.”

For a poem to touch its reader, Gizzi says, it must leave spaces between the words. He notes that *stanza* is Italian for “room”—readers step into the poem on the words the poet furnishes, but are given space to inhabit the room and find personal significance in what they encounter there. As important as what is in the poem, Gizzi says, is what’s left out.

Like any work of art, a poem is meant to be experienced more than once. “My students often tell me they’re done with an assignment after they’ve read a poem once, and I say, ‘What do you mean you read it? I’ve been reading this poem for the last 20 years, and I’m still not done with it.’ ”

... to wander the tired stones again and worn teeth we remember to hold onto a world

—*Tous les Matins du Monde*

Some poets drink, some scowl, some ride boxcars. It’s not easy baring your soul for a living. Gizzi manages the act with a balance of self-effacement, humor, and devotion to the poetic past. “Poetry is an ancient practice, and when you write you are participating in a tradition,” he says. A poet, Gizzi adds, writes in the company of the ghostly voices of past poets. “Poems are incredibly haunted. The act of writing a poem is a form of possession.”

Gizzi has myriad approaches for writing, but a complete work rarely pours out all at once. There are even times when he realizes a stanza he has just finished belongs with one he wrote six months ago. In many cases, the first element he conceives is the title, from which the rest of the poem flows.

An idea for a poem can strike while he is on the phone or watching a movie or drifting off to sleep. The words Gizzi hears become detached from their context and take on the cadence, sound, and syntax that make a poet’s heart beat faster.

His poems range from playful to desolate, from rough to sublime. They can confound and they can make a reader double take with sudden recognition. He enjoys ambiguity, juxtaposing seemingly opposite sensibilities. In many of Gizzi’s works there is a sense of the writer as a wanderer, traveling in a landscape rich with imagery, emotion, and memories.

“Poetry is finally about attention to detail,” Gizzi says. “To be holy in small things. Everything is animated, singing all the time—if we just look.”

—Barbara McKenna
TOUS LES MATINS DU MONDE

Goodness is hard on the body,
a distracted mind unable to doze in fitful sleep.
The dove rattles the mind into thinking
it has a body of thought—complete
& symbolic—the gray feathers perched
outside the pale cut square of silver.
Say then, we belong to that window,
that warble, and suddenly we belong too,
the silver car in the yard, even a tiny silver hammer.
All vehicles of travel
disclose the mind’s need to wonder in perfect forms.
Even if the skiffsman don’t come to this bed
to rock me to sleep—to wander the tired stones again
and worn teeth we remember to hold onto a world
for this life might not take us the whole way.
That shape of an idea, the concept, or donnée
travels farther than the instrument can register.
The spindle whirs beyond its order.
Something must be moving at incredible speed.
With pure speed I address you, reality.

Poems reprinted with permission from Artificial Heart,
(1998, Burning Deck)
HOW TO CARE FOR A SMALL BIRD
for Elizabeth Willis

Given the baby bird crisis, what if each child were delivered a bird having tumbled from its nest

Two major problems evolve
One is feeding it
another preparing it for the wild

But before you build a home of newsprint and yarn try putting it back where it came Remember its fear, think of its shock
to not be dead

beset in a hand not yet full grown

moving through space doing the best it can
Miracle or Menace?

Sociologist Monica Casper asks tough questions about the ethics of fetal surgery
As a researcher, sociologist Monica J. Casper likes controversy. By that measure, she could hardly have picked a better topic for her first book than fetal surgery, a subject that touches on women’s health, reproductive rights, and access to medical care.

The notion of trying to save a doomed baby by opening a pregnant woman’s uterus, partially removing the fetus, correcting an abnormality, and returning the fetus to the womb until delivery is mind-bending, evoking reactions that range from awe to discomfort. Like the extraordinary measures that are now available to prolong the lives of the very elderly, fetal surgery could redefine some basic assumptions about life, death, and the appropriate use of medical technology.

In her new book, The Making of the Unborn Patient: A Social Anatomy of Fetal Surgery, Casper explores the ethics of a procedure that is being heralded as the latest medical miracle despite unanswered questions about the risks it poses to both mother and fetus. The book is the first in-depth examination of fetal surgery and is based in part on Casper’s study of about 100 surgeries performed at a hospital where surgeons are pioneering the technique. (To protect the privacy of patients and medical staff, Casper does not identify the hospital in her book.)

Fetal surgery is used to remove tumors and to correct life-threatening structural defects and abnormalities, such as blocked urinary tracts and congenital diaphragmatic hernias, which allow organs to migrate into the chest cavity and inhibit lung development. Still largely experimental, fetal surgery could become a more routine treatment for some maladies.

“We love medical miracles in this culture—especially at both ends of life,” said Casper, an assistant professor of sociology at UCSC and an affiliate of the Stanford University Center for Biomedical Ethics. “We’re able to construct these tools that allow us to do amazing things, and medicine has done a very good job of promoting the idea that we can save lives this way. But with each of these ‘medical miracles,’ there is a downside.”

Casper’s study revealed a fetal mortality rate that averages about 60 percent and can exceed 85 percent for some procedures. Because labor begins when the uterus is opened, women who endure the procedure early in the second trimester must be confined to bed rest on antilabor medications for the duration of the pregnancy. Newborns, who typically arrive early and always by Cesarean section, require additional treatment after birth and may still face lingering impairment. Finally, the surgery may jeopardize a woman’s ability to carry subsequent pregnancies to term.

For Casper, fetal surgery raises serious ethical questions about maternal sacrifice, the status of the fetus, and medical priorities. “Fetal surgery has been seen largely as a pediatric issue, not a matter of women’s health,” said Casper. “The ethical questions are enormous.”

