UC Santa Barbara Today: Return of the Native

UC Santa Barbara Today is back, albeit in a new format. Today had been published at two points in the past, as a tabloid and as a newspaper supplement, but it hasn’t been around for almost a decade. Published by the Office of Public Affairs, the periodical will appear three times a year, and be sent to a broad audience of campus friends and supporters. For members of the UCSB Alumni Association, it will complement the membership magazine, Coastlines. We will seek to convey the campus’s intellectual vitality as well as its great forward momentum as we chronicle the exciting developments that make UC Santa Barbara one of the country’s leading public research universities.

The revival of this periodical is just one element of an ambitious, multiyear effort supported by the UC Office of the President to encourage more involvement with the campus by alumni and parents as well as increased private giving. Parent programs, all-class reunions and other alumni activities, and improvements to the student caller telephone-solicitation program are also part of the effort, as is a direct-mail campaign. A key message of the mailings is the important role that private support plays in the life of the campus and in enhancing the quality of education and research. Parents and alumni are an important part of UC Santa Barbara’s past, they are an even more important part of its future.


campus points


today

New Home for Student Programs, Services

Our cover and the photo below, both by UCSB’s Tony Mastres, offer peeks at one of the more popular new structures on campus, the Student Resource Building. Located near the campus entrance to the Pardall Corridor to Isla Vista, the building has quickly become the center of student community that it was envisioned to be. In addition to housing the offices of key student services and programs, it is an incubator for student collaboration, cooperation, and leadership.

The building marks the first time in the campus’s history that critical support services for students are located centrally in one easily accessible, state-of-the-art facility. Its open and inclusive design has all offices surrounding and united by a soaring, three-story atrium. It also features conference rooms, lounges, and libraries.

Designed as a place that would help enhance and take creative advantage of the campus’s diversity, the building is, by all accounts, doing just that.

“The minute you walk into SRB, you know you’re in a special place,” said Yonie Harris, dean of students. “It’s not just a beautiful facility — it is a lively and dynamic community.”

Michael Young, vice chancellor for student affairs, said the building itself is playing a role in “creating leaders for the complex world we live in today.”

The Student Resource Building is also a green structure that maximizes natural lighting and ventilation and uses renewable resources. Recycled and recyclable materials were used in its design and construction.

Entering Class Sets Records

The first-year class that will enroll in the fall will be the largest in UC Santa Barbara history. It’s also the product of the largest ever applicant pool. A total of 4,725 students representing a broad section of talents and interests have indicated that they intend to enroll as freshmen. The group raises the bar on academic quality and includes more members of underrepresented minority groups than ever before.

Chancellor Henry Yang said the campus worked hard to increase the quality and diversity of its programs and student body. “We are delighted that our efforts continue to bear fruit, including our success this year in attracting our largest and strongest applicant pool ever,” he said.

Expectations are for an actual enrollment of approximately 4,400 freshmen, about 200 students more than anticipated, said Christine Van Gieson, director of admissions. The freshmen are among 23,183 high school seniors admitted to UCSB out of 47,069 applicants — the highest number in campus history.

Mascot Madness! Gaucho Greatness!

The Swarthmore College student newspaper (The Phoenix) surveyed campus mascots this year and came up with a Top 5 list of its favorites. The UC Santa Barbara Gaucho was ranked third: “A pair of sinister-looking eyes peering out from under a black, 10-gallon hat … not even sure what a gaucho actually is, but it sounds way too awesome not to acknowledge.”

Speaking of the Gauchos, teams from UC Santa Barbara won or shared titles in several sports to capture the Big West Conference Commissioner’s Cup for the 7th time and 2nd consecutive year. Teams winning conference titles were women’s basketball, cross country, and swimming, and men’s soccer, swimming, and tennis. The men also shared the basketball crown. The cup goes to the institution with the best overall results in the conference’s 17 sponsored sports.

UC SANTA BARBARA TODAY

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John M. Wiemann, Vice Chancellor
Long Range Plan
Rolling Forward

The draft Long Range Development Plan (LRDP) that will help guide UC Santa Barbara to the year 2025 was released in the spring and is moving forward. The LRDP is a companion document to the campus’s Strategic Academic Plan, providing the physical blueprint needed to implement the academic vision.

The release of the draft followed several years of work and presentations by campus officials to 40 neighborhood, civic, and community groups. The new LRDP is committed to environmental stewardship, sensitive to neighborhood concerns, and responsive to the needs of a changing student population. The plan outlines improvements in the campus’s environment while protecting its extraordinary coastal resources and location.

The LRDP recommends improvements to the physical campus, a modest increase in enrollment of 1% per year to a total of 25,000 by the year 2025, and the housing of all new faculty, staff, and students. The campus expects to pay its fair share of the cost of mitigating off-campus environmental impacts of the plan.

Comments about the LRDP from local residents, leaders, and campus representatives have focused on concerns about growth, population increases, traffic, and housing. Campus officials are now working to answer questions and address issues raised at a public hearing in June and in statements submitted during the public comment period.

The LRDP will proceed later this year to the UC Board of Regents and the California Coastal Commission for review and approval.

Extensive information about the LRDP is available online at www.UCSBVision2025.com.

