What attracts blue whales, the largest animals ever to inhabit the Earth, to Monterey Bay?

The answer begins with the wind (see page 8).

Also in this issue: UCSC in the year 2010, students help nonprofits get "wired," a post-9/11 language program.
Dear Friends of UC Santa Cruz,

SAT LUX! “LET THERE BE LIGHT!” the motto for the University of California, is the guiding ideal for UC Santa Cruz. At no time in recent history have the importance and global consequences of education been more appreciated. UC Santa Cruz is steadfast in its commitment to promote the values and principles of education and research. In this issue of Review magazine, you will find examples of the myriad ways that faculty, staff, alumni, students, and volunteers indeed illuminate the past, shape the present, and invent the future.

Understanding the mysteries of the ocean and applying this new knowledge to protect it. Inspiring wider understanding of other languages and cultures. Offering opportunity for our brightest young scholars. Animating the human spirit through the arts. Preserving and transmitting the insights of the myriad ways that faculty, staff, alumni, students, and volunteers indeed illuminate the past, shape the present, and invent the future.

As a public university, UC Santa Cruz receives support from the state of California. However, only about 40 percent of our annual operating cost is derived from state funds. California’s current economic downturn will most certainly result in budget cuts at UC Santa Cruz. Now, more than ever, our campus must rely on other sources to provide the balance of our funding.

Private philanthropy from foundations, alumni, parents, and other friends is critical to UC Santa Cruz’s success. These gifts fund scholarships and graduate fellowships, support world-changing research, and provide the classrooms, laboratories, and other learning environments in which our students prepare for the future.

This year, the campus received its largest gift from an alumnus to launch the STEPS Institute for Innovation in Environmental Research. We dedicated two new buildings—the Center for Ocean Health and the Center for Adaptive Optics. Our Telephone Outreach Program passed the million-dollar mark. And we initiated the Center for Informal Learning and Schools. All were made possible with nonstate support.

On behalf of the extended UC Santa Cruz family, I offer heartfelt thanks to our generous benefactors, and I applaud the exceptional work of the volunteers who help us in countless ways.

If you do not already enjoy a place among the ever-widening circle of donors and friends, please join us. Without your generous gifts of time and money, we will be unable to meet fully our commitment to keep bright the light of learning.

M.R.C. Greenwood
Chancellor
DuPuis, above, says milk against them, how can milk’s this camera as being able to do 10 times better than the old one, but it still amazed us to see the results,” said professor of astronomy and astrophysics Garth Illingworth, deputy leader of the UCSC astronomers who have been working on the camera for the past seven years.

The overall goal of the institute is to foster research linking local and global environmental processes, a major scientific challenge that has been identified as a top priority by several national environmental task forces over the past two years. “Human health depends on ecosystem health, and ecosystem health depends on the environment,” said Ringold, chair of the UCSC Arts Division and Arts & Lectures program, was dedicated to Ustad Ali Akbar Khan, in celebration of his 80th birthday. A distinguished adjunct professor of music at UCSC, Ali Akbar Khan, teaches master classes and workshops and advises the South Asian music program. Proceeds from the concert were earmarked for the South Asian Arts Fund at UCSC, which supports the study and performance of the classical arts of South Asia.

Hubble’s new camera delivers breathtaking views of universe

The first views of the universe taken by the Hubble Space Telescope’s new Advanced Camera for Surveys are stunning, even to UCSC astronomers who have been working on the camera for the past seven years. “We had always advertised this camera as being able to do 10 times better than the old one, but it still amazed us to see the results,” said professor of astronomy and astrophysics Garth Illingworth, deputy leader of the campus’s science team.

NASA released four demonstration pictures in May. Among the suite of “suitcase-for-framing” images is a stunning view of a colliding galaxy, dubbed the “Tadpole,” located 420 million light-years away. While the galaxy itself is visually striking, what’s in the background made an even bigger impression on Illingworth and other astronomers: an enormous number of distant galaxies that speckle the darkness beyond the Tadpole.

Among the photos released by NASA were ones dubbed “Tadpole,” right, a view of a colliding galaxy, and another called “Cone Nebula,” left, a pillar of gas and dust.

UCSC presents ‘The Classical Music of India’ concert

One of India’s most important musical artists, sitar master Ustad Vilayat Khan, starred in “The Classical Music of India,” a concert sponsored by UCSC on June 2 at the Flux Center in Cupertino.

The concert was held in honor of Talat and Kamil Hasan, in celebration of his 90th birthday. A distinguished adjunct professor of music at UCSC, Ali Akbar Khan, teaches master classes and workshops and advises the South Asian music program. Proceeds from the concert were earmarked for the South Asian Arts Fund at UCSC, which supports the study and performance of the classical arts of South Asia.

Chancellor Greenwood addresses Washington policy colloquium

In the aftermath of September 11, the science and technology community is being asked to contribute to new counter-terrorism efforts. And some of these programs may be subject to regulations that restrict access to information or to laboratory procedures. In an address delivered in Washington, D.C., in April, Chancellor M.R.C. Greenwood asked her audience to consider balancing the need to restrict information for security reasons and the value to society of the free flow of scientific ideas. Greenwood’s presentation of the 2002 William D. Carey Lecture was sponsored by the American Association for the Advancement of Science.

Linguist takes aim at ‘grammar myths’

You can’t afford to casually ignore this new book, especially if you’ve ever been cited for breaking traditional grammar rules—such as splitting infinitives. The Cambridge Grammar of the English Language, coauthored by UCSC professor of linguistics Geoffrey Pullum, is the first definitive grammar reference book of standard international English in more than 20 years. Pullum hopes that among other things, the book will help debunk what he deems “grammar myths” that have long plagued the world’s most widely used language.

“People have been living in fear of grammar rules that don’t exist,” said Pullum, who wrote The Cambridge Grammar with Rodney Huddleston of the University of Queensland. Here are a few of the “rules” that Pullum and Huddleston debunk:

• You must never split an infinitive.
• It’s wrong to end a sentence with a preposition.
• They must never occur with a singular antecedent.
• The word “since” must be used only in the time-reference sense.

Milk: Perfect food or deadly poison?

Hollywood stars don’t milk mustaches to ask the ubiquitous question, “Got milk?” while vegan activists decry the practice as unhealthy and tainted by antibiotic residues, hormones, and genetically modified organisms.

Like it or not, milk is a staple of the American diet and, more than any other food, milk has become a symbol of wholesome goodness and pastoral purity. With all the forces of Madison Avenue arrayed against them, how can milk’s dissenters take on “nature’s perfect food”? “For years, milk has been championed as the perfect food, and now it is being demonized as a symbol of the degradation of modern society,” said E. Melanie DuPuis, an assistant professor of sociology at UCSC and author of the new book Milk: Perfect Food or Deadly Poison? in honor of Talat and Kamil Hasan, in celebration of his 80th birthday. A distinguished adjunct professor of music at UCSC, Ali Akbar Khan, teaches master classes and workshops and advises the South Asian music program. Proceeds from the concert were earmarked for the South Asian Arts Fund at UCSC, which supports the study and performance of the classical arts of South Asia.