Fetal surgeons view the fetus as the patient, but does that mean the fetus is a person, asks Casper. What about the woman’s role as patient? Could mothers be forced to undergo the procedure against their will? Like interventions at the end of life, does it make sense to try to save the life of an impaired fetus at all costs, financial and otherwise? What if the best surgical outcome is a severely disabled infant?

Despite the pressing questions surrounding fetal surgery, the procedure remains shrouded in secrecy at the few medical centers in the country that are performing it. Casper had to file Freedom of Information Act requests to obtain details about some of the 100 or so surgeries that had been performed at the hospital where she conducted her research, and she lost access to prospective and actual patients after surgeons gleaned the scope of her research.

Casper asserts that the ethics of fetal surgery are being overlooked in the public arena, where a generally positive reception by the media is curbing the scope of the discussion. Anti-abortion forces have embraced the procedure as “pro-life,” and Casper predicts that fetal surgery could radically reshape abortion politics if it helps establish the fetus as a patient and a person independent of the mother.

Casper’s goal in writing her book was to avoid simplistic answers. When pressed, she says she favors preserving fetal surgery only in a context that protects the woman’s rights as an independent patient and only if it can be made safer for both fetuses and the women who choose it. But she expresses grave concern about spending limited health care dollars on a practice so fraught with medical and ethical uncertainty that will benefit so few.

—Jennifer McNulty
Particle

UCSC physicists are building supersensitive high-tech tools to track quarks, mesons, and other denizens of the subatomic world.

MEN IN WHITE: Surrounded by testing and fabrication equipment in the SCIPP laboratory are (clockwise from lower left) Abraham Seiden, professor of physics and director of SCIPP, Bruce Schumm, assistant professor of physics, Hartmut Sadrozinski, adjunct professor of physics, Alex Grillo, research physicist, Robert Johnson, associate professor of physics, and David Dorfan, professor of physics.
When Queen Victoria asked the great English experimentalist Michael Faraday what good was electricity, he replied (or so the story goes), “Madam, what good is a baby?”

Faraday had been able to induce a trickle of electric current, but at that time there were no practical uses for it and its eventual applications could not even be imagined.

The assumption behind all basic scientific research is that there is inherent value in understanding how nature works, even though the practical applications cannot be known in advance. Furthermore, increasing our knowledge of the world around us has aesthetic and intellectual value, regardless of any practical spinoffs.

At the Santa Cruz Institute for Particle Physics (SCIPP), UCSC researchers are trying to answer questions that most people wouldn’t even think to ask: Why are we made out of matter and not antimatter? What gives matter mass? How does gravity work?

Particle physicists grapple with these cosmic mysteries by peering into the subatomic world of quarks, mesons, and other esoteric particles. Ultimately, they hope to grasp the fundamental forces that govern the physical world and to explain how the universe evolved from the Big Bang, about 15 billion years ago, into what we observe today.

“We have a ‘standard model’ explanation for things such as how mass is generated, and our experiments are designed to test that model,” says physicist Abraham Seiden, director of SCIPP. “But the results could be totally different from what we expect to see, so the experiments are really exploratory in terms of figuring out how things work.”

While they are not trying to cure cancer or build a faster computer, physicists can certainly take credit for many advances in those areas. Medical imaging technologies (X-rays, CT, MRI), lasers, transistors (the basis for the computer industry), and even the World Wide Web are among the by-products of the pioneering work of physicists.

“The technology we are developing in the lab makes use of the latest developments in industry,” Seiden says. “In turn, our work generates spinoffs that have practical value to industry as well as to other fields of research.”

The driving force behind research in particle physics, however, is primarily an insatiable curiosity about the nature of the universe.

In a typical high-energy physics experiment, a particle accelerator boosts beams of subatomic particles to near the speed of light and brings them together in a head-on collision, creating a burst of energy and a shower of new particles.

The most interesting particles produced from these collisions tend to be very short-lived, rapidly decaying into other particles. The challenge for researchers is to work backwards from the evidence recorded by sensitive detectors to reconstruct what kinds of particles were produced in the collision and how they subsequently decayed.

These experiments involve international collaborations among hundreds of investigators and are performed inside only a handful of major accelerator facilities. Within these huge projects, SCIPP’s team of about 30 physicists has carved a niche as a leading developer of special detectors and electronics used to track subatomic particles.

Made from silicon, the ubiquitous semiconductor of the computer age, SCIPP’s detectors are fabricated using techniques perfected in the integrated-circuit industry.

SCIPP scientists developed the first silicon-based detector used in a colliding-beam experiment. That experiment was conducted at the Stanford Linear Accelerator Center (SLAC) in Palo Alto in the mid-1980s, and SCIPP teams continue to be an integral part of research at SLAC.

NASA, meanwhile, has SCIPP researchers working on a space-based telescope to be launched within the next decade (see next page). SCIPP detectors mounted on the Gamma-ray Large Area Space Telescope will record the direction of gamma rays emitted by neutron stars, black holes, pulsars, supernova remnants, and other intriguing astrophysical sources.

In addition, SCIPP physicists, engineers, and technicians have been tapped to develop detectors for a particle accelerator at the European Particle Physics Laboratory (known by its French initials, CERN) in Geneva. When CERN’s Large Hadron Collider (LHC) begins operation in 2005, it will rank as the most powerful particle accelerator in the world.