Pinpoints

- The new $154-million San Clemente Graduate Student Housing complex is opening this fall. The 325 apartments (with a total of 973 beds) are organized into several “villages.” Located at the El Colegio Road border of the Storke fields, the complex marks the campus’s first housing facility for single graduate students.
- UC Santa Barbara has adopted a comprehensive Campus Sustainability Plan designed to make major contributions to energy conservation, resource management, and environmental awareness on campus and beyond. The plan says that the campus “is committed to global leadership for sustainability through education, research, and action.”
- A new campus system that sends emergency text messages to cell phones and other devices went into operation this year. More than 5,000 students and faculty and staff members already have registered with UCSB Alert.
- In a survey of campus safety at colleges and universities around the country, Reader’s Digest gave UC Santa Barbara a grade of A and noted how the campus had emergency response programs in place.
- The UC Santa Barbara Economic Forecast Project has expanded its focus beyond the tri-county area. It now is offering state and national economic forecasts.

Mortarboards Off

Of all those who took part in Commencement 2008 at UC Santa Barbara, few were as thrilled as Benjamin A. Thomas was when Chancellor Henry Yang presented him with the Thomas More Storke Award. An honors student from Hawthorne majoring in biology, Thomas (above right) was recognized with the campus’s highest student honor for his outstanding scholarship and extraordinary service to the university and community. A total of 4,800 seniors and graduate students took part in eight official commencement ceremonies this year, and Chancellor Yang, as is his custom, shook the hand of each and every one.

Undergraduates Showcase Research, Creative Work

The campus’s annual Undergraduate Research Colloquium, sponsored by the College of Letters and Science, was once described by a press pundit as “a science fair on speed.” It’s perhaps that, but also a lot more. This year a record 126 students participated in the event, presenting their discoveries and creative accomplishments, and acknowledging faculty members who have contributed to the development of student research and creativity. Research projects addressed subjects ranging from brain development to information disclosure on the Internet to natural resource depletion. Works in the fine arts included a documentary film on the “Shifting Sands of Goleta Beach.” The campus provides some $200,000 annually to support such research, and it’s estimated that about one of every four undergraduates is involved in organized research.

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Stem Cell Research Program Advances

Stem cell research at UC Santa Barbara is quickly moving forward. The campus has been awarded $3.2 million by the California Institute for Regenerative Medicine (CIRM) to support the development of a state-of-the-art facility at the new Center for Stem Cell Biology and Engineering. This follows earlier CIRM grants for laboratory construction and fellowships.

The long-term goal of the center is the development of stem cell-based therapeutics for a range of human diseases. The latest grant “will facilitate new, interdisciplinary research projects that would otherwise be impossible due to federal restrictions and lack of suitable space,” said Dennis Clegg, chair of the Department of Cellular, Molecular, and Developmental Biology. UCSB is among several leading institutions that have joined forces to advance the field by establishing the Southern California Stem Cell Scientific Collaboration.

Institute to Probe Energy Efficiency

A new Institute for Energy Efficiency has been formed at UCSB. Directed by John Bowers, a professor of electrical and computer engineering, the institute will involve some 50 faculty members from many disciplines. Bowers said the institute “will provide a unifying and very synergistic environment” for as much as $10 million a year in research now being conducted in various departments and centers. Slowing the growth in the global demand for energy is its overarching goal.

Findings

- California’s high-school dropouts cost state taxpayers approximately $46.4 billion annually, according to a study by the California Dropout Research Project at UCSB. The study also estimated that the economic benefit from effective dropout intervention programs would be $392,000 per high school graduate. “Until now, we knew very little about the economic costs of California’s dropout crisis,” said Russell W. Rumberger, the project’s director and a professor at the Gevirtz Graduate School of Education. “These findings reveal severe economic consequences to the state and underscore the need for solutions to the dropout crisis.”

- Using plastics to harvest the sun’s energy got a significant boost thanks to a discovery made at the Center for Polymers and Organic Solids. Nobel laureate Alan Heeger, a professor of physics and of materials, worked with Kwanghee Lee of Korea and a team of other scientists to create a new “tandem” organic solar cell with increased efficiency. Tandem cells are made up of two multilayered parts that work together to gather a wider range of the spectrum of solar radiation — at both shorter and longer wavelengths. “The result is 6.5 percent efficiency,” said Heeger. “This is the highest level achieved for solar cells made from organic materi-

- California Spiny Lobster

Prospects

- The MacArthur Foundation has allocated $10 million for a new national program on neuroscience and the law that is based at UC Santa Barbara and involves two dozen leading universities across the country. The effort seeks to integrate new developments in neuroscience into the U.S. legal system. Former Supreme Court Justice Sandra Day O’Connor is the honorary chair of the Law and Neuroscience Project, which is directed by Michael S. Gazzaniga, a professor of psychology and director of UCSB’s SAGE Center for the Study of the Mind.

- A grant of nearly $2 million from the Larry L. Hillblom Foundation is supporting innovative research on Alzheimer’s disease. The highly interdisciplinary effort involves a UCSB team with a wide range of specialties led by Kenneth Kosik, co-director of the Neuroscience Research Institute and Harriman Professor of Molecular, Cellular, and Developmental Biology. The grant supports research focused on the neurofibrillary tangles that, in addition to amyloid plaque, are a hallmark of Alzheimer’s disease.