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Two UCSC astronomers elected to Academy of Arts and Sciences

TWO PROFESSORS OF ASTRONOMY AND ASTROPHYSICS—Douglas Lin and Claire Max—have been elected to the American Academy of Arts and Sciences. The academy honors the nation’s most distinguished artists, scientists, and business and political leaders. The selection of Lin and Max brings the number of academy fellows in UCSC’s Department of Astronomy and Astrophysics to nine and the UCSC total to 17.

Douglas Lin is director of the California Space Institute’s Center for Origins. Claire Max is an associate professor of the Center for Adaptive Optics.

The researchers looked at four closely related damselfish species that have different coloration patterns. They found that the group of species includes three distinct species, rather than the two previously thought. The researchers used genetic data to determine the number of species and found that they have different color patterns.

Configuration management is essential to understanding the state of the software during its development and controlling the changes made to it. Configuration management is analogous to document management in that it uses a process to log and track changes to software files.

Computer scientist receives ‘early career’ grant from NSF

James Whitehead, an assistant professor of computer science at UCSC, has received a prestigious award from the National Science Foundation’s Faculty Early Career Development Program. Whitehead will use the grant of $300,000 over five years to support his research on configuration management systems, which aims to improve the management of software development projects.

UC Regents endorse bond measures

The UC board of regents has endorsed the Facilities Bond Acts of 2002 and 2004, which would provide funding for a total of $300,000 over five years to support the research on the design and implementation of configuration management systems. UC Regents endorse bond measures. The researchers looked at the effects of different coloration patterns on the survival of damselfish species. They found that the group of species includes three distinct species, rather than the two previously thought. The researchers used genetic data to determine the number of species and found that they have different color patterns.

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T he burst administration’s plan to develop space-based missile defense systems has generated heated debate, but most commentators have overlooked an important and potentially destructive consequence of placing weapons in orbit around the Earth: The militarization of space could create a permanent halo of orbiting debris that will interfere with important scientific and communication satellites. “In science fiction movies like Star Wars there are constant explosions, but a few seconds later the screens are clean. It’s not going to work that way near a planet,” says UCSC professor of physics Joel Primack, who issued the warning during a speech at the Unitary Educational Conference on Scientific and Cultural Organization in Paris. About 3.5 million kilograms of debris (roughly 6 million pounds), from dead satellites to paint chips, already orbit the Earth. The U.S. Space Command tracks more than 9,000 objects larger than four inches in diameter, and operational satellites can take evasive action to avoid being hit by one of these objects. “The most serious current hazard is the non-trackable debris smaller than a marble that orbits at around 17,000 miles per hour, 10 times faster than a bullet from a high-powered rifle. A BB-sized fragment traveling at that speed has the destructive power of a bowling ball moving over 60 miles per hour.” Space-based missiles will generate huge amounts of small debris particles, said Primack. Each explosion, even more so, will result from the coming small projectiles hitting larger objects already in orbit.

In Memoriam

Mary A. Holmes, a founding member of the faculty of UCSC and a beloved artist and art historian, died in January after a brief illness. She was 91.

Holmes, who grew up in various towns in the West, and in Chicago, began her career as a painter and became equally well known for her work as an art historian, hosting a series of community lectures. “She was remarkable in many respects,” said John Drakes, a fellow founding faculty member. “There was no one like her. I admired her intense professionalism as an art historian, which she rather disguised because she was full of so many eccentric opinions. Above all I admired her courage; she was indomitable.”

Holmes’s affiliation with UCSC began in 1965 when she arrived from Los Angeles as a lecturer in art; she retired as a full professor in 1977. Holmes’s connection to UCSC is not merely geographical. “I used to think it was a cliché when people said ‘It’s an honor just to be nominated,’” said Jacobson. “But now I know it’s true. I was thrilled to find out I was a semifinalist, and ecstatic when I won.” This year’s 95 Mellon Fellows were selected from 733 applicants. Jacobson is the 17th UCSC student to win a Mellon Fellowship, and the sixth winner from UCSC’s classics program. A 2000 graduate with a double major in classics and history, Jacobson begins a doctoral program in classics at UC Berkeley this fall.

Institute of Marine Sciences dedicates its Center for Ocean Health

F indings support ‘Out of Africa’ hypothesis

A n abrupt episode of global warming and major changes in plant and animal life marked the transition between the Paleocene and Eocene epochs about 55 million years ago. Several groups of mammals, including early primates, made their first appearances in Asia, Europe, and North America around this time.

The study also shows that an extinct family of mammals, the hyaenodontids, definitely appeared first in Asia. “These groups probably spread to North America and Europe from Asia at the Paleocene/Eocene boundary,” said Gabriel Bowen, a Ph.D. candidate in earth sciences at UCSC and co-first author of the paper. The boundary is marked in the geologic record by an anomalous blip in carbon isotope ratios. Geochemists have linked this anomaly to a mass extinction event and the transient global warming that occurred at this time, dramatically altering the global climate for about 100,000 years.

Koch and Bowen worked with researchers from the University of New Hampshire and the Chinese Academy of Sciences to collect and analyze samples from the Hengyang Basin in southern China.

UCSC alumnus awarded Mellon Fellowship

When David Jacobson starts his Ph.D. studies this fall, he’ll be able to focus more on learning and less on worrying about tuition and expenses, thanks to his 2002 Andrew W. Mellon Fellowship in Humanistic Studies. The prestigious award, which supports exceptionally promising first-year doctoral students preparing for careers in humanities teaching and scholarship, will cover all tuition and required fees for the UCSC alumnus in his initial year of graduate study, as well as providing a one-time stipend of $17,500.

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The results are consistent with studies that have pointed to Asia as the center of origin for several important groups of mammals, including primates and two orders of hoofed mammals. The study also shows that an extinct family of mammals, the hyaenodontids, definitely appeared first in Asia. “These groups probably spread to North America and Europe from Asia at the Paleocene/Eocene boundary,” said Gabriel Bowen, a Ph.D. candidate in earth sciences at UCSC and co-first author of the paper. The boundary is marked in the geologic record by an anomalous blip in carbon isotope ratios. Geochemists have linked this anomaly to a mass extinction event and the transient global warming that occurred at this time, dramatically altering the global climate for about 100,000 years.

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Albert E. Whitford, an acclaimed astronomer, former director of UCO/Lick Observatory, and a professor emeritus of astronomy and astrophysics at UCSC, died in March in Madison, Wisconsin, after a short illness. He was 96.

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from Wind to Whales: Understanding an Ecosystem

By Tim Stephens

In 1996, Donald Croll set out to answer a simple question: What makes Monterey Bay such a great place for blue whales? Probably the largest creatures ever to live on Earth, blue whales congregate in the bay every summer, feeding on swarms of shrimp-like crustaceans called krill.

So the simple answer to Croll’s question is that blue whales come here to eat. But Croll, an assistant professor of ecology and evolutionary biology at UCSC, wanted a deeper understanding of the relationships between blue whales, krill, and conditions in the bay.