Inside the LHC, two beams of protons speeding in opposite directions through a tunnel 16 miles in circumference will cross paths, producing as many as a billion collisions each second.
SCIPP DETECTORS play a major role in a number of high-energy physics projects, including the planned Gamma-ray Large Area Space Telescope (diagram, above) and the ATLAS detector at the European Particle Physics Laboratory in Geneva, Switzerland (diagram, below). In the photo, SCIPP’s Robert Johnson holds a silicon strip detector (right) and a detector panel that will be housed in the space-based telescope.
The fact that the universe is full of matter and not antimatter is a puzzling observation still unexplained by modern physics. How this relates to BaBar the little elephant is a story in itself. Researchers at the Santa Cruz Institute for Particle Physics (SCIPP) will participate in an experiment this spring that may help resolve the antimatter puzzle by creating and tracking the decay of ephemeral particles called B mesons. Produced along with each B meson is an anti–B meson, the shorthand notation for which is the letter “B” with a bar over it, pronounced “bee-bar.” That’s close enough for the researchers to name the detector that will track these particles “BaBar.” They even obtained permission from children’s book author Laurent de Brunhoff to use the image of the little elephant as a sort of logo for the detector project.

SCIPP researchers are designing a critical component of the BaBar detector. “Antimatter is just like ordinary matter except that the charges are reversed, so an antielectron, which we call a positron, has the same mass and energy as an electron but has a positive charge,” explains Abraham Seiden, director of SCIPP. The existence of antimatter was predicted by quantum theory and later confirmed in experiments. Scientists now know that each of the subatomic particles that make up matter has a corresponding antiparticle. In addition, one of the key properties of particles and antiparticles is that when they collide they annihilate each other, converting their entire mass into energy.

So why did the Big Bang, which should have produced equal amounts of particles and antiparticles, result in a universe full of matter? In the BaBar experiment, which will be conducted at the Stanford Linear Accelerator Center, researchers hope to observe in B and anti–B mesons a violation of symmetry that may explain how matter came to dominate the universe. —Tim Stephens

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Alumni News

Alumni Association Councilors, 1998–99

Cowell
Stephen Klein, President
Michael Twombly

Stevenson
Diana Reece, Vice President for Programs
Heather Urquhart, Vice President for Administration

Crown
Michael Brown
Linda Wilshusen, Vice President for Finance

Merrill
Alan Acosta
Dominador Siababa

Porter
Daren Lewis
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Kresge
Douglas Foster
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Oakes
Renée Martínez
Eric D. Thomas

College Eight
Joanne Foxe
Robert Weiner, President-Elect

At Large
Mark Adams
Adilah Barnes
Aimee Dudovitz
Dorothy Gustafson
John Laird
Sandor Nagyszalanczy
Kathryn Tobisch, Vice President for Membership

Ex Officio
Carolyn Christopherson, Executive Director
Michael Cowan, Past Chair, Academic Senate
M.R.C. Greenwood, Chancellor
Steven Jung, Past-President
Helana Ramirez, Chair, Student Union Assembly
Nathan Sanders, President, Graduate Student Association

Banana Slug Spring Fair campus open house, April 17

ALUMNI, current students and their parents, prospective students and their families, and all friends of the campus are invited to visit UCSC for Banana Slug Spring Fair on Saturday, April 17. This annual open house features reunions, panels, lectures, tours, and receptions at each college. Alumni highlights are listed below. For more information, contact University Advancement at (800) 933-SLUG or locally at (831) 459-2501. Web site for the event: admissions.ucsc.edu/bssf

Banana Slug Spring Fair Open House Welcomes Alumni back to Campus:

► UCSC’s “Pioneer Class” (those who attended the campus when it opened in 1965) will celebrate its 30th reunion with a reception and multiple opportunities for reminiscence and reflection on the student experience at UCSC during its founding. For more information, contact the Alumni Office at (800) 933-SLUG.

► An all-alumni luncheon is the keystone event for alumni from every class year. This year’s luncheon will give special recognition to six classes celebrating 5- through 30-year reunions: ’94, ’89, ’84, ’79, ’74, and ’69. To RSVP, contact the Alumni Office at (800) 933-SLUG.

► “The Writing Life/Life on the Page,” a series of panels featuring prominent and emerging alumni writers of fiction, nonfiction, and poetry, will be held on Friday and Saturday. Current UCSC faculty in literature and writing will also participate. For more information, contact Provost Paul Skenazy at Kresge, (831) 459-4792 or pskenazy@cats.ucsc.edu.

► The Black Parent Information Forum will bring together college hopefuls of African American and multiheritage African descent and their families, UCSC staff, faculty, alumni, and current students to promote early academic preparation strategies for the next generation of African American scholars. For more information, contact Sarah Pizer-Bush at (831) 459-4823 or pizerb@chemistry.ucsc.edu.

► Every college will hold a late-afternoon reception. Porter will celebrate the performing arts with daytime events on the quad. At Merrill, Los Mejícas dance troupe will perform, and students will paint the moat.

► The Admissions Office will hold a reception to thank alumni outreach volunteers who help recruit new students to UCSC. Opportunities for volunteer training and networking will be provided. For information, contact Heidi Renteria at (831) 459-5518 or hrrenter@cats.ucsc.edu.

At Banana Slug Spring Fair 1998 (left to right): Alumni and prospective students and their parents listen intently to a faculty panel discussion on arts and humanities programs; College Eight alumnae Selene Tsoi (’92), who traveled from Hong Kong to attend the event, and Veronica Kenny (’93) at College Eight’s 25th Anniversary reception; old friends Linda Ziskin (Porter ’77) and Sandor Nagyszalanczy (Stevenson ’77) at the all-alumni luncheon.
Alumni award nominations invited

“It was wonderful to feel my work was appreciated. It confirmed for me how much I love teaching.” So said Marge Frantz, lecturer emerita in American studies and women's studies, winner of the Alumni Association's 1997–98 Distinguished Teaching Award.

Alumni have the opportunity to make someone else feel similarly appreciated; nominations are now being accepted for the Alumni Association’s Distinguished Teaching Award, Outstanding Staff Award, and Alumni Achievement Award.