- The W. M. Keck Foundation has awarded UCSB a $1.75-million grant to support a pioneering multidisciplinary research initiative to understand the motion of proteins, the molecular machines that enable life. Although scientists know a great deal about the molecular structure and function of proteins, how they perform critical biological processes remains a mystery. Mark Sherwin, an experimental physicist and director of the Institute for Quantum and Complex Dynamics, leads the Keck project.
A scholar and his students develop a virtual recreation of Buddhist monastic life

By Andrea Estrada

In the foothills just outside the city of Lhasa stands one of the world’s premier monastic universities. Founded nearly six centuries ago by a disciple of the famous Tibetan lama Tsong Khapa and originally dedicated to the study of tantra — a form of meditation that sees the world as innately divine — it grew to be one of the great centers of Buddhist learning.

The monastery was named Sera — the Tibetan word for wild rose — in honor of the flowers that blanketed the hillside behind it. Today, nearly 8,000 miles...
away from Tibet on the campus of UC Santa Barbara, Professor José Cabezón has opened a virtual door to Sera with a multimedia Web site that brings the 15th-century monastery to anyone with an Internet connection.

“It’s the most detailed study of a Tibetan institution ever attempted,” says Cabezón, the first scholar to hold UCSB’s XIVth Dalai Lama Chair in Tibetan Buddhism and Cultural Studies. “When finished, it will have spatial, architectural, religious, historical, and educational dimensions. From a scholarly point of view, this interdisciplinary approach is its greatest contribution.”

The Sera Project is a collaborative venture by UCSB, the University of Virginia (which houses the Tibetan and Himalayan Digital Library), and the Tibet Academy of Social Sciences. The Web site allows visitors to explore every aspect of Sera Monastery, from its physical layout and history to the intricacies of Tibetan monastic life. The site features an interactive map of the 40-acre campus — created from a satellite image of the entire Lhasa valley — that identifies and describes every building and structure, including the 19 hermitages nestled in the surrounding mountains. The site also includes more than 4,000 images and panoramic views of the monastery and grounds, historical essays, translated texts, and even audio clips of monks chanting. (Although a new and more user friendly version of the project’s Web site is under construction, the Sera Monastery Project can currently be found at www.thdl.org/collections/cultgeo/mons/sera.)

That UCSB would partner with the University of Virginia to produce the Sera Project makes perfect sense. The two universities, along with the University of Wisconsin-Madison, where Cabezón completed his doctorate, are home to the top Buddhist studies programs in the country.

“It is a huge undertaking,” Cabezón, a former Buddhist monk, says of the Sera Project. As its director, he oversees the content on the site and writes every essay, photo caption, and translation that appears on it.

Work on the Sera Project, which is ongoing, began in the summer of 2002, when Cabezón traveled to Tibet with graduate students Alyson Prude and Taline Goorjian, who are completing advanced degrees in Buddhist studies at UCSB.

Two years later, Cabezón and two other Religious Studies graduate students, David Cooper and Alex Catanese, spent a summer at Sera identifying, mapping, and photographing the hermitages. Conducting research at Sera over the course of six years has made Cabezón a familiar presence to the monks there.

“It was amazing to see how easily people responded to him,” says Cooper. “His Tibetan is impeccable, and he has tremendous knowledge of Tibetan Buddhist tradition.”

In 2006, Cabezón made a solo trip to the monastery to interview the monks and get a sense of life at Sera before and after the 1959 Chinese invasion of Tibet. He also worked on philosophical texts that were part of the monastery’s early curriculum and photographed texts published centuries ago.

Until 1959, monks from all over Tibet came to study at Sera and the community

“The project documents all aspects of Sera Monastery, from physical layout to monastic rituals. Above, a temple entrance.
flourished. Events of that year, however, and more particularly the violent decade of China’s cultural revolution, which began in 1966, brought a virtual end to the centuries-old monastic culture and practice at Sera. Chinese government policy forced most of the monks to leave the monastery, which became an army barracks. A few hundred monks fled to India, where they eventually established Sera-India near the city of Bylakuppe. When the Chinese government’s official policy toward religion eased in the early 1980’s, monks were allowed to return to Sera Monastery in Tibet. Through their efforts, most of the buildings have since been rebuilt or restored. But, as events of recent months have demonstrated, relations between the Chinese government and the people of Tibet remain tense.

“The importance of understanding the role that monasteries play in Tibetan society — as repositories of culture, art and traditional learning — is made all the more evident when these institutions are threatened by political maneuverings,” says Cabezón. “Part of the Chinese government’s failed policies in regard to monks and monasteries is undoubtedly the result of the government’s inability to fully appreciate the role that these institutions play in Tibetan society.”

Cabezón says the Sera Monastery Project is not just a tremendous academic resource but also a great educational tool. “It has become a wonderful way to teach graduate students how to document a culture,” he says. “They get introduced to Tibetan culture while working in the field on a research project.”