It turns out that the whales come for the same reason that Monterey Bay attracts all kinds of marine life: It is quite simply one of the most fertile marine ecosystems in the world. And Croll, in collaboration with a diverse group of researchers at UCSC and other institutions, is starting to develop a comprehensive picture of how this highly productive ecosystem works.

“Our research centers around how physical processes, from water chemistry to wind dynamics, ultimately determine how much food is available for animals at the top of the food chain, like whales and seabirds,” Croll says.

Croll’s investigation is one of many such projects in which UCSC researchers are sorting out the complex and elegant networks of interactions that govern marine ecosystems. Their work is helping to establish a solid scientific basis for the conservation and management of marine resources and the protection of endangered species.

While Croll’s group focuses on the open-water or “pelagic” habitat, other researchers are studying the nearshore habitats—the rocky reefs and intertidal zone. Biologists in both groups work with oceanographers to get a better understanding of the physical processes that influence these ecosystems. By studying the dynamics of marine ecosystems over a long period of time, researchers hope to understand them well enough to tell the difference between natural variability and disturbances caused by human activities.

“That’s what this is all about,” Croll says. “If you’re trying to manage resources, you have to understand what creates variability in those resources. Humans are affecting the world in so many ways, but at the same time we know that we live in a variable world. The problem is that we haven’t had the long-term data to know what the natural variability is.”

Ultimately, Croll’s concern is the health of the marine ecosystems on which blue
As a result, they only feed in areas of exceptionally high productivity, Croll says. Blue whales have the highest average daily energy requirements of any species. This is problematic that affects the whole coastal food web. Many of the world’s most important fisheries. California and Oregon, intense upwelling tends to occur in certain places due to complex interactions of wind, currents, and topographic features of the coastline. The strength of the upwelling determines how many of the juvenile krill survive to become adults, and also whether the krill stay bunched up in the dense swarms blue whales like to feed on, Marinovic says. People often marvel that blue whales, which are far bigger than the largest dinosaurs, eat something as small as krill. An average blue whale is about 80 feet long and weighs about 110 tons, while the krill species found along the West Coast are less than an inch long. But Croll points out that blue whales don’t eat individual krill, they eat entire schools of them. “They’re really eating a superorganism, and the way they do it is pretty amazing. The blue whale has a tremendously bizarre feeding apparatus,” Croll says. A feeding blue whale, as Croll describes it, swims toward a school of krill at about 15 miles per hour and engulfs the krill along with the entire volume of water ... and forces the water out through the baleen, fibrous plates that hang down from the upper jaw and filter out the krill. A feeding blue whale, as Croll describes it, swims toward a school of krill at about 15 miles per hour and engulfs the krill along with the entire volume of water ... and forces the water out through the baleen, fibrous plates that hang down from the upper jaw and filter out the krill. The driving force behind the high productivity of California’s coastal waters is wind. Every spring and summer, winds blowing from the north act in combination with the rotation of the Earth to move warm surface waters offshore, drawing cold, nutrient-rich deeper water to the surface. This is called upwelling. Along the coast of California and Oregon, intense upwelling tends to occur in certain places due to complex interactions of wind, currents, and topographic features of the coastline. Phases of upwelled water enter Monterey Bay mainly from the north, from an upwelling center off Point Arena Niewo, about 20 miles north of Santa Cruz. Spring is a crucial time in the annual cycle, when wind-driven upwelling typically stimulates the first big phytoplankton blooms of the year. Krill populations respond with a burst of reproductive activity, leading to a peak in the abundance of larval krill in April and May. These larvae reach adult size by July, when the blue whales start to show up, migrating north from their winter breeding grounds in the Gulf of California and other more southerly waters. Regular pulses of upwelling are needed to keep the system going through the summer, but that doesn’t always happen, says Baldo Marinovic, a research biologist at UCSC Institute of Marine Sciences (IMS) and one of Croll’s longtime collaborators. “It’s like getting someone going on a swing. It takes a big kick-start in the spring to get the productivity going, and then just a push now and then to keep the system productive,” Marinovic says. The strength of the upwelling determines how many of the juvenile krill survive to become adults, and also whether the krill stay bunched up in the dense swarms blue whales like to feed on, Marinovic says. The system varies from year to year and also from place to place along the coast. If the upwelling is weak in one area, it may be strong somewhere else, and the whales move around accordingly, says Croll. “I realize now that, in terms of the spatial scale, Monterey Bay to a whale is probably like a grocery store to us, and they’re in this grocery store looking for the krill aide,” Croll says. “But that store may be all out of krill, so they have to go across town to another store. For a whale, that might mean going from Monterey Bay to the Channel Islands off southern California or the Cordell Bank north of San Francisco—that’s their idea of local stores.” Because of their great size, blue whales have the highest average daily energy requirements of any species. As a result, they only feed in areas of exceptionally high productivity, Croll says. People often marvel that blue whales, which are far bigger than the largest dinosaurs, eat something as small as krill. An average blue whale is about 80 feet long and weighs about 110 tons, while the krill species found along the West Coast are less than an inch long. But Croll points out that blue whales don’t eat individual krill, they eat entire schools of them. “They’re really eating a superorganism, and the way they do it is pretty amazing. The blue whale has a tremendously bizarre feeding apparatus,” Croll says. A feeding blue whale, as Croll describes it, swims toward a school of krill at about 15 miles per hour and engulfs the krill along with the entire volume of water ... and forces the water out through the baleen, fibrous plates that hang down from the upper jaw and filter out the krill. The driving force behind the high productivity of California’s coastal waters is wind. Every spring and summer, winds blowing from the north act in combination with the rotation of the Earth to move warm surface waters offshore, drawing cold, nutrient-rich deeper water to the surface. This seasonal upwelling of nutrient-rich water sparks massive blooms of phytoplankton, microscopic algae that support a rich web of marine life. It’s one of the largest biogeographical events that has ever occurred on this Earth,” Croll says. A single whale can consume more than two tons of krill a day during the peak summer feeding season. But the whale comes and goes, and a blue whale may have to travel great distances and go for long periods without food before resupplying. “They have large energy stores, so they can go a long time without feeding while they travel from one patch of krill to another. Their size also helps them take in a lot of food once they find it,” Croll says. Croll’s research on the upwelling-driven ecosystem in Monterey Bay grew out of a general interest in the ecology of all the great whales—including blue, fin, and humpback whales—that forage for food along the West Coast. As a research biologist at UCSC in 1996, he and a group of collaborators began conducting systematic surveys of several areas regularly visited by these whales. They mapped the distribution of whales over large areas, attached monitoring devices to whales to follow their diving behavior, and used echo sounders to locate and track aggregations of krill. The researchers found that blue whales tend to feed in certain spots along the coast where the continental shelf drops off steeply into deeper water. One of the most dramatic examples is along the Monterey Bay, where the intense Monterey Submarine Canyon cuts a big wedge out of the continental shelf. By tracking both krill concentrations and the diving patterns of whales, the scientists could see that the blue whales dive directly down to the densest swarms of krill along the edge of the canyon. “Whether here in Monterey Bay, or north of it in the Monterey Bay, or the coast of Mexico, it was always the same pattern—they were feeding on dense aggregations of krill off the edges of these steep underwater cliff faces,” Croll says. In April and May, when the water temperature and ice concentration of these places are associated with major upwelling centers. With a classic upwelling region practically in his backyard, Croll decided Monterey Bay was the best place to try to understand the behavior of the whales in relation to the dynamics of upwelling systems. Croll’s main collaborators include Marinovic, an expert on krill, UCSC research biologist Bernie Teschky, and Scott Benson, a graduate student at Moss Landing Marine Lab. Croll is working with one of his professors at Harvey, every summer, the group conducts regular surveys of Monterey Bay from Moss Landing’s research vessel John Martin. The boat polishes back and forth across the bay in straight, parallel lines, while researchers and volunteers perched on the flying bridge record every sign of life on the bay—including whales, dolphins, and seabirds, sometimes in astonishing numbers. The scientists also take water samples, collect krill, and gather oceanographic data, such as water temperature and salinity. While it has never been easy for scientists to get funding for long-term monitoring of ecosystems, various agencies have provided funding for Croll’s work, including the Office of Naval Research, the National Science Foundation, the California Sea Grant, and the Monterey Bay National Marine Sanctuary, which is especially interested in gathering data on the sanctuary. Having years worth of data allows scientists to ask questions they couldn’t otherwise address, Croll says. “These data start to take on a life of their own and suggest new questions to explore. Now that we have years of good data, we have enough information to start to understand how the system works and how variability between years occurs.”
El Niño is important not only as a source of natural variability, but also as a possible harbinger of things to come as a result of global warming. Croll says. Sea-surface temperatures are expected to increase with global warming, as they do along the coast during El Niño. Furthermore, the frequency and intensity of El Niños may increase with global warming. Croll’s group already had one year of survey data when the 1997–98 El Niño came along. It was a perfect opportunity to study the effects of El Niño on coastal ecosystems.