Letters of nomination must include the full name, current address, and daytime phone of the nominator. E-mail nominations may be submitted to alumni@ua.ucsc.edu. For an optional nomination form, which includes complete award criteria and a list of past recipients, contact the Alumni Office at (800) 933-SLUG. The deadline for nominations is Friday, May 28.

Alumni encourage students of color

“...it’s our duty to do what we can to encourage students,” says Roberto Ocampo (Merrill ’75, sociology). It’s a duty Ocampo takes seriously. Despite a busy schedule (he’s a high school counselor at Alisal High School and a Salinas city councilman), Ocampo has participated in the annual weekend conference for ten years.

“Students wonder, is there really life after college? Will I really get a job? They see alumni who are professionals—doctors, lobbyists, teachers. It encourages them, gives them hope. Role modeling is an old concept, but it works. In the midst of winter, each year, as many as 60 alumni from throughout northern and southern California return to campus to participate in the Multicultural Connections Conference (formerly called the Students of Color Conference). “It’s our duty to do what we can to encourage students,” says Roberto Ocampo (Merrill ’75, sociology). It’s a duty Ocampo takes seriously. Despite a busy schedule (he’s a high school counselor at Alisal High School and a Salinas city councilman), Ocampo has participated in the annual weekend conference for ten years.

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“I think it has validity. When students see someone in a professional role whose class or ethnic background is the same as theirs, it breaks the stereotypes,” Ocampo says.

Alumni interested in providing one-day career-oriented mentoring for students of color are invited to participate in the upcoming conference, scheduled for Saturday, March 6, from 10 A.M. to 4 P.M. at College Eight. For more information or to RSVP, contact Ann Montgomery at the Alumni Office, (800) 933-SLUG, or via e-mail at alumni@ua.ucsc.edu.

Visiting professor program brings filmmaker to UCSC

Loné Ding, an award-winning filmmaker focusing on Asian American history and culture, visited UCSC fall quarter as part of the Alumni Association’s Distinguished Visiting Professor program, which brings an outstanding scholar or teacher to UCSC each year.

During her stay at UCSC, Ding taught a five-credit course, The Art, Craft, and Politics of Media Intervention, at Merrill College. In the class, students learned about the process of creating a multimedia product, from envisioning the idea to planning how to present the chosen subject in an engaging way.

Ding acts as writer, producer, director, and editor of her documentaries. Her credits include Color of Honor and Nisei Soldier, both of which focus on Japanese American soldiers in World War II; With Silk Wings, a three-part series on Asian American women and their work; Bean Sprouts, a series for children; and Ancestors in the Americas, which focuses on the history of Asian immigration and settlement in North and South America and the Caribbean.

The Distinguished Visiting Professor program is supported by an endowment and sponsored by the Alumni Association to enhance academic programs at UCSC’s eight colleges. The professorship rotates among the colleges.

The University of California Alumni Associations present the Second Annual Northern California UC Alumni Career Conference & Job Fair

UC Alumni Career Conference & Job Fair

- Job Fair with exhibitors in every career field
- Workshops with top career professionals

Saturday, March 13, 1999

Conference: 9 A.M. to 3 P.M.
Job Fair: 3 P.M. to 6 P.M.
City Center Marriott, Oakland

Cost (includes lunch):
$60 Alumni Association members
$75 Nonmembers
Add $15 for registration after February 26

For more information, contact the UCSC Alumni Association: (800) 933-SLUG or via e-mail: alumni@ua.ucsc.edu

John Gutierrez (Porter ’73), left, a case manager in Los Angeles County, and Roberto Ocampo (Merrill ’75), a high school counselor and Salinas city councilman, at the 1997 Students of Color Conference

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John Gutierrez (Porter ’73), left, a case manager in Los Angeles County, and Roberto Ocampo (Merrill ’75), a high school counselor and Salinas city councilman, at the 1997 Students of Color Conference
Cowell College

'67 Walter JOYCE has spent 31 years in the insurance brokerage business and is currently president of Lawson Hawks Insurance in Mountain View, Calif. He has two sons and one granddaughter.

'70 Catherine GIMELLI-MARTIN, an associate professor of English at the University of Memphis, is the author of The Ruins of Allegory: Paradise Lost and the Metamorphosis of Epic Convention (Duke University Press, 1998).

'73 William TEAGUE is senior pastor and head of staff at Park Presbyterian Church in Beaver, Pa.

'76 Virginia “Ginger” BURTON is married and has two children; she is a high school teacher in Santa Maria, Calif.

'78 Bryan WALL has been named the new principal at Loma Prieta High School in Santa Cruz; he has worked for the Santa Cruz City Schools since 1985.

'79 Kathleen ADAMS received tenure and promotion to associate professor of anthropology at Loyola University of Chicago; she spent part of last year in Indonesia researching art and identity politics on the islands of Alor and Sulawesi. JOHN LEECH is becoming a New York media maven, working for Oxford University Press and the Odyssey Channel.

'80 Marina LESLIE is an associate professor of English at Northeastern University; she can be contacted via e-mail at mlisle@lynn.neu.edu.

'84 After eight years in the environmental field, Chris LINSON is now halfway through a master’s program in physical therapy at Duke University; he can be reached via e-mail at cjlf@expark.duke.edu.

'86 Kafai LEUNG has joined PointCast, Inc., and works as a release engineer.

'87 James CALLEROS is a contract review supervisor for Northwest Administrators in San Mateo, Calif.; he would like to link up with other art and dance lovers and Francophiles. He can be reached at (650) 654-0801.

'87 Rachel LUNDQUIST DIAZ is married to Eduardo Diaz and they have two sons; she is working as a Spanish-English medical interpreter and teaching childbirth classes to Spanish-speaking moms.

