



UC SANTA CRUZ

► *Thinking at the Edge*

Beyond Economic Contributions

An overview of how the students, faculty, staff, and graduates of the UC Santa Cruz campus contribute to the vitality of the region



Prepared by
Bay Area Economics, Emeryville, California
University of California, Santa Cruz

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Contributing to academic excellence and regional vitality

Examples of how the University presence supports business, government, and cultural life in Santa Cruz and the region ...

Since opening in 1965, the University of California, Santa Cruz, has earned national recognition for its academic excellence and advanced research. The campus attracts top faculty and talented students to its beautiful setting. Academic offerings provide breadth and depth at all levels of undergraduate and advanced education. With outstanding programs in the humanities, physical and biological sciences, social sciences, arts, and engineering, UCSC was ranked in the top twenty percent of national public universities by *U.S. News & World Report* in 2006.

But UCSC is more than an academic institution; its students, faculty, and staff are a key factor in the vitality of the Santa Cruz region. UCSC's talent, entrepreneurship, research, and university-related spending all contribute to the regional Santa Cruz County economy.

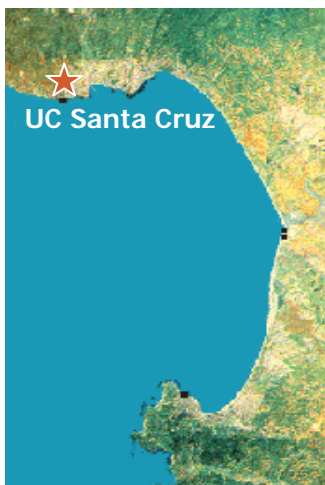
Contributions to the local Santa Cruz region, such as the direct spending by the University—as well as spending by its faculty, staff, students, and visitors in the economy—are measured in a companion report using contemporary modeling tools.

Other contributions—such as the many ways which UCSC supports business, government, and cultural life in Santa Cruz—are described through examples and interviews.

Specifically, this report summarizes how the University



Profile of spending by the University and its students, faculty, staff, and visitors within Santa Cruz County.



Monterey Bay Region

- Fosters local economic development through University-sponsored research and technology initiatives;
- Strengthens the community through student, faculty, and organizational support of public education, volunteer services, cultural life, and community partnerships; and
- Sustains the region and the world through the work of its alumni.

Fostering regional economic development

As a leader of innovation, the University helps advance economic development in the Santa Cruz region ...

The success of the Santa Cruz region's economic development in the 21st century depends on research, innovation, and entrepreneurship. UCSC, as part of a unique cluster of world-renowned research institutions in Northern California, has contributed substantially to the success of the region's economy. Each year, the University attracts tens of millions of dollars in research funding from outside sources for its highly skilled workforce, creating an environment of continual innovation. The presence of a university such as UCSC in the community, serving as a leader of innovation and technology, is a highly desired characteristic for regions around the country seeking to advance economic development.



Developed by researchers at UCSC, this animated language tutor named Baldi demonstrates realistic speech.

Research Overview

Research activities at UCSC attract funding from a range of state and federal sources, along with foundations and private industry. Research funding has increased dramatically in the past five years, rising from \$53.4 million in fiscal year 1999–2000 to \$91.3 million in fiscal year 2003–04. Science and health research areas predominate, with the federal government providing the largest source of funding. More than 83 percent of FY 2003–04 awards were from federal agencies including NASA (\$18.3 million), the National Science Foundation (\$16.5 million), and the National Institutes of Health (\$15.8 million). Private foundations such as the David and Lucile Packard Foundation also contributed to UCSC's research work.

UCSC has created 76 new inventions, and as of 2003, had been issued 25 patents. For example, *Baldi*, developed by researchers at UCSC, is an animated language tutor that visually demonstrates realistic speech. The technology has been licensed for applications to serve hearing-impaired individuals, autistic children, people learning English as a second language, and others learning new languages.

Key Research Areas

Marine Sciences

As part of the extensive "Monterey Crescent" of marine science research institutions located near Monterey Bay, UCSC manages the Institute of Marine Sciences (IMS). Working in the areas of marine biology, toxicology, geology, ocean processes, paleoceanography, and coastal hazards, IMS attracts top scientists who conduct research throughout the world's oceans and coastal regions, from Monterey Bay to Antarctica. IMS operates the Joseph M. Long Marine Laboratory, located three



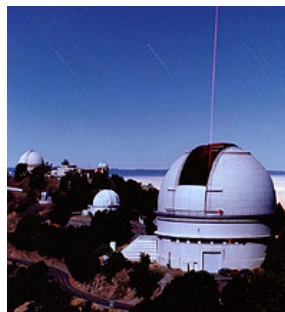
An aerial view of the education center at Long Marine Lab.

miles from the campus on Monterey Bay. This facility conducts innovative research in marine mammal physiology, ecology, and toxicology. State and federal organizations maintain research partnerships at the Lab, including the California Department of Fish and Game's Marine Wildlife Veterinary Care and Research Center, and the National Marine Fisheries Service's Santa Cruz Lab. In 2001, UCSC completed the Center for Ocean Health at the Lab, bringing together scientists to conduct research and facilitate discussion on oceanic environments.