Croll expected low krill populations to result in a bad year for whales in Monterey Bay. Instead, whales and other marine life showed up in record numbers and were seen much closer to shore than usual. “Although there wasn’t a lot of krill, this was probably one of the few places where there was any food at all,” Croll says. “Ordinarily, they would be feeding in a number of places up and down the coast, but during El Niño this area became like an oasis in the desert. That means Monterey Bay may be even more important for the whales than we had thought.”

In collaboration with UCSC’s environmental studies professor Marc Mangel, Croll’s group is now beginning to develop and test computer simulations that could be used to forecast the abundance of krill, indicating whether it will be a good year for whales and other animals that feed on krill. Salmon and rockfish eat krill, as do sardines and anchovies, which in turn are preyed on by larger fish and marine mammals. Squid also depend on krill for food, and the squid fishery is California’s largest fishery in both volume landed and commercial value. Mangel is looking at how upwelling fuels the productivity of coastal ecosystems.

One of his collaborators, Francisco Chavez of the Monterey Bay Aquarium Research Institute, has established an intensive, long-term monitoring program to examine the physical dynamics and productivity of Monterey Bay, using instruments on moorings and ships. And Croll has been adding new collaborators, at UCSC and other institutions, as his research progresses. Their investigations are already revealing new layers of complexity in coastal ecosystems. It turns out, for example, that some of the nutrients that stimulate phytoplankton blooms originate in runoff from the land. Kenneth Bruland, professor of oceanography, has shown that phytoplankton growth may be limited by the availability of iron, which enters coastal ecosystems in sediment from rivers and streams.

Croll is also working with Raphael Kudela, assistant professor of ocean sciences, who uses satellite images to measure phytoplankton productivity in coastal waters. His data provide a detailed picture of what’s going on at the bottom of the food chain.

Pulling together data from diverse sources to obtain a comprehensive picture of the Monterey Bay ecosystem will not be easy. But Croll and others at UCSC have already gone a long way toward assembling the kind of broad-based interdisciplinary collaboration that can accomplish that goal. “As we develop our understanding of the whales, we see where we need input from other disciplines. We’ve found that other scientists get excited when they see what we’re doing, that we’re not just hogging whales but trying to address important ecological questions,” Croll says.

The new Center for Ocean Health at UCSC’s Long Marine Laboratory is more than a state-of-the-art research facility. It is a building with a mission, serving as a focal point for scientific research, education, and policy programs that address ocean conservation and management issues. By bringing together university researchers, government agencies, and conservation organizations, the center encourages the integration of research and policy efforts to protect and manage marine ecosystems and biodiversity.

“We are targeting scientific questions that have strong policy implications, where there is a need for solid research to address issues of great importance to the region and the state,” says Peter Raimondi, an associate professor of ecology and evolutionary biology. Raimondi is one of about a dozen faculty and researchers in UCSC’s Institute of Marine Sciences (IMS) who moved their offices and laboratories from the main campus to the Center for Ocean Health last year, bringing with them postdoctoral researchers, graduate students, and technical support staff. The center was dedicated in February (see story, page 6).

The researchers in the center are primarily involved in studies of marine vertebrates and coastal biology. The center gives them easy access to the other research facilities at Long Marine Lab, including tanks and pools for marine mammals and an aquarium for fish, plankton, and marine invertebrates. Two nonprofit conservation groups have offices at the Center for Ocean Health: The Nature Conservancy’s Coastal Waters Program and the Island Conservation and Ecology Group. Also located nearby are the Nature Conservancy’s Coastal Waters Program for the Nature Conservancy projects, gaining firsthand experience with marine conservation issues.

“There are few places in the world where there is such good synergy between scientists, managers, conservationists, and public educators working to understand and preserve marine diversity,” Beck says.

The Island Conservation and Ecology Group (ICEG) was founded in 1994 by IMS researchers Donald Croll and Bernie Tershys. It is primarily concerned with problems caused by introduced species on islands. For example, the group is helping the islanding colonies of birds that are threatened by introduced rats and other exotic species on coastal islands of Mexico and California. ICEG works with UCSC scientists, conservationists, and graduate students involved in research projects related to the group’s goals.

The Center for Ocean Health draws on the full range of expertise in the Institute of Marine Sciences. With 43 affiliated faculty and over 50 professional and postdoctoral researchers, the IMS is known forcutting-edge interdisciplinary research in environmental toxicology, marine mammal biology, nearshore ecological processes, marine bio-geochemistry, paleoceanography, and continental margin geology. —Tim Stephens

The Center for Ocean Health: Integrating science and policy

The Center for Ocean Health is a place where knowledge about marine science and policy is shared and discussed. This center is a hub for researchers, educators, and policymakers working to protect and conserve marine ecosystems.

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Tech Tutors to the Rescue

They aren’t your classic superheroes: They tackle such modern-day villains as surly computer servers, indecipherable software manuals, and database snafus. But they rival Superman and Wonder Woman in the minds of those they’ve rescued.