'88 Thomas SCHINAMAN is in his third year of law school at Santa Clara University; he’s been married for six years and is living in Campbell, Calif.

'90 Hannah WEDGLEY is in her last year of a Ph.D. program in clinical psychology; she is an intern at UC San Francisco–Stanford Health Care and does health outcomes research at Kaiser Permanente. Her current research is on quality of life with breast cancer.

'92 Ethan BRYSON finished his first year at Mount Sinai School of Medicine in New York City and celebrated his fourth year of marriage to Amy Blyson; they have a Maltese named Daisy.

'95 Marine Lance Cpl. Charles McEWEN recently finished training in Hawaii while en route to a six-month deployment to the western Pacific Ocean, Indian Ocean, and Arabian Gulf with the 15th Marine Expeditionary Unit.

'97 Scott FAY is currently a Peace Corps volunteer serving in Papua New Guinea in Namatanai, New Ireland Province, teaching 11th- and 12th-grade biology and chemistry.

Stevenson College

'69 Craig Evan SCOTT produces documentation for international clients through his own company, Heuristics, Ltd.; he “successfully transitioned age 50 this year.”

'70 Steve SCHNADT has been promoted to staff director of the Senate Transportation Committee for the California legislature.

'71 Chris COLTON is teaching English to juvenile felons in Washington State; she is a Girl Scout leader and a gymnastics/soccer/4-H mom. Jon TERRELL teaches meditation and energy healing techniques at the Inner Light Center; he holds a master’s in psychology from the Institute of Transpersonal Psychology and a senior trainer certificate with Actualism Corporation.

'72 Ann MCCAMPBELL continues to fight the chemical/pharmaceutical industry through a grassroots advocacy organization, the Multiple Chemical Sensitivities Task Force of New Mexico.

'76 Gilbert CHONG was finishing a three-year contract to work in Singapore for the Navy; he and his family were expecting to return home in summer 1998. PAUL MAHLER and his wife, Joni DOLPH Mahler (Merrill ’77), are pleased to announce the adoption of their son, Christopher James, in November 1997. “He is our first child and wonderful,” Paul writes.

'77 Randy ROGERS, a partner with the San Francisco firm of Murphy, Weir & Butler, has joined the editorial board of “Collator on Bankruptcy” at Matthew Bender & Company, a leading publisher of bankruptcy research tools and practice materials. Matthew YOUNG SMITH is living and working in the Middle East, where he is head of recruitment for Qatar Liquefied Natural Gas in Ras Laffan, Qatar. He says, “Salam alaykum to all my old classmates.”

'78 Mark STEINBERG is an associate professor of history and director of the Russian and East European Center at the University of Illinois at Urbana-Champaign, where he is learning to appreciate the haralands after nine years in New England; his recent book, Fall of the Romanovs, has been translated into Portuguese and Japanese.

'80 Doran LARSON has been appointed to the position of assistant professor of English at Hamilton College in Clinton, N.Y.

'82 After graduating from Art Center College of Design in Pasadena, Calif., STEPHEN MONDOR traveled to Morocco and is now working in the world of packaging and branding.

'86 Eric ELDER recently moved to Philadelphia and is a consultant with RHR International, a management consulting firm staffed by organizational psychologists.

'89 Sarah QUINN Noble is the editor and designer of the Alameda County Bar Association’s magazine, The Bulletin; she has a flexible work schedule that allows her to be home in the afternoons with her son, Alexander. Karen WEEKS SATZMAN married Darrell SATZMAN (Merrill ’89) in spring 1998; Karen is family programs coordinator at the Los Angeles County Museum of Art, and Darrell is a reporter for the Los Angeles Times.

'91 Lisa SONIN Larsen is in her third year of a doctoral program in clinical psychology at J. F. K. University in Orinda, Calif.; she has been happily married for two years, and she misses the groovy atmosphere at UCSC, “especially the ‘flying IUD’ and Saturn Cafe.” Luis Manuel MACIAS graduated from law school in May 1998. Barbara PEDDY is working in Sacramento in direct sales and marketing; she misses UCSC.

'92 Sachie NGUYEN TRUNG was awarded a master of science in nursing and certification as a family nurse practitioner from the MGH Institute of Health Professions at Massachusetts General Hospital. After receiving a master of divinity degree from Luther Seminary in May 1998, Rick SHERRILL is serving as associate pastor of the Lutheran Church of the Good Shepherd in Salinas, Calif.

'94 Tara PAINTER Malec earned an air force officer at Lake Tahoe in June 1997; she and her husband are working on their master’s degrees. Lisa MAYHEW and John NIBARGER (Stevenson ’95) were married in California in June 1998.

'95 Melissa JOHNSON completed an M.A. in museum studies at San Francisco State University and was hired as curator of the Wells Fargo History Museum in Los Angeles. Tatloc RIVAS is receiving an M.F.A. in directing from the professional director’s training program at the University of Washington’s School of Drama; his thesis production is Henrik Ibsen’s The Lady from the Sea.

'96 Michelle MA is attending Yale University in the physician associate program.

Crown College

'69 Fr. Patrick DOOLING is the recipient of the 1998 Distinguished Teacher Award from Merrill College; he was nominated by former student Candida STRICKLEN (Merrill ’98). Barbara VOGL is editing a newsletter/journal and facilitating a network for educators on systems thinking and chaos theory.

'72 Peter FITZSIMMONS started as Sargent Johnson in the play Forever Free: The Life and Times of Sargent Johnson, performed at the Phyllis Watts Theater at the San Francisco Museum of Modern Art in June 1998.

'76 Pat MURPHY’s fourth novel, Nadya—The Wolf Chronicles, a historic, feminist, werewolf story, is out in paperback from Tor Books; Murphy lives in San Francisco and works for the Exploratorium.