Astronomy

UCSC is a leading center for observational and theoretical research in astronomy and astrophysics, with studies ranging from the Solar System and the Milky Way to the most fundamental questions of cosmology.

Interdisciplinary research organizations at UCSC include the Center for Adaptive Optics, which studies new optical correction techniques for applications in both astronomy and vision science, and the Center for the Origin, Dynamics and Evolution of Planets, which brings together members of several departments to study planets in our solar system and around other stars. Headquartered on the UCSC campus is UC Observatories/Lick Observatory (UCO/Lick), which oversees UC's participation in the W. M. Keck Observatory in Hawaii and operates the Lick Observatory on Mt. Hamilton east of San Jose. UCO/Lick also operates laboratories on the UCSC campus that are engaged in the design and fabrication of state-of-the-art instruments for observatories throughout the world. In addition to their work at the Lick and Keck Observatories, UCSC astronomers are among the leading participants in research using the Hubble Space Telescope and other major space-based and ground-based instruments.

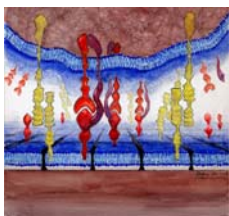


The adaptive optics system at Lick Observatory on Mount Hamilton uses a laser beam to measure turbulence in the atmosphere.

Engineering

The Jack Baskin School of Engineering, UCSC's first professional school, has emerged as a distinctive engineering school with a unique focus on the critical areas of information technology, biotechnology, and nanotechnology. The school is small but growing, with highly regarded research programs in areas such as bioinformatics, storage systems research, wireless networking, and quantum electronics. Plans for the future call for about 110 faculty and nearly 2,000 graduate and undergraduate students by the end of the decade. Outreach to industry is also growing, with programs such as network engineering and Technology & Information Management offered through the UCSC Silicon Valley Center.

California Institute for Quantitative Biomedical Research (QB3)



Complex biological processes that occur at membrane level explored at 2005 QB3 symposium.

In recent years, the study of molecular genetics led to the rise of the biotech industry. Now, the application of the quantitative sciences to biomedical research is creating a second revolution that promises to improve human health and create dynamic new technologies. To lead this work, the University of California and private industry have formed the California Institute for Quantitative Biomedical Research (QB3). A cooperative effort among three UC campuses: Santa Cruz, San Francisco, and Berkeley, QB3 integrates the understanding of biological systems at all levels of complexity, from atoms to cells to organs to the entire organism. The institute involves more than 140 scientists in research and training of a new generation of students. Two new facilities have been

constructed at UCSC to house its components of QB3: a portion of the Physical Sciences Building and the Engineering 2 Building.

Social Sciences and Humanities

The heart of UCSC lies in the shared vision of student, faculty, and staff to create a better world. This commitment is exemplified by the Center for Justice, Tolerance, and Community (CJTC), which researches pervasive social problems to elevate the quality of



public debate and inform decision makers. CJTC's research agenda focuses on topics such as the psychological roots of violence and racism, community building in distressed urban areas, environmental justice, and reduction of wage inequality in the new digital economy. CJTC focuses its work on California, which represents the cutting edge of the new economy and a new kind of diversity.

Technology Partnerships for Economic Development

To foster local and regional economic development, UCSC has taken a leadership role in creating partnerships with government, business, and scientists throughout Northern California.

Technology Transfer Center at 2300 Delaware

In 2004, UCSC acquired property located at 2300 Delaware Avenue in Santa Cruz. This 230,000-square-foot facility, formerly a semiconductor manufacturing complex, contains a "clean room" and extensive space for classrooms, laboratories, and offices. The center will serve as a technology hub, transforming UCSC research into commercialized technologies for private business ventures. Preliminary joint City/University discussions envision a facility that emphasizes work in astrophysics and digital media, with the common goal of commercializing UCSC research to create local businesses and jobs, expanding the economic base of the region.

Monterey Bay Education, Science, and Technology Center (MBEST)

Since 1991, UCSC has played a leading role in developing the MBEST Center, a multi-partner R & D facility located at the former Fort Ord military installation. MBEST brings together the resources of private industry, public agencies, educational institutions, and local government to address emerging issues of the 21st century. More than 30 MBEST partners conduct a range of activities and research in marine and biological sciences, environmental technologies, computer science, and foreign-language training.