For Cooper, whose doctoral dissertation will be a study of Sera Monastery in India, working with Cabezón on the project has been invaluable. “I learned a huge amount from him,” Cooper says. “I want to do ethnographic work, and by studying with José, I was able to develop a model for how I’ll do my own research.”

Initially, Cabezón planned to produce a monograph about Sera monastery, but David Germano — then a fellow graduate student at Wisconsin and now a professor of Buddhist studies at the University of Virginia and head of the Tibetan and Himalayan Digital Library — suggested they create an interactive Web site instead. Germano calls their Sera work “one of the most impressive projects in the digital humanities.”

The Web site, says Cabezón, “has allowed us to integrate the multimedia dimension in a way that otherwise would be impossible. We have been able to create a window into Sera Monastery through which the entire world can experience this very special place.”

Graduate student David Cooper taking notes at the site of one of the hermitages overlooking the Lhasa Valley. He spent a summer identifying and mapping the hermitages.
Rooms With A View

Richard Ross finds poetry in unlikely places

So, okay, sometimes the rooms are prison cells and bomb shelters. Richard Ross often looks through a lens darkly. But he always finds where the light gets in. (Is it a surprise that one of his books was titled “Gathering Light?”) Lately he has used that light to illuminate worlds most people would never see for themselves, like the U.S. detention center at Guantanamo, or the infamous American-run prison at Abu Graib. As the writer Sarah Vowell put it: “He takes seriously beautiful pictures of frequently god-awful places.”

Since 1977 Ross has been a professor of art at UC Santa Barbara, where he is known for involving his students in his “projects.” If, in the post-9/11 world, his work has turned decidedly political, it is no less recognized for its artistic achievement. Last year he won a Guggenheim Fellowship, in recognition of both distinguished achievement and exceptional promise. He is using the fellowship to extend his work documenting the “architecture of authority.” That’s the title of his latest book (his 12th), published by Aperture, and an exhibition. In the afterword to that volume, Ross writes: “Architecture is not necessarily an innocent act of creativity. A confessional in a Catholic church and an interview room at the Los Angeles Police Department headquarters share the same intimate dimensions. They are both uncomfortably tight spaces constructed...
to force people together, to extract a confession in exchange for some form of redemption.”

Ross was the principal photographer for the restoration of the Getty Villa, the Malibu home of the J. Paul Getty Museum’s antiquities collections. He also documents Getty Conservation Institute projects worldwide. His work has been exhibited widely in the United States and Europe, and has appeared in many newspapers and magazines. On these pages are selections from some of his many projects.
On Discovery’s Doorstep

THE CALIFORNIA NANOSYSTEMS INSTITUTE WORKS TO ADVANCE SCIENCE IN THE SMALLEST WAYS POSSIBLE

By Anna Davison

An artist’s representation of the control of electron spin in diamond structures. A variation of this piece, by UCSB’s Peter Allen, appeared on the cover of “Science” to illustrate research on solid-state quantum computation by David Awschalom, CNSI’s associate director.
I magine armies of tiny capsules that course through the body, homing in on cancerous tumors or infected tissue and releasing a blast of drugs right where they’re needed. Now imagine another leap forward in a different field — information technology — thanks to a revolutionary new way of storing huge quantities of data on smaller and smaller computer chips.

Working to make those technologies a reality are the scientists of UC Santa Barbara’s California NanoSystems Institute (CNSI). A joint project with UCLA, the institute was established by the state legislature in 2000 as one of the first California Institutes for Science and Innovation. Industrial partners provide additional support.

Some 60 faculty members and post-doctoral fellows are affiliated with CNSI, as are many students, and they represent a dozen academic departments and several research units, including the Center for Spintronics and Quantum Computation and the Media Arts and Technology Program. The researchers are at the forefront of the nanotechnology revolution, which has yielded exciting advances in everything from computing to consumer goods to health care — and promises much more.

According to the National Nanotechnology Initiative, a federal program that coordinates and supports such efforts, “nanotechnology has the potential to profoundly change our economy and to improve our standard of living.” Nanotechnology involves the production and manipulation of things less than 100 billionths of a meter in size, which is more than a thousand times smaller than the width of a human hair. At that scale, materials behave in strange ways, and it’s these properties that researchers are trying to exploit in the nanotechnology revolution, by putting nanoscale building blocks together to create useful devices.

Nanotechnology isn’t a field of science, but rather “it’s what you do with chemistry and physics and biology and engineering at the nanoscale,” says Matthew Tirrell, the Richard A. Auhll Professor and Dean of the College of Engineering.

“As you start putting atoms and molecules together, pretty soon you have a functional system that does something. It might catalyze a chemical reaction, it might emit light.”

Nanotechnology already has infiltrated the marketplace. It’s been used to create stain-resistant clothing, longer-lasting tennis balls and better dressings for burns. It also has increased the storage capacity of computer hard drives and enabled scientists to develop improved landmine detectors and water filtration systems. The National Science Foundation says the U.S. market for nanotechnology products and services will surpass $1 trillion by 2015. The federal government is devoting $1 billion annually to nanotechnology.

At UCSB, researchers are looking to nanotechnology as the basis for new drug delivery techniques and a new generation of computers. They’re also using it to create energy-efficient technologies, and exquisitely sensitive sensors to detect chemical warfare agents.