'79 Genevieve FIRE-Halvorsen is an environmental/civil engineering consultant in Los Altos, Calif.; she is still continued on page 18
Imagine a stack of $1 bills, stretching to the moon and nearly back again. According to UCSC alumnus Stephen Schwartz, that’s one way to visualize how much money—$5.5 trillion—the United States spent on building and maintaining its nuclear stockpile and nuclear weapons infrastructure from 1940 to 1996.

That’s more than was spent on medicare, education, or any other government expenditure except for social security ($7.9 trillion) and nonnuclear national defense ($13.2 trillion).

Whether the $5.5 trillion was money well spent is a matter of debate. Depending on one’s perspective, it either prevented World War III or exacerbated Cold War tensions between the United States and the former Soviet Union.

What isn’t debatable, argues Schwartz in a Brookings Institution book he edited and coauthored, is that the U.S. government made few attempts to track its spending on nuclear weapons and weapons-related programs. Schwartz says this lack of fiscal oversight kept the American public and its representatives in Washington, D.C., from making fully informed decisions during a massive and dangerous nuclear arms race.

“For 50-plus years, since the bombing of Hiroshima and Nagasaki, we’ve been arguing over the benefits of nuclear weapons, and we haven’t had the opportunity to weigh the costs,” Schwartz says. “Now, for the first time, you can really balance the ledger, weigh the pros and cons, and have a balanced debate.”


A Los Angeles Times book reviewer called Atomic Audit a “giant step . . . toward integrity” in America’s history with nuclear weapons. “It is only through the unflinching study of our past behavior that we can expect to create a more humane and democratic future,” the reviewer wrote.

Included in the study is a description of the nuclear tests, the human-radiation experiments, the gaps in congressional oversight, and the naïveté with which government and military officials approached the use of nuclear weapons and the disposal of radioactive materials.

Now publisher of The Bulletin of the Atomic Scientists, Schwartz Nuclear Policy, since renamed the Stevenson Program on Global Security.

“My whole undergraduate education got skewed toward nuclear weapons,” says Schwartz, who became a senior research assistant at the Stevenson program and helped write a handbook on nuclear weapons. Schwartz also wrote an 80-page “nuclear primer” and won a Chancellor’s Undergraduate Award for his senior thesis, which discussed whether—and how—to teach nuclear issues in grade school.

His UCSC projects helped prepare Schwartz for the exhaustive research required for Atomic Audit. Over a four-year period, he and nine contributing authors waded through archives, pushed to get documents declassified, dug into mountains of statistics, and read hundreds of “old, musty” reports, he said.

The United States embraced nuclear weapons in the late 1940s and early-to-mid 1950s in large measure because nuclear weapons were considered to be a relatively inexpensive alternative to conventional weapons.

Schwartz’s book itemizes the costs associated with that decision (expressed in 1996 dollars after adjustments for inflation). Included in the $5.5 trillion total are $409 billion to manufacture nuclear warheads and $3.2 trillion for the aircraft, missiles, submarines, and other delivery systems needed to deploy them.

The costs continue to add up, according to Atomic Audit:

The U.S. maintains an arsenal of 10,000 nuclear weapons—many still poised on hair-trigger alert—at a current cost of $25 billion a year.

—Francine Tyler
bicycling, gardening, and playing viola, when she’s not entertaining two kids. ‘82 After eight years as UCSC’s transportation director, Larry PAGELER shifted to a half-time position as campus transportation planner to spend more time with his newborn twin sons, Aren and Jed, and wife, Katie Freeman. ‘88 After receiving a doctor of chiropractic degree from Cleveland Chiropractic College in Los Angeles, Jennifer SMITH Righi is now in practice in Torrance, Calif.; she married Paul Righi in 1995, and they were expecting their first child in September 1998. ‘89 Pamela QUINN Griffey married David Griffey in October 1997; she is working for Sacramento City Unified School District while pursuing her teaching credential at National University. John KATZ received a Ph.D. in immunology from the University of Chicago in 1997 and is currently employed with the University of Chicago as a postdoctoral scientist in immunology. ‘90 Vivian KWAN Woo is working part-time at Sun Microsystems as a project coordinator; she’s been married to her husband, Perry, for four years, and their daughter, Jacqueline, was born in May 1998. ‘91 Laura ELLIOT McCulley is a senior regulatory analyst at PG&E; she and her husband, Gary, welcomed a son, Garrett, in November 1997. ‘92 Sara ATKINS received a master’s degree in social welfare from UCLA in June 1998 and is working as a child welfare worker for Alameda County, Calif. Jason FREEMAN is studying for a master’s in urban and regional planning at the University of Wisconsin–Madison. Menahem POTASH is pursuing an M.B.A. at UC Irvine (additional text deleted 8/06). Robert REES was honored by IBM at its annual Corporate Technology Recognition Event for his work on ADSTAR Distributed Storage Manager, a data management software product. ‘93 After completing a master’s in biology at Occidental College, Shay HILLEARY has gone back into wildlife field biology and is presently the internship coordinator for the California condor reintroduction effort at the Ventana Wilderness Sanctuary in Big Sur, Calif. ‘95 Alona JASIK is studying Torah and working on composting and environmental education projects in Jerusalem.