Silicon Valley Initiative (SVI)

SVI is an exciting collaboration by UCSC, San Jose State University, Foothill–De Anza Community Colleges, and the NASA Ames Research Center to conduct leading-edge research and establish graduate training programs in Sunnyvale, CA. SVI has three primary components: the *University Affiliated Research Center* (UARC), a 10-year, \$330 million research contract with NASA; Academic Programs offering graduate training; and the *Bio-Info-Nano Research and Development Institute* (BIN-RDI), supporting fundamental research and industry start-ups. SVI will develop "next generation" technologies such as ultra-miniature surgical tools for non-invasive surgery, vision chips for the blind, and genetically designed drugs. SVI plans to create specialized research facilities housing educational partners, established companies, and start-up firms.

Building the community

Contributing to schools, non-profits, and the cultural life of Santa Cruz...

The Santa Cruz community is enriched in a myriad of ways through University activities. Students spend countless unpaid hours in local schools and at local non-profit organizations to complete required service learning components of their academic study. Faculty, staff, and students volunteer at many community organizations. Arts and sporting events sponsored by UCSC enrich the community's cultural life, while unique joint City/University task forces work to resolve local issues.

Support to local schools

UCSC supports the region's public schools through partnerships, agencies, field studies, and volunteering. The following highlights programs offered by UCSC to support local K-12 education.

Educational Partnership Center



The Educational Partnership Center (EPC) aims to improve student learning and increase college attendance rates among traditionally non-college-bound students by providing mentoring, academic counseling, tutoring, leadership training, ACT/SAT prep, academic enrichment, math training, and summer programs to over 15,000 students each year. The EPC service area includes Monterey, San Benito, San Mateo, Santa Clara, and Santa Cruz Counties.

The New Teacher Center

Established in 1998, the New Teacher Center (NTC) has become a national resource for teacher training. The Center focuses on improving student performance by increasing teacher retention and effectiveness. The NTC model of teacher support provides beginning teachers with two years of mentoring by veteran teachers who have been trained as "teachers of teachers." The infusion of support dramatically reduces new-teacher attrition. More than 10,000 teachers in the Monterey Bay Area and Silicon Valley have participated, and NTC is now collaborating with school districts in more than 30 states.



UCSC Education Department

The Education Field Program's EDUC 180: "Introduction to Teaching" course places all its field-study students in K-12 classrooms in Santa Cruz County. The class requires 30 hours of supervised fieldwork assignments in a variety of public school classroom settings.

Three universities collaborate to offer new doctorate for professional educators

A new doctoral program in educational leadership is being offered jointly by UCSC, San Jose State University, and California State University, Monterey Bay. The Doctor of Education Degree (Ed.D.) in Collaborative Leadership is geared toward working professionals. The goal is to prepare K-12 educators to lead educational transformation in the culturally and linguistically diverse schools of the region that encompasses

Monterey, San Benito, Santa Clara, and Santa Cruz Counties. The Ed.D. is geared toward practical, professional work, and dissertations are expected to have practical implications.

Online college prep program expands access to the underserved

Based at UCSC, the UC College Prep Initiative (UCCP) offers college prep courses to students in 56 counties whose high schools do not provide advanced placement and other classes that help students compete for spots at UC and other top universities. The program also provides free online test preparation and academic support to students and teachers from eligible schools.



Local teachers get help teaching math



Each year, regional K-12 teachers get help teaching math from the Monterey Bay Area Mathematics Project (MBAMP). Through workshops, advising, and coaching, the teachers gain a deeper understanding of mathematics and build their ability to communicate mathematical concepts to their students. Project coordinators are experienced classroom teachers who share their "tricks of the trade," including math games—keyed to state standards—that are a hit with students. MBAMP instructors also set up math fairs that help build a "math-friendly" school climate.

Assessing the health of the teacher workforce

Assistant professor of education Lora Bartlett is working with school districts in Santa Cruz, Monterey, and San Benito to evaluate teacher workforce issues in a region where about one-third of teachers are nearing retirement age and the cost of living forces many new teachers to leave the area. The Teacher Workforce Initiative (TWI) is a collaborative effort to take the pulse of teachers in the tricounty area. In partnership with schools, local colleges and other universities, and the Center for the Future of Teaching and Learning, UCSC is helping gather detailed demographic information from local teachers to assess the strength of the workforce.



Summer math and science program for talented teens



Students who love—and excel in—math and science have a chance to spend four weeks at UCSC, learning about astronomy, marine mammal biology, robotics, earthquake engineering, advanced mathematics, and more. The California State Summer School for Mathematics & Science (COSMOS) is a summer residential program for talented and motivated students who are completing grades 8-12.