The founding scientific director of CNSI, Evelyn Hu, who has stepped down from that role but remains very involved with the institute, says its success can be attributed in part to its collaborative atmosphere, which brings together scientists from diverse disciplines to share ideas and work on common problems.

Noting that most major universities and the national laboratories of countries around the world now have nanotechnology programs, Hu says that CNSI has “some extraordinary convergences of local expertise” that can’t be found elsewhere. “It’s that convergence of expertise and excellence, together with the collaborative culture here, that truly defines us and provides our greatest strengths.”

The many leading researchers at...
UCLA’s focus on medicine and the life sciences offers great potential for groundbreaking research.

UCSB’s portion of the institute is housed in a 110,000-square-foot building that opened in 2006 and was renamed last year in honor of Virgil Elings and Betty Elings Wells, who donated $12.5 million to support the institute’s work (see story on page 14). In addition to laboratories and seminar rooms, the building also houses the three-story AlloSphere, where mathematical data is translated into visual representation and sound, giving scientists new ways to analyze large and complex data sets.

The director of the AlloSphere Research Facility, JoAnn Kuchera-Morin, a music professor and chair of the Media Arts and Technology program, describes it as a “multidisciplinary instrument” that enables researchers to work with many types of information from diverse fields. Exploring new ideas for clean energy is just one of the many ways in which the facility is now being used.

Beyond groundbreaking multidisciplinary research, CNSI also serves as a center for public education about nanotechnology, and outreach is an important part of its mission, Hu says. Together with UCSB’s Center for Nanotechnology in Society (see accompanying story), CNSI has launched a series of free public events — known as NanoCafés — aimed at fostering discussion about emerging nanotechnologies and their implications. CNSI also sponsors, with the Professional Artists Lab at UCSB, an international competition for plays about science and technology.

CNSI offers many opportunities for high school teachers and students to become involved in nanotechnology, including internships, after-school programs, and special courses.

While it might seem that such activities could distract from CNSI’s research agenda, they actually are a reflection of its aim to help produce broadly trained scientists and engineers capable of sustaining California’s leadership in nanotechnology.

The institute even hosted a popular, hands-on exhibit that offered an introduction to nanotechnology to schoolchildren from age 8 to 13. “In terms of interacting with the public, and, in particular, with schools,” says Hu, “that is an example of the kind of impact we’d like to have.”

The work at the institute reflects the campus’s particular strengths in materials science and information technology, as well as stem cell research, in which UCSB is expanding its activities. Tirrell says that the combination of those strengths and UCLA’s focus on medicine and the life sciences offers great potential for groundbreaking research.

UCSB who are affiliated with the institute include two Nobel Prize winners, Alan Heeger and Herbert Kroemer, as well as Shuji Nakamura, winner of the Millennium Technology Prize for developing revolutionary new light sources.

Among research coming out of CNSI that has attracted considerable attention of late has been the work of the institute’s associate director, David Awschalom, a professor of physics and of electrical and computer engineering. Awschalom’s research group explores magnetic and electron spin dynamics within a variety of semiconductor-based nanoscale systems. His fundamental discoveries are credited with helping launch technological efforts aimed at developing applications ranging from secure data encryption to radical improvements in computation speed. Awschalom was recognized by his UCSB colleagues this year with their highest honor, the Faculty Research Lectureship. His campus talk, in late May, focused on recent developments in spintronics.

Hu says Awschalom’s work has made CNSI “one of the leading presences in spintronics research.” She notes that CNSI also is known for “superb research in materials of a diverse variety, leadership in photonic materials and devices, and the largest academic presence in nitride materials.”

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Beyond groundbreaking multidisciplinary research, CNSI also serves as a center for public education about nanotechnology, and outreach is an important part of its mission, Hu says. Together with UCSB’s Center for Nanotechnology in Society (see accompanying story), CNSI has launched a series of free public events — known as NanoCafés — aimed at fostering discussion about emerging nanotechnologies and their implications. CNSI also sponsors, with the Professional Artists Lab at UCSB, an international competition for plays about science and technology.

CNSI offers many opportunities for high school teachers and students to become involved in nanotechnology, including internships, after-school programs, and special courses.

While it might seem that such activities could distract from CNSI’s research agenda, they actually are a reflection of its aim to help produce broadly trained scientists and engineers capable of sustaining California’s leadership in nanotechnology.

The institute even hosted a popular, hands-on exhibit that offered an introduction to nanotechnology to schoolchildren from age 8 to 13. “In terms of interacting with the public, and, in particular, with schools,” says Hu, “that is an example of the kind of impact we’d like to have.”

The National Science Foundation is providing $5 million to support the center’s first five years of operation.

UCSB Center seeks answers

Does scientific research at the nanoscale present health and safety risks? The public’s interest in the answer to that question is the chief reason why the National Science Foundation in 2006 established centers at two universities — UC Santa Barbara and Arizona State — to study the societal implications of nanotechnology. The Center for Nanotechnology in Society at UCSB is an international collaborative enterprise that involves social scientists, humanists, and scientific partners.

“This is an unprecedented opportunity from a research standpoint, to be able to examine the public perception of a large issue before it hits public awareness in a big way,” says Barbara Herr Harthorn, the center’s director and an associate professor of women’s studies.