Merrill College

‘78 John EVERHART writes: “Blended families are a challenging blessing. I continue to be both challenged and blessed.” ‘79 Kanani (Barbara) BURNS was invited to teach a course in palmistry at Mission Hill Jr. High School in Santa Cruz, and she helped to organize and plan the 50th reunion of the Santa Cruz High School class of ’48. ‘80 Sonoma State University chose a proposal by artist Johanna POETHIG as the winning design for the César Chávez memorial mural to be installed on the campus to honor the values for which Chávez struggled. ‘88 Susan YEP Pearson and her husband welcomed a daughter, Paige, in November 1997; she was planning to start graduate school in health service administration at St. Mary’s College in fall 1998. ‘90 Walter LEVISON does integrat-ed pest management and tree pruning for Bartlett Tree Experts in San Francisco. After the birth of his son, Michael, Gary SUMMERS relocated to Bakersfield, Calif., to be close to grandparents and for the “very kind cost of living.” ‘91 Laurie STEVENS and La Dell DANGEROUS III (Merrill ’92) were planning to be married in September 1998. Laurie continues to enjoy her job at the Institute of International Education in San Francisco advising international Fulbright students; La Dell is a public defender for Marin County. ‘92 After serving a tour in the U.S. Army and receiving an M.A. in international relations from St. Mary’s University in San Antonio, Malherbe BELIZEA is deputy-mayor of the city of Port-au-Prince, Haiti. RoseMary DIAZ is a freelance writer based in Santa Fe, N.M., and director of American Indian programs for the Loretto Tutor Team. Heather MIETZ is a producer of home design software at Broderbund Software, Inc. Dmitriia SOKOLOV and Eric WAGER (Merrill ’92) have moved from Portland to Corvallis, Ore., where Dmitriia is pursuing graduate work in elementary education and a teaching credential and Eric is undertaking graduate study in fermentation science. Ethan VAN THILLO, who was a student film festival director when he attended UCSC, is the founder and director of Cine ’98; The San Diego–Tijuana Latino Film Festival, which presents films by established and emerging filmmakers from Mexico, Colombia, Cuba, Brazil, and the United States. ‘93 Abel LOMBERA II received a master of arts in criminology from Indiana University of Pennsylvania; he is currently a deputy probation officer with Kern County in Bakersfield, Calif. Joyce CHANG Meyer married Karl MEYER (Merrill ’84) in May 1998, and they are living and working in New Zealand. Brad YATABE is serving as a Peace Corps volunteer in El Salvador; he is an agroforestry specialist working with local farmers to establish tree nurseries, introduce pest-management techniques, and decrease soil erosion. ‘94 Amber EVANS married Simon TROLL (Kresge ’94) and is getting her master’s in city and regional planning at UC Berkeley; she is a project coordinator at the Bay Area Defense Conversion Action Team (BADCAT). Environmental Technology Partnership. ‘95 Carrie RUDNER began a master’s program in social work at Boston University in fall 1998. ‘96 Melanie SHELDON is serving as a Peace Corps volunteer in the West African island nation of Cape Verde, where she is teaching English to high school students and organizing a community library. Porter College

‘75 Keith REDENBAUGH is currently the biology industry liaison at Iowa State University. ‘76 Linda ZISKIN earned a J.D. from the University of Oregon Law School in 1997 and was admitted to the California Bar in July 1998; while in law school, she edited and drew cartoons for a torts casebook, Tort Law and Practice by Dominick Vetri, which is, as far as she knows, the only illustrated law school casebook. Linda is a member of the UCSC Alumni Council. ‘77 Rebecca MORGAN’s fourth book, Life is Lessons: Insights and Information for a Richer Life, was published in January 1998. Sharon TURNOY was recently named manager of executive communications for the office of the chairman and CEO of Synopsys, Inc., a $700 million software company in Mtn. View, Calif.; she lives in San Jose, has two children, and can be reached by e-mail at sharon@synopsys.com. ‘78 Lori GUSTAVSON received one of three 1998 President’s Awards from the Washington Association of Criminal Defense Lawyers for her distinguished service to the criminal defense bar; she is in private practice in Seattle concentrating in the area of major felony and federal criminal defense litigation. ‘79 The Tejon Ranch Company has named John SELDHE to the position of location manager for its Film and Television Location Department; he has worked as a location manager on projects for Baywatch Productions, Walt Disney Company, Twentieth Century Fox, and DreamWorks SKG. ‘80 Fred FERNAINdy is playing music, raising two kids, and teaching special-needs children. ‘82 Since returning to England, Susan HEALEY has been living in Portsmouth and working to raise the profile of Charles Dickens by organizing an international conference in 1996 and, with her associate A. J. Pointon, traveling widely to give talks and performances related to Dickens’ life and work. ‘83 Lisa KAPLAN is married, living in Los Angeles “right under the Hollywood sign,” and working as a voice-over actor in commercials and animation; she can be heard on the Fox Saturday morning program, The Mr. Potato Head Show. ‘84 Amy GERHAUSER is currently finishing an M.F.A. in sculpture and teaching sculpture at the Governor’s School for the Arts in Norfolk, Va. ‘86 Shelley LEVIN Bilkik is the director of environmental initiatives at Warner Brothers Studios, and she is enjoying being the mom of her one-year-old daughter, Alana. ‘90 Jennifer PRIEBE has been a freelance ceramic sculptor of toys and giftware since completing an M.A. at N.Y.U. in 1993. ‘91 Jennifer MOODY lives in New York City and works as much as possible as a performer or stage manager with a variety of companies. She has also started producing videos for Gay Men’s Health Crisis, the largest and oldest AIDS service organization in the U.S. ‘92 Christopher SPELLMAN received an M.D. degree from the Medical College of Wisconsin in May 1998; he will serve a residency with Lenox Hill Hospital in New York City. Ellen Anne WALLACE is married and living in Israel; she does graphic arts and designing. ‘93 Barbara RESNICK Dietze, who graduated from Porter College at age 51, was married in 1998 and writes, “the best is yet to come.”
Kresge College

'76 After receiving her master's in music composition and working for two years as an outside consultant composer for Walt Disney Imagining, Tish (Patricia) EASTMAN was hired by Disney; currently she is lead media designer for the new Tokyo Disney Sea Park and has several cuts on new Walt Disney Records releases.