Bringing Shakespeare to local schools

Each spring, UCSC's *Shakespeare To Go* tours local schools as a theater arts faculty member casts and directs a 50-minute version of one of the plays that the Shakespeare Santa Cruz (SSC) will be presenting in the summer festival. The presentation is part of "Shakespeare in American Communities:

Shakespeare for a New Generation," a project sponsored by the National Endowment for the Arts in cooperation with Arts Midwest. *Shakespeare To Go* was initiated by Shakespeare Santa Cruz (SSC) 18 years ago in collaboration with UCSC's Theater Arts Department. The 2006 production will tour schools in Santa Cruz, Monterey, and Santa Clara Counties. Each participating school receives a packet of educational materials.



Seminars for teachers highlight humanities

In February 2006, literature professor Daniel Selden helped local teachers "crack" *The Da Vinci Code*. Selden's seminars, based on the bestseller, were part of the UCSC Humanities Division's Teacher Scholar Program, which exposes humanities and social studies teachers of grades six through 12 to cutting-edge content in their fields. Teachers then decide exactly how they want to present the information in their classroom. And although the goal of the program is academic enrichment, a beneficial by-product is often lists of books and new resources for teachers and schools.

Merrill College's Classroom Connection



The Classroom Connection course engages Merrill College students in assisting Santa Cruz County teachers by working with children in small groups. UCSC students have worked in classrooms and after-school programs at Live Oak, Bay View, and Green Acres Elementary Schools. Approximately 100 to 180 UCSC students participate each quarter, with a goal of providing approximately 10,000 hours of annual service to each elementary school adopted by the program.

Step to College Mentorship Program

UCSC undergraduates participate in this service-learning program by mentoring and tutoring children attending K-12 schools in Pescadero. The program encourages future UCSC attendance by economically disadvantaged children. The process involves developing a mentor relationship with the children, sharing college experiences, and providing information about campus life.



Service Learning

As one of the top service learning campuses in the University of California system, UCSC has integrated "field-study" service-learning programs into its undergraduate curriculum. During the 2003-04 academic year, departments including Community Studies, Education, Environmental Studies, Economics, Psychology, Latin American and Latino Studies, and Health Sciences sponsored field-study placements equivalent to nearly 2,000 five-unit courses. In most placements, students averaged 10 hours per week over a ten-week quarter, totaling approximately 200,000 hours of service during the year. A more intensive placement is required of Community Studies students at a full-time level for six months, totaling another almost 180,000 hours. In total, if valued at \$8 per hour, the

almost 380,000 hours of service would be worth \$3 million if paid. The majority of field studies were conducted in Santa Cruz County agencies and non-profit organizations.

Examples include:

- *Community Studies Department* provides the largest number of field-study students. The department requires an extensive, six-month field placement to complete the major. In the 2003-04 school year, approximately 110 full-time students completed the field-study requirement, along with 307 part time students from other majors. These placements provided almost 180,000 hours of unpaid service. More than 60% of student participants worked within Santa Cruz County at agencies such as the Walnut Avenue Women's Center, Barrio Unidos, and the Seniors Council.



- *Psychology Department* field-study students work 10 hours a week for two quarters. During the 2003-04 year, 197 psychology students participated, with most working in area organizations such as the Santa Cruz City School District, Public Defender's Office, Friends Outside, County Mental Health, Elderday, and group homes for people living with mental illnesses.

- *Molecular Cell & Developmental Biology Department* introduced the University of California's first undergraduate degree program in Health Sciences in 2003, preparing students for advanced training in health science. By requiring Spanish-language proficiency and an academic internship, Health Sciences fosters healthcare with a community focus. Students work in a wide range of organizations serving local Latino communities, particularly in the Watsonville and Pájaro areas.



- *Esprit de Corps*, a service-learning for credit course offered by Colleges Nine and Ten, involves student service for four to ten hours a week in a non-profit agency or school. During the 2004-05 year, 62 students completed 2,464 hours of service, including placements at Gault Elementary School, St. Francis Soup Kitchen, and the New Horizons School for homeless children.

Volunteers

In addition to academic service learning, UCSC students and faculty/staff engage in voluntary service to local organizations.

A June 2005 survey of UCSC students, staff, and faculty conducted for this report found that 29 percent of students volunteer or complete unpaid internships in Santa Cruz County, serving for an average of 15 hours a month; when applied to the total student enrollment, UCSC students contribute a total of 550,000 student hours of unpaid community service time during the academic year. The survey also indicated

Students, faculty, and staff contributed more than 820,000 hours of community service to mostly local agencies, worth more than \$6.5 million, in the 2004–05 academic year.

that almost 54 percent of UCSC faculty/staff volunteer locally, averaging almost 11 hours a month, resulting in 270,000 hours of community service time annually. In total, the 820,000 hours of volunteer service by students and faculty/staff to area organizations would be worth more than \$6.5 million if paid at \$8 per hour. The following programs represent a snapshot of several community service programs and activities.