The center strives to be a national research and education resource and a hub among researchers and educators concerned with nanotechnologies’ societal impacts. It carries out its mission through research, surveys, conferences, and educational outreach activities, often working in partnership with the California NanoSystems Institute. Among its many activities, it presented a major conference on “Nanotechnology and Occupational Health and Safety” last fall, and, with the Bren School of Environmental Science and Management, it conducted the first comprehensive, international survey of workplace safety practices in the nanotechnology industry, which found that many nanotech companies and laboratories believe nanoparticles — specks of matter that are smaller than living cells — may indeed pose specific environmental and health risks for workers.

Campus officials underscore how the center embodies UC Santa Barbara’s highly interdisciplinary approach to research. “This is a real advantage in advancing our understanding of critical social issues and the social impacts of technology,” says Melvin Oliver, social sciences dean. “Few institutions have the public, and, in particular, with schools,” says Hu, “that is an example of the kind of impact we’d like to have.”
Interested in reading George Washington's first State of the Union Message or Abraham Lincoln's second Inaugural Address? How about listening to one of Franklin Delano Roosevelt’s fireside chats?

These and every other public document — as well as many audio and video recordings — associated with all U.S. chief executives can be found at The American Presidency Project, a Web site developed by a pair of UC Santa Barbara political scientists that has become the definitive online source of all words presidential.

Now used by students and scholars all over the world, the site boasts 78,000 written documents and 700 recordings. They include everything from inaugural addresses, executive orders, and convention speeches to radio addresses, televised news conferences, and debates. The site also provides information on the presidents’ relations with Congress, their popularity, public appearances, growth of the executive branch, and presidential selection.

Over the past 18 months, more than two and a half million people have used the site, accessing it from every continent and practically every country, according to a map function on the site that tracks visitors.

The project began in 1999 when John Woolley, a professor and chair of political science, commissioned Gerhard Peters, a graduate student, to help him create a teaching resource that would enable students in his American presidency course to access primary documents. “I wanted to give them raw material that would let them do real political science research in the context of an undergraduate class,” says Woolley. “Subsequently, the site has become a major research resource that’s used all around the world.”

Woolley is currently exploring possible sources of support for the project. “There are so many more things we could do with a site like this, but we just don’t have the resources,” he says. “It’s been a total volunteer effort up to now.”

The project has teamed with CQ Press, a division of Congressional Quarterly, Inc., to produce two reference volumes: “State of the Union: Presidential Rhetoric from Woodrow Wilson to George W. Bush” and “The Presidency A-Z.”

Other collaborations have been forged with various presidential libraries. “We gave the Truman Presidential Museum and Library digitized copies of all of President Truman’s papers, and in exchange the Web master at the University of Missouri designed the search engine,” says Peters. Site visitors can search by various criteria, including words and phrases.

This being an election year, it’s not surprising that one particularly popular holding on the site right now is its compilation of party platforms. “We have the platforms of every party that’s ever received an electoral vote in the United States, going back to 1840,” says Peters. “People are doing textual analysis on the content of these platforms and are sending their students to study how the parties’ statements have evolved.”
The Campaign for UC Santa Barbara
Ensuring a ‘Dynamic Future’ for UC Santa Barbara
The first-ever comprehensive fundraising campaign for UC Santa Barbara is approaching the half-billion dollar mark.

The Campaign for UC Santa Barbara began at the start of the decade with an initial goal of $350 million. The fund-raising momentum achieved through the campaign led to a new goal: $500 million. Since 2005, some 60 major campaign events have been held in all parts of California as well as in Chicago, New York, Portland, Seattle, St. Louis, and Washington D.C.

Alumni and friends contributed $70.8 million in gifts and pledges during the 2006-07 fiscal year — up 30 percent over the previous year. Totals for the year just ended are not yet final.

The campaign has seen increases in both the ranks of donors and the size of donations. Parents have played a growing role in supporting the campus. UCSB’s endowment — now estimated at $200 million — has grown by $126 million since the campaign began.

In a recent message of thanks to supporters, Chancellor Henry Yang and the Chair of the UC Santa Barbara Foundation, Fredric Steck, Class of ’67, noted that every donor makes a difference. The campus’s remarkable progress toward the campaign goal, they wrote, “gives testimony to the vision and generosity of the many volunteers and philanthropists” involved in the effort to create “a dynamic future for our campus.”

The overarching aim of the campaign is to ensure UC Santa Barbara’s excellence for future generations. The funds help support priority projects and initiatives across the campus and the disciplines, including cutting-edge research and instruction; scholarships, fellowships, and professorships; innovative programs; and new and enhanced facilities.

As the drive inches toward its goal — by the end of the fiscal year more than $480 million had been raised — Chancellor Yang, the campaign’s volunteer leadership, trustees of the UC Santa Barbara Foundation, and campus officials including John Wiemann, vice chancellor for institutional advancement, and Gary Greinke, associate vice chancellor, are discussing where the campaign goes next.

Academy Award winner and UCSB alumnus Michael Douglas — who contributed $1 million for the Carsey-Wolf Center for Film, Television, and New Media — serves as honorary chair of the campaign.