Consider mild-mannered Melody Liu Shuk Han, a UCSC undergrad who arrived on the doorstep of the Center for International Policy in Washington, D.C., and proceeded to resuscitate the nonprofit’s web site.

“We will be eternally grateful to her,” said Frick Curry, the center’s director of fundraising. “We’re a small nonprofit, and we don’t have an information technology expert on staff, or even a consultant. It’s catch as catch can.”

Liu soared to heroine status as an intern with UCSC’s Global Information Internship Program (GIIP, pronounced “jeep”), a new initiative steeped in the issues of globalization. GIIP trains undergraduates in computer skills they take to organizations that need a boost to make the most of today’s technology.

UCSC sociology professor Paul Lubeck launched GIIP in 1998 to address growing inequality in access to information networks and global communications. “Computer networking is a powerful organizing tool, but the poor and disenfranchised are being shut out of the information revolution,” said Lubeck.

“Helping these groups get wired gives them a chance to mount web pages, communicate their message, and connect with others who share their interests. It democratizes globalization by putting people within each other’s reach.”

For groups like the Center for International Policy, a think tank founded in 1975 to promote peace, human rights, and a U.S. foreign policy that reflects democratic values, GIIP was the difference between having a web presence and vanishing from the virtual world. Liu not only corrected long-standing problems with the center’s web site and got it back online, she took proactive steps to avoid future snafus. “She definitely helped bridge our digital divide,” said Frick.

About 75 students have participated to date. Although most come from the social sciences and humanities, Lubeck estimates that 10 percent of students are science majors. To prepare for their internships, students enroll in a nine-month class that provides 40 hours of computer-based training and 80 hours of project work focused on network technology, computer back-up systems, and web-page development. Required courses cover subjects such as global inequality, democratic social movements, fieldwork methodology, and language instruction, if needed. Interns...


also learn about grantwriting and computer-based fundraising, an untapped realm that budget-strapped organizations typically are eager to explore. Like many interns, Liu had no particular computer skills before enrolling in the prep course. “I used the computer for e-mail and writing papers, and that was about it,” she said. During her internship at the Center for International Policy (CIP), she quickly became the resident computer expert. “She kept telling us she was just a beginner, but we said, ‘That’s okay. You know 100 percent more than anyone else!’” said CIP intern coordinator Leah Riley.

After performing triage on the center’s web site and untangling a number of computer problems that cropped up shortly after her arrival, Liu spent much of her internship conducting in-depth online research about potential donors. “She did what no one else here, especially myself, had the time to do, which is use all these new online databases to gather information about foundations,” said fundraising director Frick. Liu’s work helped Frick sharpen his focus and target his fundraising pitches. “She’s a self-starter and a fast learner,” he said of Liu, who studied politics at UCSC as an exchange student from the Chinese University of Hong Kong.

A world away in South Africa, GIIP intern Gabe Collett was promoting technology in a vastly different setting. During an internship with the University of Natal at Durban, Collett used his computer savvy to create new online classes and to design and launch a web site for the university’s Industrial, Organisational and Labour Studies Department. By night, he helped “wire” organizers at the nearby Worker’s College, teaching students how to use e-mail, spreadsheets, word-processing programs, and the World Wide Web.

Most of South Africa, like much of the Third World, lacks the infrastructure of telephone lines to support sophisticated computer networks. In KwaZulu Natal Province where Collett worked, few homes had computers. “For people who have no concept of how computers work, there was a real feeling of empowerment,” Collett said of introducing his students to e-mail as a tool for organizing, lobbying, and building overseas alliances. But Collett found it difficult to sustain interest when there was no computer access outside the classroom. “There’s a massive skill shortage in South Africa, and the university graduates with the necessary skills head for the United Kingdom,” he said.

Such roadblocks, coupled with cultural resistance to the use of computers—“many are distrustful and see computers as a new form of imperialism,” said Collett—present real challenges to those hoping to bridge the digital divide. Yet Collett remains unfazed. Getting his own grandmother online “was not an easy sell,” and he is confident the opportunities for collaboration outweigh any risk of exploitation. “If we’re serious about promoting democracy to people who need greater self-determination, we have to use the tools of information technology,” he said.

Collett’s experience illustrates the technology void that exists in many countries around the globe. But technology gaps abound in even the most modern, industrialized nations, where access is unpredictable in both the public and private sectors. In the United States, nonprofit and grassroots organizations frequently lack the funds and expertise to keep pace with the constant flurry of new products, faster software, and updated hardware. “The term ‘digital divide’ is far too tidy a phrase to convey the social implications of the inequities we’re seeing,” said Lubeck.

During an internship with the United Farm Workers (UFW) in the summer of 2000, undergraduate Brandon Wright was struck by the disparity in computer know-how between Silicon Valley and the nearby agricultural communities of Watsonville and Salinas. Wright took it upon himself to upgrade the woeful computer infrastructure of the UFW’s field office in Watsonville. Although the union’s headquarters were networked, Wright was appalled by the limited resources he found in the Central Coast office: Computers were old, slow, and unreliable—when there were any computers at all. Organizers in field offices relied on phone calls, faxes, and “snail mail” to communicate with colleagues, often driving hundreds of miles to meet with other union leaders. Staff in Watsonville literally had to walk across the street to their satellite office to send e-mail or do a web search. “It seemed like the union hadn’t changed much since the days of Cesar Chavez,” recalled Wright. “They were at a huge disadvantage when facing opponents in corporate agriculture who have all the tools of technology at their disposal.”

Ironically, the research office had received a small grant to upgrade its computers and office equipment but lacked the money to hire a consultant who could put the money to use. Aided by those funds, Wright set about acquiring usable, low-cost, and durable computers and abolishing what he called “the fear of technology” that pervaded the office. “Using a one-on-one, hands-on approach, Wright showed union staff members how computers could help them do their work more efficiently and effectively. He connected local office computers to the Internet, taught staff how to create a basic web page and enhance the graphic appeal of their petitions and flyers, and introduced useful online databases. Finally, Wright showed staff how to get free Internet access and free e-mail accounts, and how to use search engines and online translation and map services. Wright, who became a part-time union employee, paved the way for subsequent GIIP interns, including Esther Rojas, who led a daylong computer course in Spanish last summer tailored to the needs of UFW managers.

Mary Mecartney, who coordinated research out of the union’s Watsonville office, said Wright and Rojas brought the ideal blend of expertise and respect to their work. “Most of the employees in our local field offices were farm workers before joining the staff,” she said. “They haven’t been to college or used computers to write term papers. But the interns did a wonderful job of breaking through the idea that computers are something too complicated for a non-technical person to use.” Mecartney, too, is a convert, declaring computers “a fact of life in our work now. GIIP helped accelerate our understanding of that.” And she is eager to continue working with UCSC students. “Our focus is organizing, working with people,” said Mecartney. “We don’t have time to figure out all the intricacies of computers, and we don’t have the funds to go out and hire professional consultants.”