- *Student Volunteer Connection (SVC)* serves as a central clearinghouse for students to connect with community service projects. As a student-run organization, SVC office offers drop-in services, advising, and referrals for students interested in service learning. The SVC website offers a database of over 60 community-based organizations that often depend on UCSC student volunteers.



The *Student Volunteer Connection* connects students who want to volunteer with opportunities in the community.

- *Office of Physical Education, Recreation and Sports (OPERS)* links student athletes to volunteer opportunities. OPERS sponsors the unique Special Olympics training program, assisting young people with special needs to participate in the Special Olympics of Northern California, Monterey Bay Region. Other volunteer activities include Cycling Team assistance with planning for Santa Cruz's Bike-to-Work day, Varsity Basketball Team community clinics for high school students, Equestrian Team assistance to high school training, and Women's Dance Team donations of event proceeds to the Women's Crisis Center. Students from Ultimate Frisbee and Cross-Country teams also coach their sports at local parks, recreation centers, and high schools.

- *Second Harvest Food Bank* procures and distributes food to individuals, shelters, soup kitchens, and programs throughout Santa Cruz County, San Benito County, and the City of Merced. The Food Bank runs Food for Children, supplying food to 21 local schools; and the Community Food Hotline, connecting local needy families with food pantries. Although the Food Bank has 22 paid employees, volunteers conduct all of the collecting, sorting, and distribution. UCSC student volunteers are a mainstay of this effort, and take leading roles in organizing food drives on campus, sorting 2,000 bags of food, answering the Food Hotline, and maintaining databases. During the 2004-05 year, UCSC's Student Volunteer Connection sponsored a holiday food drive that raised 11,223 pounds of food and implemented an online meal plan donation drive that yielded \$2,711 for the Food Bank.



"UCSC student volunteers bring a level of energy that is so helpful to us...and they leave it with us when they go out the door."

Susan Olson
Volunteer Coordinator

- *Friends Outside* is a non-profit organization supporting the incarcerated at local jails in Santa Cruz and Watsonville. This small agency addresses the high rate of criminal recidivism by preparing inmates for release. With only one paid staff person, Friends Outside depends almost entirely on its volunteers; last year, 40 of the 68 total volunteers were UCSC students. Volunteers ease the trauma of incarceration by helping settle outside financial situations, notifying family

members, providing emergency food or clothing to inmates' families, and obtaining GED information.

- The *Women's Crisis Center* seeks to end violence against women and children by providing domestic violence services in Santa Cruz County. Comprehensive crisis intervention and prevention services include a 24-hour bilingual crisis line, emergency shelter, emergency response to domestic violence and sexual assault, advocacy support groups, legal assistance, and self-defense classes. The WCC volunteer program educates volunteers to provide crisis support and training for state certification as domestic violence and sexual assault counselors. All UCSC field-study students and volunteers must commit for six months. WCC depends on its volunteers to staff its crisis line and to facilitate its programs.



Community Partnerships

UCSC works closely with the City of Santa Cruz and the region to strengthen links between “town and gown” and leverage resources for community development, including as follows:

- *Housing Task Force.* Comprised of staff from UCSC and the City of Santa Cruz, the Housing Task Force meets jointly on a regular basis to address community housing needs, including both affordable and workforce units. The Task Force has identified opportunities for housing development in the City on underutilized parking lots and on campus, and identified funding models for new housing projects, reviews policies to create new housing along transit corridors and downtown, and formulated economic development strategies that support City goals and the research mission of the University.
- *Transportation Task Force.* UCSC and the City of Santa Cruz jointly staff the Transportation Task Force, which explores ways to improve circulation and address transportation issues throughout the City and around the University. In July 2005, a consultant to the Task Force completed a Conceptual Plan for the Bay Corridor, which examined opportunities and impediments to implementing a Bus Rapid Transit service (BRT) from central Santa Cruz to UCSC.
- *Good Neighbor Initiative.* In 2004, UCSC launched the Good Neighbor Initiative to build and maintain better relations with residents of Santa Cruz. The Initiative has focused on the impacts of traffic and students living in residential areas. Achievements to date include promoting off-campus housing options, electric bicycles, and parking in underused locations. The group has also produced the Good Neighbor Guidelines pamphlet to inform students about how to comply with local regulations affecting off-campus behavior, and launched a series of Good Neighbor Forums in 2005 to hold public conversations promoting safety and tolerance.