“This is a time of unprecedented opportunity for UC Santa Barbara,” he said in a video message about the campaign, “and private support will provide the critical margin of excellence.”

For more information or to make a gift, contact The Campaign for UC Santa Barbara at (805) 893-4772 or, toll free, (800) 641-1204. E-mail is campaign@ucsb.edu.

The grand opening of Mosher Alumni House was held in April.

The grand opening of Mosher Alumni House was held in April.

Beneﬁcations

- The single largest gift to The Campaign for UC Santa Barbara thus far came from a former faculty member and scientiﬁc pioneer and his former wife and business partner.

Virgil Elings and Betty Elings Wells have given $12.5 million to support research and education at the California NanoSystems Institute, which is housed in what is now known as Elings Hall.

Virgil Elings is a former UCSB professor of physics who made fundamental contributions leading to the scientiﬁc revolution at the nanoscale. In 1987, he co-founded Digital Instruments — the first company to make the power of atomic scanning probe microscopy readily available to scientists and engineers, enabling them to view and explore nanoscale features and structures never seen before — a critical starting point in nanoscience and nanotechnology.

“Our company was a part of the beginning of what people today call nanotechnology,” he said. “We also made our money in Santa Barbara, and this is one of many gifts we are making to give back to the community in which we have prospered.”

Wells said that she made the gift to UCSB to honor her former husband and mentor, the devoted employees at Digital Instruments — many of them UCSB graduates, and the university.

- UCSB has its sights set firmly on the future, but an academic tradition rooted in Renaissance England — the endowed chair — is laying the groundwork for some of the campus’s ambitious new academic plans.

Since the inception of The Campaign for UC Santa Barbara, 54 new endowed chairs have been established, bringing to 78 the total number of such distinguished professorships on campus.

Professorships created recently with campaign gifts of $1 million or more include eight Mellichamp Academic Initiative Chairs, established by UCSB Emeritus Professor Duncan Mellichamp and his wife, Suzanne, to build centers of excellence in programmatic areas of rising importance across the disciplines (the effects of globalization is one example); the Ruth Garland Chair for the director of the new Center for Stem Cell Biology and Engineering; the Marsha and Jay Glazer Chair in Jewish Studies; and two other chairs established by professors and their spouses, the Walter J. Mead Chair in Economics and the Fred and Linda R. Wudl Chair in Materials Science.

Other recent endowment gifts that will support the academic work of UCSB’s faculty are the Guenter and June Ahlers Chair in Physics, established by a UCSB physicist and his wife, and the SAGE Sara Miller McCune Chair for the dean of social sciences, Melvin Oliver. The gift was from Ms. McCune, a UC Santa Barbara Foundation trustee, and SAGE Publications, Inc., the company she founded.
Tales of the Tats

Once an art form restricted to sailors, soldiers, and people on the fringe of society, tattooing has become a cultural phenomenon. More than 45 million people in the United States have tattoos, many using the indelible images as a means of sharing their own personal messages. In his new book, Permanence: Tattoo Portraits (Chronicle Books), Kip Fulbeck, a professor of art, combines photographic tattoo portraits with stories about these images told in the subjects’ words and handwriting.

“’It’s a book about identity that uses tattoos as the starting point,’” says Fulbeck. “’I’m most interested in how people choose to individualize themselves — in this case, in a physical sense. I’m interested in hearing their response to the question, ‘Why?’” So I picked people with interesting stories rather than interesting tattoos — though sometimes people have both — and I wanted to be as varied and diverse as possible.”

Heavily tattooed himself, Fulbeck does not necessarily consider himself a fan of body art, but he appreciates great artistry and the talent some tattooers have to create brilliant images.

The collection of portraits includes rock stars, concentration camp survivors, corporate executives, students, suburban mothers, Hells Angels, gang members, adult film stars, veterans, and celebrities. Also included is Milton Love, a research biologist at UCSB’s Marine Science Institute and an expert on rockfish, who claims “only real marine biologists have tattoos.”

Thoreau Tableau

The Writings of Henry D. Thoreau, a projected 30-volume series of the work of the 19th-century American naturalist and social philosopher, has reached the halfway mark with the recent publication of Excursions.

The Thoreau Edition, which has been headquartered at several universities across the country since its inception in 1966, is now based at UCSB. The latest book (published by Princeton U. Press) continues a scholarly endeavor that began four decades ago. When completed, the Thoreau Edition will include the contents of all 47 volumes of Thoreau’s handwritten Journal, his writings for publication, his correspondence, and other uncollected papers. The first volume in the series, Walden, was published in 1971.

“These are some of Thoreau’s best known essays,” says Elizabeth Witherell, the project’s editor-in-chief, of the new volume. “Our texts of them reflect Thoreau’s intentions much more closely than any other available versions.”

In an essay for the faculty and staff newspaper, S2106, Witherell wrote about transcribing the author’s writing: “Thoreau wrote almost every day and knew what he was writing, while the transcribing has been much less concentrated and we have to decipher his challenging hand,” she wrote. “Sometimes what Thoreau wrote looks like little more than a series of bumps.”