For Rojas, working with the union reminded her of the connection between education and community involvement. “Being a student is not just about passing your classes, but it is also about taking charge of your education and using your knowledge to teach others,” said Rojas, a senior majoring in global economics and Latin American and Latino studies. If GIIP interns feel empowered by their experiences and are able to help empower the organizations they work with, the program has accomplished its goals, said Lubeck. “If the program can be a catalyst for that kind of win-win relationship,” he said, “we’re doing something right.”

—Jennifer McNulty

For more information, visit the GIIP web site: www2.ucsc.edu/giip
In the days following September 11, appeals from U.S. intelligence officials scrolled across the bottom of television screens as the government sought help translating documents in Arabic. These urgent requests confirmed what Wlad Godzich, dean of humanities at UCSC, already knew: Arabic language classes were in very short supply at American colleges and universities. The government’s appeals also reinforced his decision to expand the variety of language courses at UCSC, a process he had begun prior to that tragic September day.

Campus offerings have traditionally been rich in European languages, with courses in French, German, Italian, Portuguese, Russian, and Spanish. But UCSC offered only two Asian languages, Chinese and Japanese, and one Middle Eastern language, Hebrew. Godzich had already added the South Asian languages Hindi and Urdu to the fall 2001 curriculum, and he was preparing to phase in Cambodian, Korean, Tagalog, Thai, Vietnamese, and Arabic.

Then came the terrorist attacks. “The events facing us made everybody realize that offering Arabic had become a top priority,” said David Orlando, chair of UCSC’s Language Program.

In less than 10 weeks—warp speed when it comes to implementing a new course—an instructor was recruited, classroom space found, and a five-quarter sequence of Arabic was begun in winter quarter 2002. Enthusiasm for the course was so strong that not all interested students were able to enroll in Arabic 1.

Arabic is one of only six official languages of the United Nations, with translation into Arabic available for all official U.N. meetings and documents. Arabic has the largest and most flexible vocabulary of any language in the world, a quality that lends it an “infinite capacity to generate new words,” said Brian Miller, a graduate of UCSC (Kresge College ’80) who was hired to teach Arabic.

Arabic’s mutability played a crucial role in the transfer of knowledge back into Europe following the expansion of the Byzantine Empire in the eighth century A.D. Islamic scholars, for example, translated Greek mathematical texts into Arabic, before developing the math concepts and reintroducing them to Europe centuries later.

But Arabic’s large lexicon has also contributed to its rating as one of the four most difficult languages for English speakers to learn, according to the Modern Language Association. “A general rule of thumb is that at least one year is generally considered the minimum period necessary to achieve a useful knowledge of most other second languages,” said Brian Miller.

Instituting Arabic in the curriculum was a rapid response to international policy concerns, but Godzich had additional criteria in mind when he added Hindi and Urdu to UCSC’s Language Program last fall. “Let’s look at where we are, on the edge of the Pacific,” said Godzich, “and what languages are spoken around us.”

Hindi, the national language of India, is the fourth most widely used language in the world, with approximately 500 million speakers. Close to home, a South Indian population of about 65,000 resides in the San Jose area alone. In addition, UCSC has a growing number of courses and programs involving the art, music, history, and film of South Asia (see related story on UCSC’s “The Classical Music of India” concert on page 3).

UCSC also has an increasing enrollment of students from Hindi- and Urdu-speaking families as well as students who are “heritage learners.” “These are students who are from that language background,” said Orlando, “but don’t speak the language of their parents or grandparents. We have quite a few heritage learners in Hindi classes.”

Like Arabic, Hindi and Urdu have become important languages in international politics and diplomacy. Grammatically, Hindi is nearly identical to Urdu, the national language of Pakistan. “As words heard, you can’t tell them apart,” said John Mock, UCSC instructor in Hindi and Urdu. “But as words seen, they are totally different.” Hindi is written from left to right in Devanagari script, which is also used for writing Sanskrit. Urdu uses a Perso-Arabic script, and is written from right to left.

The addition of these three new languages in 2001–02 is only the first step in Godzich’s plans to reshape UCSC’s Language Program. He also envisions a time in the not-too-distant future when the program will enable the Humanities Division to adopt a language requirement and proficiency standard for all of its students.

The process of language learning will be changing at UCSC as well. Godzich has proposed that the program use emerging digital technologies, such as wireless handheld devices, to transform how languages are taught. This kind of development would also enable UCSC students to receive language instruction from other institutions, inside and outside the United States.

Combined with UCSC’s proximity to the Defense Language Institute and the Monterey Institute of International Studies, digital communications also create possibilities for regional collaborations in foreign language instruction. “Traditional, isolated language labs are giving way to interactive learning environments and closer integration with other institutions,” said Godzich.

“UCSC is poised to join institutions around the Monterey Bay Area in the rapid evolution of language teaching and learning.” —Ann M. Gibb
Charting UCSC’s Future

Why undertake this major planning effort at this time in UCSC’s history?
Several years ago, a number of us in the faculty and administration determined that the campus would have a fairly predictable rate of growth in the first decade of this century—and that this growth provided us with an unusual opportunity for long-term planning. We knew that, according to a 1999 study, 63,000 additional students would be eligible to attend a UC campus by the year 2010. And that UCSC, as its share of that growth, would expand by about 6,000 students in that time period.
So instead of doing our thinking, planning, and budget projections on a year-to-year basis, we decided to imagine what the campus could be like in the year 2010 and think about how we’re going to get there. It breaks out of the usual mold of thinking short term, thinking piece by piece, position by position, initiative by initiative, and considers in a much broader sense what the UCSC of the future will look like.
Indeed, in its own way, I think this process is as interesting an opportunity as Dean McHenry and Clark Kerr had when they conceived of and started UC Santa Cruz, because the development of the campus in the next ten years will have a defining influence on its character over the next half century or longer.

How successful has this effort been at producing a detailed campus plan?
I think that the goals and aspirations that have been articulated as part of this process have given all of us at UCSC a very good idea about what we want to do in this decade and why we want to do it.
We took a long view, and we sought input from all faculty and staff. So, the planning to date reflects the visions of more people in greater detail than ever before.
Personally, this project has also confirmed for me that the faculty and staff of UCSC have an enormous dedication to this institution. People could have seen this project as just another planning exercise. Instead, they have been genuinely engaged in considering how the UCSC campus should expand and how it should be operating by the time we begin the next decade.

Would you share a few of the academic initiatives that have been proposed?
In the Arts, for example, the division is interested in establishing graduate programs in the field of audiovisual media. One interesting idea is the creation of a Digital Arts/New Media Master of Fine Arts program, which would be the first M.F.A. degree at UCSC. Graduate program growth like this is an acknowledgment of the division’s development and reflects the blending of art and engineering processes that goes into the creation of some of today’s art.
The Humanities Division has a number of very creative proposals, including a master’s program in Public Humanities designed to prepare students for careers related to the management, promotion, and interpretation of cultural events. And the division’s recently established Institute for Humanities Research is very interested in expanding its scholarship in the areas of Mediterranean Studies, Jewish Studies, Modernist and Avant-Garde Studies, and South Asian Studies.
In the Social Sciences, the division has defined an agenda including multidisciplinary programs that enrich research and teaching. One of these includes a new master’s in Social Policy and Public Advocacy. Addressing society’s challenges will be a common research theme for many social sciences and humanities faculty, including those affiliated with College Ten and with the newly established Center for Justice, Tolerance, and Community.
The Natural Sciences seek growth in a variety of thematic areas in which faculty collaborations from several departments illustrate the value that UCSC places on multidisciplinary scholarship. Research will address human needs in environments.