Cultural Events

UCSC provides a wide array of public cultural and recreational events for all ages, enriching the quality of life for Santa Cruz residents, as profiled below.

- *UCSC Arts & Lectures*, with 20,000 attendees a year, is the largest presenting organization in the Monterey Bay region, bringing nationally and internationally-recognized artists to the local community. Arts & Lectures develops performing arts programs exemplifying a broad range of world cultures, sustains the working artist, and encourages new works. The 2005-06 season of performances included 25 exciting Theater, Spoken Word, Dance, and Jazz, Classical, World, and Roots Music events. Arts & Lectures also works with the Cultural Council of Santa Cruz County and the Director of Education on ArtsXchange, a K-12 program providing educational mini-performances, master classes, lecture/demonstrations, and Meet-the-Artist talks to nearly 5,000 students per year.



- *Performing Arts Center* includes the Mainstage Theater, with 528 seats in an intimate performance space. Scheduled for the 2005-06 year were the Fugate/Bahiri Ballet Company, David Dorfman Dance, and the Word for Word Performing Arts Company. The UCSC Music Center Recital Hall is a 396-seat performance space featuring a state-of-the-art sound system, theatrical lighting capabilities, and a motorized orchestra pit. Events for 2005 included the classical Talich Quartet, a lecture by Harvard physics professor Lisa Randall, and Spanish acoustic music by the Llan de Cubel.

- *Shakespeare Santa Cruz* is a professional resident theater company that has earned a national reputation for innovative productions in a unique outdoor amphitheater overlooking the Monterey Bay. UCSC serves as the host, provides event staff, and is a source of talented players for the programs. SSC has performed over 75 plays for an audience of over 500,000, attracting over 30 percent of its audiences from outside of Santa Cruz County.



- *Campus Calendar* is a resource provided by the Public Information Office and funded in part by the students of UCSC through registration fees. Although only university members may list events, the public may access and search activities on the Calendar website. A sample of events in September 2005 included a Peace Corps informational meeting, a tour of the Arboretum, a presentation for families on "Cool Tools" at the Long Marine Lab, and the Labor Day Ultimate Frisbee Invitational.



- *UCSC Athletics* focuses on developing the participants rather than attracting crowds. Despite this philosophy, several athletics events and teams draw crowds from the region. On the national level, UCSC hosted and won the 2005 National Collegiate Athletic Association (NCAA) National Championships for Men's Tennis,

with an estimated 3,500 spectators attending from outside Santa Cruz, spending about \$150,000 locally. UCSC also hosts regional events in soccer, tennis, and swimming, with the regular D3 sports season hosting up to 120 home games per year. In addition, local, national, and international club teams hold rugby, baseball, lacrosse, and ultimate Frisbee games on campus. Summer camps run by UCSC coaches and teams offer training to youth on university facilities. When not in use by school athletic teams, campus recreation facilities are open to the public for a nominal fee.



- University Inn & Conference Center* is available to the public and holds an average of 80 events with 10,000 visitors during a typical ten-week summer period. The conference center hosts professional conferences, educational outreach meetings, religious retreats, sports camps, and academic conferences. Annual events include several Nike Sports Camps, a specialized bike model show, UCSC Center for Adaptive Optics' national grant program, and cheerleading-spirit camp. The biannual Hope Health Symposium brings researchers from all over the nation to discuss such health issues as AIDS, cancer, and hepatitis.

Sustaining the region & the world

UC Santa Cruz alumni making a difference...

Profile of UC Santa Cruz alumni

A total of 64,190 alumni have graduated from UCSC since its opening in 1965, including undergraduate and graduate students. Approximately 60 percent of UCSC alumni reside in the broader San Francisco Bay Area, with 17 percent (10,800 people) currently residing in Santa Cruz County.

Alumni work in a broad range of industries and across multiple fields. Nearly 30 percent of all UCSC alumni work in education or research, and an additional 18 percent have entered careers in business.	UCSC Alumni Career Fields (April 2005)	
	Education/Research	19,029 29.8%
	Business	11,655 18.2%
	Healthcare	5,474 8.6%
	Law/Government/Politics	5,287 8.3%
	Information Services/Computer Technology	4,518 7.1%
	Community Services/Nonprofit/Counseling	5,205 8.1%
	Communication/Media/Public Relations	4,518 7.1%
	Arts	4,144 6.5%
	Engineering/Construction/Contracting	2,022 3.2%
	Urban Planning/Architecture/Environmental/ Natural Resources	2,022 3.2%
	Total	63,874 100.0%

Interviews conducted with prominent local alumni for this report underscore that many of them have chosen to first come to Santa Cruz to attend college, and then remain because of the region's natural beauty and the community's unique culture. Alumni report that the University's presence plays a major role in establishing a progressive environment, establishing arts and culture in the region, attracting interesting and intelligent residents, and boosting the local economy.