A page of Thoreau’s Journal and the transcription of it can be found on the project’s Web site at www.library.ucsb.edu/thoreau/.writings_handwritingP.html.

Pacific Overtures

In 1961, newly graduated from Harvard University with a bachelor’s degree in Far Eastern languages, John Nathan hopped a Japan Airlines flight to Tokyo where he planned to study Japanese literature. That excursion marked the beginning of a four-decade adventure during which he became the first American admitted as a regular student to the University of Tokyo, translated the work of celebrated Japanese writers Yukio Mishima and Kenzaburo Oe, and wrote, directed, and produced documentary and feature films.

In Living Carelessly in Tokyo and Elsewhere: A Memoir (Free Press), Nathan, the Takashima Professor of Japanese Cultural Studies at UCSB, chronicles his life in Japan and details the events and individuals that characterized his successful and singularly chaotic career as an author, translator, Emmy Award-winning filmmaker, and cultural critic.

“I had the privilege to spend time with the foremost artists, novelists, playwrights, directors, movie stars — many of the most gifted people in the country,” says Nathan.

While in Japan, Nathan published the first of his many major translations, including Yukio Mishima’s The Sailor Who Fell from Grace with the Sea and Kenzaburo Oe’s A Personal Matter and Teach Us to Outgrow Our Madness. He went on to write Japan Unbound: A Volatile Nation’s Quest for Pride and Purpose, Sony: The Private Life, and Mishima: A Biography.

Footnotes

- When the Soviets launched the satellite Sputnik in 1957, thousands of people around the world seized the opportunity to become citizen-scientists and take part in the dawning space age. Known as Moonwatchers, these amateur astronomers provided professionals with critical information about the satellite’s movement. In his new book, Keep Watching the Skies! The Story of Operation Moonwatch and the Dawn of the Space Age (Princeton U. Press), W. Patrick McCray, a professor of history, tells the story of this network of pioneers who participated in what is perhaps the greatest science endeavor of the 20th century.

- One man’s trash is another man’s treasure, and nowhere is that more apparent than in William Davies King’s collection of cereal boxes, tuna can labels, envelope linings, and other whatnot. King, a professor of theater, has spent his life gathering a monumental mass of miscellany, and in Collections of Nothing (U. of Chicago Press), he takes a hard look at his habitual hoarding to see what truths it might reveal.

- In The Bitter Sea (HarperCollins), Charles N. Li, a professor of linguistics, explores both the complex relationship between a father and son and the immense gulf that separates the East Asian world from the West. Li, born near the beginning of World War II, was the youngest son of a wealthy Chinese government official. By the time he was 21, however, he saw his family’s fortunes dashed when Chiang Kai-shek’s Nationalists came to power in 1945, transforming his father from a powerful official to a prisoner jailed for treason.

- In her new book Presidential Leadership, Illness, and Decision Making (Cambridge U. Press), Rose McDermott, a professor of political science, examines the ways in which processes related to aging, physical and psychological illness, and addiction influence executive decision making. She provides case studies of four presidents — Wilson, Franklin Delano Roosevelt, Kennedy, and Nixon — and discusses how their physical conditions may have influenced foreign policy decisions and altered the course of history.
Our New Welcome Mat!

Introducing three instant campus landmarks:
Henley Gate, Steck Circle, and Kirby Crossing

Have you heard of them?
Well, now you can’t miss them. Thanks to the generosity of several major donors, the East Entrance to UC Santa Barbara has been re-imagined. The result is a clear message: Welcome!

Traffic now enters the campus through a gate and flows to a traffic circle, or roundabout, that faces, on its campus side, a broad plaza linking two prominent science buildings. The combined effect of these striking new additions is a red carpet and blue-and-gold welcome mat. As Chancellor Henry Yang likes to put it: “A world-class university must have a physical presence to match.”

Agreeing with him on that point are the donors who made major gifts for the campus’s new entrance.

The Henley Gate is named for donors Jeff Henley, Class of ’66, and his wife, Judy, UC Santa Barbara Foundation Trustee. Judith L. Hopkinson, a UC Regent, also made a major gift for the project. The gate is made of a structurally supported arched wall with stone veneer and a 102-foot long, aluminum-clad arch that spans both inbound and outbound traffic lanes. Finishing touches — the university’s seal, and special lettering, landscaping, and lighting — were being applied in July.

Steck Circle is dominated by an 80-ton Ficus macrophylla tree (or Moreton Bay Fig) that is 40-feet tall. The tree was moved from near Harold Frank Hall, the Engineering I building. The circle will be landscaped in a “world triad pattern” using Santa Barbara sandstone and Senecio mandraliscae, a succulent known as Blue Chalk Sticks. The tree was located off-center by design to accent the ground pattern and frame a view of the campus. The project was supported by Fredric E. Steck, Jr., Class of ’67, who chairs the UC Santa Barbara Foundation.

The development of Kirby Crossing was a gift from foundation trustee Marvel Kirby, Class of ’51, to memorialize her late husband, Robert. Entering the campus at Steck Circle, the plaza is flanked by Kohn Hall, home to the world-renowned Kavli Institute for Theoretical Physics, and Elings Hall, headquarters of the California NanoSystems Institute. Coming soon: benches, accent plantings, and informational banners.