Are there campus values that this process has helped rearticulate?
Yet, I think UC Santa Cruz is, in a very real sense, unique among first-tier public research universities. It is not, and probably defiantly so, going to copy the mold that is set by most large, public, state-supported universities, including other campuses of the University of California.
For example, we balance in a meaningful way the academic world of teaching, research, and public service. While many campuses describe themselves as balancing these three activities, paying attention to all three is deeply embedded in UCSC’s culture. Indeed, in my experience, this is a rare ethos for a state-supported university.
I believe that as we go forward and think about where we will be programmatically in the second decade of this century, the campus’s long tradition of fostering, indeed pushing, an interdisciplinary agenda—where the assumption is that the interesting lines of inquiry are often at the boundaries between traditional disciplines—is a tradition that will be emphasized.
To my mind, that is very progressive for a research university. In fact, one of the troubles other, older, more established universities have is getting out of what is referred to as the “virthy” of the disciplines.” Our history of valuing inter-disciplinary scholarship makes it much easier to steer clear of that outdated model.

Are you considering UCSC’s traditional strengths as you assess the proposals?
Absolutely. I think one responsibility that Chancellor Greenwood, I, and other members of the central administration have is to make sure that our plan for UCSC’s future incorporates the values and ideals that have so successfully guided the campus’s development in its first 40 years of existence.
Developing a plan for UCSC’s future does not mean that we should abandon our past.
In fact, UCSC’s long-standing commitment to quality instruction, the high degree to which we have been able to view teaching and research as complementary—cost competing—activities, the exemplary manner in which we have encouraged our students to apply what they have learned in the classroom to society’s most pressing challenges, these are among our truly great strengths. And they will be preserved, even enhanced, in this plan.

Given the state’s budget uncertainties, how will UCSC pay for these proposals?
Obviously, the state government is still a critical source of financial support for UCSC. But your readers may not realize that state funds represented only 44 percent of the campus’s budget last year. It’s the gifts and grants from individuals, foundations, business and industry, and others that support the agenda of academic excellence in this and in all state universities.

Plus, we don’t have much control over what we get from the state. I’d rather be in a position in which our ability to develop new and exciting programs is not compromised during the state’s lean budget years. If we are to achieve the aspirations detailed in our 2010 plan, we have to diversify our support base, meaning that gifts and grants will be more important than ever.

For more information about UCSC’s 2010 planning project, see the following web site, which includes proposals from UCSC’s academic and nonacademic divisions: planning.ucsc.edu/plans2001

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Online Community allows old friends to connect—and more

LIKE MOST ALUMNI, Adam Balch (Cowell '81) fell out of touch with some of his friends after leaving UCSC. And like most alumni, he occasionally wondered what became of them.

“I don’t know what the sociol- ogy is about it, but to this day, my two best friends are people I met at Cowell. We had a pretty special group, and I missed some of them,” says Balch, who now works in finance and lives in Los Angeles.

According to Balch, using the Alumni Association’s Online Community is “a fast way for people to stay in touch. You don’t have to make a commitment to phone someone you haven’t seen in a long time. Once you’re registered with the Online Community, e-mail makes it easy to reconnect where there’s a bond, but you’d fallen out of touch. It’s a good thing.”

Balch made use of the Online Community’s other top feature: the ability to set up a web-accessible “affinity” alumni e-mail address at alumname@ucalumni.com. Alumni e-mail addresses are free for Alumni Association members.

“I was getting a lot of junk e-mail at my old address. I wanted to create a personal e-mail address to use with my friends—keep the riffraff out on my old account,” he jokes.

Whether it’s renewing old friendships or showing “Slug” pride with an affinity e-mail address, thousands of alumni are using the new Online Community at www.alumni.ucsc.edu.

The first time in UCSC’s history, these free online services are allowing alumni to:

• Use the Alumni Online Directory to get in touch with classmates and friends.
• Sign up for a web-accessible alumni e-mail address (alumname@ucalumni.com), free to Alumni Association members.
• Update their individual profile with current information so fellow alumni can find them.
• Share news of recent milestone events, and even photos, by posting a ‘class note.’
• Post resumes, search for jobs online, and exchange business cards.
• Register for reunions and alumni events with the added benefit of being able to see a list of who plans to attend.
• Join or renew membership in the Alumni Association online.

Alumni are welcome to use the free Online Community and Alumni Directory. Register today at www.alumni.ucsc.edu.

History major honored with Alumni Association scholarship

S. Trace Williams is the kind of student who might not have made it to UCSC.

She’s the fifth of seven children.

Her father is a disabled veteran; her mother suffers from schizophrenia.

While she was growing up, money was tight, and there were times when the family recycled cans and used food stamps just to get by. Williams found value at school. “We took our time walking home each day because we knew what little would be there to greet us,” she remembers. “That’s where I hope to return your kind-ness with diligence. Thank you once again.”

To make a donation to the Alumni Association Scholarship Fund, send a check payable to Alumni Association Scholarship Fund, send a check payable to the Alumni Association Scholarship Fund, send a check payable to the Alumni Association Scholarship Fund, send a check payable to the Alumni Association Scholarship Fund. For more information, call Jennifer Wood, director of Annual and SpecialGifts, toll free at (800) 933-SLUG.
Alumni Notes

Cowell College


‘98 Jane KENNER is training to become a psychoanalyst at the Psychoanalytic Institute of Northern California. Margaret WADE Krause and her husband, Jeff Krause, are planning a sabbatical trip to France this year to do research on French writers of North African origin. Barbara VIKEN had one of her photographs published in the book Animal Blessings: Prayers and Poems Celebrating Our Pets.


Kate STAFFORD, a self-employed writer and photographer, has been working on several projects, including a documentary on horticultural therapy projects for the mentally disabled, homeless, and at-risk youth in group homes; and photographing organic farms throughout the Santa Cruz and north bay areas.

‘73 Scott CRASK was recognized recently for over four years of service to Bucklewe Programs, which provides housing and rehabilitation services for adults with mental illness, at the agency’s annual meeting at the Embassy Suites in San Rafael. Calif. Kathryn WRIGHT is program and medical director of Horizons, a complete clinic for HIV-positive adolescents; she is also the mother of an 11-year-old daughter, Jordan.

‘84 Michelle WILKIE is a registered nurse; she and her husband have two sons, ages 12 and 10.

‘77 Kate O’SheA is teaching workshops developed by Peggy Huddleston and based on Huddleston’s book Prepare for Surgery, Heal Faster.