Alumni as innovators for sustainability & social change

"Culturally, there are people from around the world who come to town because of UCSC—musicians, artists, and wonderful writers who probably otherwise would not be living here. UCSC transformed Santa Cruz from being just a cool beach town to an intellectual hotbed."

Martha Mendoza
Pulitzer Prize-Winning Associated
Press Reporter;
UCSC Lecturer in Journalism
B.A. Individual Major (1988)

UCSC faculty, staff, and alumni have created initiatives and businesses, or developed careers, which reach far beyond the local area. Using the values of sustainability and innovation which form such an integral part of the UCSC experience, the Santa Cruz region has become a laboratory creating new ways of living on the land, and fresh approaches to important issues of the 21st century.

This is really a two-way process; university activities blend with community interests, refinements arise from the human capital drawn to this unique place, and the innovation is communicated to the region and the world. The following highlights several examples of this process.

Organic Farming and Food Systems

For nearly four decades, UCSC has been a leader in the field of organic farming and food systems. The Center for Agroecology and Sustainable Food Systems (CASFS), which operates a 25-acre farm and 2-acre garden on campus, has trained over 800 apprentices

in organic farming methods. Initiated shortly after the university's founding, the UCSC Farm and Garden Apprenticeship offers a six-month training program including the option to live on-site. The high-quality foods produced by the program are now served in UCSC's dining halls on-campus, and the program has sparked world-wide initiatives to buy locally-grown, organic foods.

UCSC students, faculty, and alumni continually improve organic farming techniques, as well as sustainable agriculture's ability to impact social issues. Through applied research, academic preparation, and hands-on training, CASFS' work has earned international recognition.

Moreover, on-campus dining operations have initiated additional Central Coast local, fresh-food purchasing through ALBA, an organization that promotes small family farming, leading a movement sweeping dining halls across the country. The values of sustainability and local growing also helped stimulate the entrepreneurship of Scott Roseman, founder of the region's successful New Leaf Community Markets.



Scott Roseman
 Founder
 New Leaf Community Markets
 B.A. Sociology (1979)

While attending UCSC in the early 1970s, Scott created the concept of a community market selling fresh and organic foods. Today, New Leaf Markets has 5 locations from Boulder Creek to Capitola, and provides quality fresh organic and conventional groceries through much of the county.

Preserving Regional Resources: The National Marine Sanctuary and Visitor's Center

One of the most significant developments in environmental sustainability impacting California and the world is the designation of Monterey Bay as a National Marine Sanctuary. Spurred by the successful establishment of the Monterey Bay Aquarium and Research Institute, and the work of countless faculty and alumni, along with active scientists in the region, this designation means that the Bay will be preserved as a natural ecosystem for study and protection.

Within the Sanctuary's borders lies the country's largest kelp forest, one of the largest underwater canyons on the continent, and a deep ocean environment that is closer to shore than any other in the continental U.S. Important research regarding environmental pollution, early forms of life, and a host of related scientific pursuits is now possible.

But the achievement will be further linked to the Santa Cruz economy. In early 2005, the region learned that it had been chosen as the site of the new Monterey Bay National Marine Sanctuary (MBNMS) Visitor's Center. This designation was made possible by a collaborative effort by the City, the University, and its many supportive alumni and faculty, along with the Aquarium.

The Visitor's Center is expected to bring 350,000 visitors a year to the region, and will attract a significant amount of economic activity, support to the City's General Fund. It will at the same time educate the public about the importance of ocean preservation.



Julie Packard
 Executive Director
 Monterey Bay Aquarium
 B.A. Biology (1974)
 M.A. Biology (1978)

Co-founder of the Aquarium and the Monterey Bay Aquarium Research Institute (MBARI). UCSC Alumni Achievement Award recipient 1987. Audubon Society medal winner 1998. Member, the Pew Oceans Commission, an independent group focusing on policies to restore and protect living marine resources in U.S. waters. The Commission made formal recommendations to Congress and the nation in June 2003, making international news.

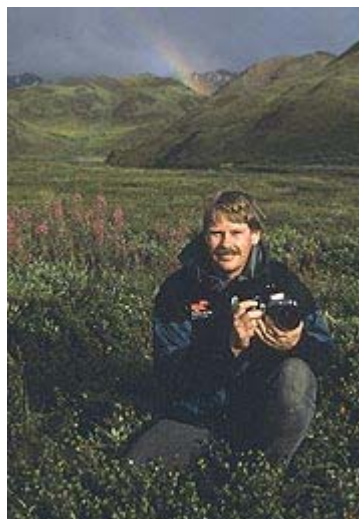
Changing the Region and the World

Many alumni of the University have enhanced the region and the world, through contributions large and small. Building on values of social change, the following profiles two of the many alumni who have impacted society.