'78 Tom MEYER is a psychiatrist working part-time in a community mental health center in Crescent City, Calif.

'79 Susan TATSUI D'Arcy is an administrator at Merit Academy, and she recently published the Busy Woman's Organizer, Busy Woman's Checklist, and Busy Woman's Wedding Planner.

'80 Douglas MANCILL, an attorney specializing in cross-border insolvency and international litigation and a partner in the San Francisco law firm of Graham & James, has relocated to Thailand, where he is working on legal reforms resulting from the financial crisis in Southeast Asia.

'82 Panda KROLL recently finished an internship with a Massachusetts appeals court judge and has been asked to return for a judicial clerkship after she graduates from law school in 2000; her husband, Kevin VOLKAN (Kresge '81), just finished a master's in public health at Harvard and has been hired as director of assessment by the Department of Educational Development at Harvard Medical School.

'83 Catherine KEACH's original performance text, "Dyke Cowgirls and Dancing," was one of ten scripts selected in March 1997 for contribution to diversity in performance by the five-college World Festival in Amherst, Mass.; winners received a stipend from the James Baldwin Memorial Fund and their work was performed.

'90 Kristina JOHNSTON and David FRANKE (Kresge '90) were married in 1995; they have quit their jobs (Kristina as an executive chef and David as a teacher) to travel around the world. Visit their Web site at www.wired2theworld.com.

'91 Beth HENLEY Geise received her teaching credential and is teaching an "open structure" fourth-, fifth-, and sixth-grade class; she is married, has bought a house, and is pregnant.

'92 Sheryl Kaye MARTINELLI is an English instructor at King City High School; she began her teaching career at Alisal High School in 1993.

College Eight

'77 After retiring as a city planner from the city of Oxnard in 1996, Allan MOORE has spent his time consulting, traveling, visiting friends, and playing golf; he recently received the 1998 Oxnard Tourism Bureau's Merit Award for using Internet technologies to promote tourism for the city.

'78 Kevin DANN is keeping alive the natural history field quarter at the University of Vermont, where he taught a summer course titled "Natural History and Inspiration;" his latest book, "Bright Colors Fully Seen: Synaesthesia and the Search for Transcendental Knowledge," was published by Yale University Press in fall 1998.

'80 Mark SILBERMAN is the general counsel for the New York City Landmarks Preservation Commission; he lives in Brooklyn with his wife, Sonita, and their dog, Maddie.

'82 Jean CURRY Brock is celebrating 15 years as an employee of A & P Insulation in Santa Cruz; her expertise is in energy audits and energy economics of commercial and residential buildings. "Among dozens of building projects she has worked on at UCSC," she writes, "she is especially proud of those for College Eight."

'84 Kim MATSUNAGA and her husband, Michael Hurley, are the parents of John Francis Hurley II, born in August 1997, and Cate Yuriko Hurley, born in August 1995. Kim recently dropped out of a Ph.D. program in architecture at UCLA to work part-time as a researcher in sustainable communities, city revitalization, environmental design, and building technology and to raise her children.

'86 Rose KILBURN LaMont is currently a faculty member at Modesto Junior College and is holding an interim position as college researcher.

'88 Randall HITCHIN lives in Seattle with his wife, Lynn KANNE (Kresge '90); he has just completed an M.S. in forest resources and is collections manager/registrar of the Washington Park Arboretum.

'91 Anthony MENDOZA graduated from medical school at Michigan State University, College of Human Medicine, and started a family practice residency program in Fresno, Calif.

'96 Since graduation, Sarah FLUETSCH has been working as the outdoor program and summer camp director for the Sierra Nevada Girl Scout Council in Reno, Nev.

Graduate Studies

'84 Wendy LUTTRELL (Ph.D., sociology), an associate professor of anthropology at Duke University, received the Oliver Cromwell Cox Best Book on Race and Ethnicity Award from the Society for the Study of Social Problems for her book Schoolmart and Materwize: Working-Class Women's Identity and Schooling (Routledge, 1997).

'88 John DONAT (Ph.D., chemistry) has been awarded tenure and promoted to the rank of associate professor in the Department of Chemistry and Biochemistry at Old Dominion University in Norfolk, Va.; his research focuses on the biogeochemical cycling of trace metals in Chesapeake Bay and in coastal and open waters of the Atlantic and Pacific Oceans.

'90 Rebecca URSICH (cert., education) leads introductions to the Landmark Forum and works as a senior technical trainer for a software company in Seattle; recently she served as the general contractor for work on an old home she purchased.

'94 Amanda KONRADI (Ph.D., sociology), an assistant professor of sociology at Ohio University, was recognized by the Society for the Study of Social Problems with its Alfred Lindesmith Law and Society Award for her paper "Having the Last Word: An Examination of Rape Survivors' Participation in Sentencing."

'David SONNENFELD (Ph.D., sociology) is the recipient of the 1998–99 Cirsacy-Wantrup Postdoctoral Fellowship in Natural Resource Economics at UC Berkeley; he has taken a leave from his position as assistant professor of sociology at Washington State University.

'97 Kamari (Maxine) CLARKE (Ph.D., anthropology) is an assistant professor of anthropology at Yale University. Robert KUWADA (M.A., history of consciousness) is a publicist for a quarterly magazine about cultural values, titled Parabola: Myth, Tradition, and The Search for Meaning.

In Memoriam

Clement SHEAREER (Graduate Studies '78), a top administrator at Carleton College in Northfield, Minn., died May 14, 1998, of a heart attack at his home in Northfield; he was 49.

Madalon ZORN (Cowell '78), a marriage-family-child counselor and a founding member of the dance/theater collective Mamalution, died at her home in Santa Cruz July 9; she was 51.

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