‘74 Aaron SILVERBERG’s first book of poetry, Through the Chari, was published by Off the Map Enterprises in November 2001, and he was planning a series of readings in the Pacific Northwest; in addition to writing poetry, he’s an improvisational flutist, ecstatic dancer, organic gardener, and personal-life coach.

‘86 After receiving an M.S. in Earth sciences from USCS and a Ph.D. from the University of Colorado, Boulder, Lisa CAMPBELL is living in Houston and working for Conoco; she is married and has two children, ages six months and three years. Darryl YUN’s historical adventure novel, The Chronicles of Dat Swang, the Young Monk, is a perfect summer read (complete with romance and martial arts) and is available at www.greatunpublished.com.

‘88 Henry “Rennie” COHT Jr. is chief operating officer for the University of Washington Physicians Network; prior to this appointment, he served as medical director at Regence Blue Shield in Seattle, and before that he had a general practice in pediatrics. Jonathan SPULDING was featured in a 90-minute documentary by filmmaker Ric Burns, titled A seating Command, which was telecast on PBS in April 2002, he is associate curator of the Stever Center for Western History Research at the Natural History Museum of Los Angeles County.

‘94 Kevin MICKCY is living in Spokane with his wife, Amy, son, Matt, and daughter, Molly; he is still practicing law and enjoying it; friends are invited to look him up when they are in the area.

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‘87 Lucia SMALL’S film about her long-endangered father, dreamer and visionary architect Glenn Small, titled My Father, The Genius, was shown at the Slamdance 2002 Film Festival in Park City, Utah, where it won an award for best editing and the Grand Jury Prize for best documentary.

‘93 Laura MALEY Rumelhart married Peter Rumelhart, whom she met in graduate school at UCLA; they both work as geologists in Houston.

‘94 Catherine BREESE is involved in drug addiction studies in the Psychiatric Research Department of Cedars-Sinai Medical Center in Los Angeles.

‘95 Verónica CONTRERA S is finishing a Ph.D. in biochemistry at the University of Texas Health Science Center in San Antonio and plans to marry Mike Shannon in 2003.

‘97 Brian DEVINCENZI is a realtor and mortgage broker.

Helen FAITH has been happily married since 1998 and is working in the Financial Aid Office at USCS; she is putting her husband through college and raising their two cats while singing soprano with the Santa Cruz Chorale. Leigh MURRELL is teaching Spanish at the University of California at San Diego. His work has been featured on PBS in April 2002; he is an associate curator of the Sevier Center for Western History Research at the Natural History Museum of Los Angeles County.

This issue was published by Off the Map Enterprises in Seattle in June 2002. It contains articles about the UC Santa Cruz staff and students, as well as information about upcoming events and news from the university.

UCSC Santa Cruz Review / Summer 2002

Kate O’SheA 1972

Roswell, Law ’72

Kate STAFFORD

From the ground up

Alexander Gonzalez (psychology, M.S., Ph.D. 1979) didn’t plan on going to college; now he’s president of CSU San Marcos

I didn’t start out to be a university president,” observes Alexander Gonzalez. What the president of California State University, San Marcos, did start out as was the son of Mexican immigrants in East Los Angeles, the middle child of seven. After graduating from Garfield High School—the school made famous in the 1988 film Stand and Deliver—military service, not college, was in Gonzalez’s immediate future.

“My friend and I were going to join the Navy, but the recruiter had gone out to lunch,” he remembers. After a four-year stint, including service in the Philippines, Gonzalez began to consider college. No one else in his family had gone to college, and his parents had received just a few years of schooling. But when he was recruited by California State University, San Marcos, he decided to go. “I was really interested in military service, and Deliver did that for me,” he says.

Gonzalez didn’t plan on going to college; now he’s president of CSU San Marcos.

UCSC Santa Cruz Review / Summer 2002

25
Douglas DURWARD is an attorney practicing civil rights law; his wife, Amy Beth THORNHILL Durward (Merrill ’96) is a pastor in the United Methodist Church; they are expecting their first child in July 2002. Ami EHRLICH is working on a project called Women with Attitude, a mountain-queering expedition that is raising awareness and funds for victims of domestic violence; learn more about the project on the web at www.womenwithattitude.org.

David HORWITZ is now a lawyer in San Diego fighting for truth and justice.

Last year was a big year for GEORGE WILLIAMS II, who became a new father in July 2001 with the birth of his son, Kyle, and received an M.B.A. with an emphasis in information technology management from California Lutheran University in December 2001.

Bernt WAHL has received a Fulbright Fellowship and will spend the 2002–03 academic year as a professor of business and technology in Kuala Lumpur, Malaysia, where he plans to continue his work on Internet search technology and integrated mass transportation systems.

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Laurie IN May 2002, a global public

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Sharon MURPHY has run seven marathons; she has a new puppy and a rabbit and just bought her first home.

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Northeast was one of six regional gardens featured in the March/April 2002 issue of Fine Gardening magazine; her design includes native plants that provided “color and texture in a sequence of bloom, berry, and leaf for four-season interest.”

Ron Kappé’s son, Wilson Kaiser, graduated from Oakes College in June; Ron has an architectural firm, Kappé + Du Architects, located in San Rafael, Calif., specializing in civic and educational buildings. David Neal is working in Minneapolis as a private portfolio manager for individuals and small institutions; he visited the campus in summer 2001 with his wife, Mary, and three daughters; he misses the redwoods and the ocean; friends may write him at dnu@zenowood.com.

74 Michael Schippling is currently “wholly owned chattel of IBM,” but he hopes to retire to New Mexico with a bunch of other UCSC grads.

70 Jennifer Colby received her Ph.D. in humanities from California Institute for Integral Studies in 2001; she is a lecturer in liberal studies and service learning at CSU Monterey Bay and the owner of Galeria Tonantzin in San Juan Bautista, Calif.

50 Rob Lamme recently took a job as director of governmental relations for the North Carolina Department of Health and Human Services, and he is training for a triathlon; friends can contact him via e-mail at rob.lamme@rmail.net.

85 Mayumi Watanabe is still painting.

79 Sean Ahrens has a daughter, Madison Jones Ahrens, born in January 2000, and he’s working on a CD, called “Mental Floss,” for his band Twist of Frt; he started Curious Labs in April 2000 and is working on Paser and other 3-D graphics software. Wendy Bettis and her husband, Evan Hunt (Merrill ‘91), recently had a baby boy, Ben Hunt. Vinnie DeRamus is a production coordinator and digital/animator puppeteer in training at Jim Henson’s Creature Shop in Los Angeles.

80 Julie Gerngross Baker has opened a gallery, Julie Baker Fine Art, in Grass Valley, Calif., offering cutting-edge exhibitions, corporate and collector’s services, and cultural activities; her husband, Michael Baker (Potter ‘89), is an architectural designer and photographer. Hewitt Ivan Jr. was planning to marry his college sweetheart, Caroline TAO (‘91), in April 2002 in the Santa Cruz Mountains.

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—Professor Gary Griggs
Director, Institute of Marine Sciences
UC Santa Cruz

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