Kennan Ward, Photographer, Adventurer, and Naturalist

B.A. Environmental Studies (1980)

Kennan Ward photographs and writes about wilderness and wildlife. His work has been featured in national and international magazines including *National Geographic*, *Sierra*, *Natural History*, *Outdoor Photographer*, and *Outside*. He spent 10 years as a Search and Rescue Ranger for the National Park Service. In 1980, during time off from his job as a ranger in Yosemite National Park, he captured images of a lightning strike at Half Dome and a double rainbow, which have become widely recognized. Soon afterwards, photography became a full-time concern. In 1994, Ward published his first book, *Grizzlies in the Wild*, which details both the natural history of grizzly bears and his personal experiences while photographing them in their native habitat. Other books include *Journeys with the Ice Bear*, *Denali: Reflections of a Naturalist*, *Born to be Wild: The Bears*, and *The Last Wilderness: Arctic National Wildlife Refuge*. Ward also produces high-quality note cards, calendars, journals, and posters that are available online. His image of the Polar Bears Relaxing after Play is known worldwide.



Larry deGhetaldi, M.D. , Chief Executive Officer, Sutter Santa Cruz

B.A. Biology and Chemistry (1976)

Building on the campus values of social change and service to society and the region, Larry deGhetaldi (B.A., 1976) is an example of one UCSC graduate who chose to live out those values within the local community. DeGhetaldi joined Santa Cruz Medical Clinic in 1985 as a family practice physician and today is chief executive officer of Sutter Santa Cruz. He oversees the 87-member Santa Cruz Medical Clinic, the county's largest physician organization; the nationally-recognized and award-winning 30-bed Sutter Maternity and Surgery Center; and VNA of Santa Cruz, a visiting nurse organization that logs more than 31,000 home care visits each year.

He was captain of the 1974 UCSC soccer team that first adopted the banana slug mascot, and credits the campus with helping the community's dire need for medical professionals, because undergraduates are eager to return to the Central Coast after completing their training. Dr. deGhetaldi graduated from UCSC and completed his medical school education at Wayne State University and the University of Southern California. He completed his postgraduate medical training internship at Stanford University and completed the Stanford University Family Practice Residency Program at San Jose Hospital in 1984.



Larry deGhetaldi, M.D.
B.A. Biology and Chemistry
(1976)

Margaret "Peggy" Dolgenos, Entrepreneur

B.A. Computer and Information Sciences (1992)



Co-founder of Cruzio, a local Internet service provider (ISP) providing dial-up Internet access, domain name services, and e-commerce packages for Santa Cruz area businesses and individuals. The company began in the westside Santa Cruz garage of co-founders Chris Neklason and Peggy Dolgenos in 1989. In 2004, the company's revenue was estimated at \$3.5 million, with 27 employees and some 9,300 customers including 1,900 businesses. In May 2005, Cruzio announced that it had once again been named the "Best Internet Service Provider" by the *Good Times* and *Metro Santa Cruz* readers' polls, as it had for 11 years running. The company also made note of its largest community project for the year: "a partnership with the Pajaro Development Corporation resulting in the opening of Cruzio's second location in Downtown Watsonville."

Citations and References

Additional details and references...

On the web

- Research programs and institutes at UC Santa Cruz
<http://www.ucsc.edu/research/>
- Research impacts of UC Santa Cruz programs
http://www.ucsc.edu/about/research_impacts.pdf
- Profiles highlighting the achievements of UCSC alumni
http://www.ucsc.edu/alumni_friends/profiles/
- Recent achievements of the campus and its members
<http://www.ucsc.edu/about/distinctions.asp>
- Arts & Lectures events at UC Santa Cruz
<http://artslectures.ucsc.edu/>
- Resources available to the local community
http://www.ucsc.edu/about/public_resources.asp
- Contributions to the community
<http://www.ucsc.edu/about/contributions.asp>
- Public and private partnerships
<http://www.ucsc.edu/about/partnerships.asp>

Creating this report

Bay Area Economics (BAE) obtained information from the University, conducted independent research, and analyzed how the University presence supports business, government, and cultural life in Santa Cruz.

Bay Area Economics is headquartered in Emeryville with offices around the U.S.:

Bay Area Economics
1285 66th Street
Emeryville, CA 94608
510.547.9380 (voice)
510.547.9388 (fax)

Janet Smith-Heimer, Managing Principal, BAE, oversaw the UC Santa Cruz analysis, which included interviews with alumni and the administration and analysis of two opinion surveys. This overview—prepared jointly by BAE and the UC Santa Cruz Office of Public Information—summarizes that work.