

# UC SANTA CRUZ

Fall 2011

REVIEW

AT THE DAWN OF PERSONALIZED MEDICINE

# Did you know . . . Sammy the Banana Slug is 25?



He celebrated his birthday by getting his very own **UC Santa Cruz Banana Slug Day** in the City of Santa Cruz!

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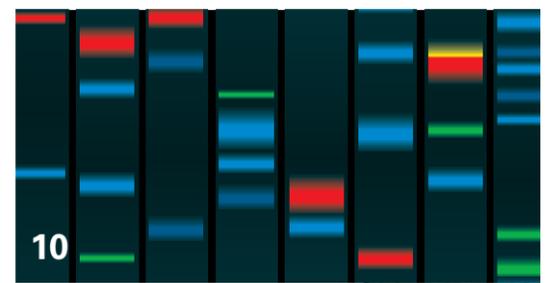


# UC SANTA CRUZ

REVIEW | [review.ucsc.edu](http://review.ucsc.edu) | Fall 2011

## Decoding cancer

*UCSC researchers are at the forefront of developing new therapies for one of humanity's most heartbreaking challenges.*



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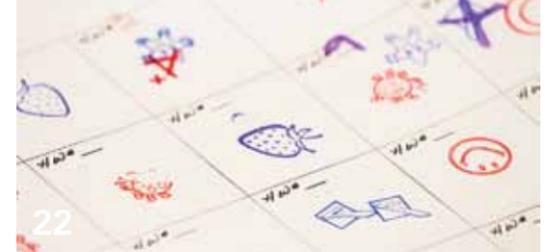
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# From the Chancellor



UNIVERSITY  
OF CALIFORNIA  
SANTA CRUZ

Chancellor  
George Blumenthal

Vice Chancellor,  
University Relations  
Donna Murphy

UC SANTA CRUZ REVIEW  
Fall 2011

Editor  
Gwen Mickelson

Creative Director  
Lisa Nielsen

Art Director/Designer  
Linda Knudson (Cowell '76)

Associate Editor  
Dan White

Contributors  
William Abernathy  
Amy Ettinger  
Matt King  
Guy Lasnier (Merrill '78)  
Scott Rappaport  
Camille Mojica Rey  
Tim Stephens  
Peggy Townsend  
Dan White

Produced by  
UC Santa Cruz  
Communications  
& Marketing  
1156 High Street  
Santa Cruz, CA 95064-1077  
Voice: 831.459.2495  
Fax: 831.459.5795  
E-mail: [review@ucsc.edu](mailto:review@ucsc.edu)  
Web: [review.ucsc.edu](http://review.ucsc.edu)  
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Great and important things are happening at UC Santa Cruz. I hope as you read this magazine you'll feel a burst of pride, as I do.

In addition to the groundbreaking cancer research taking place here (see page 10) and the many other programs and people of note detailed in these pages, I want to point out just a few more terrific things going on here at UCSC.

We're introducing several new academic programs this year, including a minor in dance, a B.S. in robotics engineering, and a new B.A. in network and digital technology.

We received a gift of \$500,000 to establish The George P. Hitchcock Modern Poetry Fund at Porter College, ensuring that poetry will thrive at UCSC in perpetuity (see page 9).

The Sierra Club gave us one of its highest rankings ever in its annual list of "the nation's most planet-minded universities."

This year also marks the 25th anniversary of our beloved Banana Slug mascot, Sammy the Slug. Fiat Slugs!

Whatever your passion, I'm sure you'll find something of interest here. Come see for yourself. Visit campus, attend an event, get involved. Volunteer, make a gift to a program that's meaningful to you, stroll through the Arboretum, attend a holiday play, or reconnect with old friends at Alumni Reunion Weekend April 27-29.

UCSC has so much to offer. Make it yours.

Sincerely,

George Blumenthal

PHOTO: PAUL SCHRAUB

# From the Editor

I idolized my Uncle Gary. He was funny, smart, and handsome, and he took us kids horseback riding and fishing. He was a pioneer in veterinary echocardiography at Cornell University, where he was a professor of veterinary medicine.

A brain tumor took his life at 39, when I was just 11. In quiet moments, I sometimes remember Uncle Gary and wonder how much richer life might have been with him in it.

Cancer has touched nearly everyone. The American Cancer Society estimates that this year alone more than 1.6 million people in the U.S. will be diagnosed with the disease.

Researchers at UC Santa Cruz are at the forefront of the search for new ways to defeat this devastating disease. As you'll read in our cover story (page 10), Distinguished Professor of Biomolecular Engineering David Haussler and his team are working toward the goal of personalized cancer diagnosis and treatment, which would be an enormous advance in cancer medicine.

Other articles in this issue show how UCSC achieves its public service mission by helping supply California with qualified math and science teachers (page 22), is opening new doors of understanding to world history (page 14), and is working to bring more primary care doctors to communities with underserved populations (page 26).

UCSC alumni also entertain: One is now a TV executive involved in producing provocative hit shows including *Mad Men* and *Weeds* (page 18); another is editor-in-chief of a news magazine that examines issues from an unusual angle (page 27).

You can always get the full scoop on UCSC by subscribing to our monthly e-newsletter. Just go to [news.ucsc.edu](http://news.ucsc.edu) and click the "Subscribe Today" button.

Have a great holiday season, and keep in touch.

—Gwen Mickelson,  
editor

## Sammy the Slug prevails: It was 25 years ago

It's hard to remember that UCSC's mascot, the Banana Slug, was once subversive. For the Banana Slug's earliest fans, rallying behind the mollusk was a mischievous gesture, a thumb in the eye of the status quo.

These days, 25 years after it became the campus's official mascot, Sammy the Slug could not be more accepted and beloved. All of the Banana Slug

paraphernalia now available can make people forget that this mascot's future once hung on a slender thread of slime.

This year, alumni are pausing to reflect on those days in the mid-1980s, when backers of the then-unofficial UCSC Banana Slug mascot prevailed after a disagreement with campus community members who favored a sea lion mascot.

The Banana Slug mascot story is all about perseverance, creativity, and daring to be different in a world of boring, run-of-the-mill animal mascots. "The banana slug just suited the campus so well—its symbiotic relationship with the redwoods and its nonviolent Gandhi-an characteristics," said Marc Ratner (Cowell '87, linguistics).

# HOT dates

Join us for  
these signature events

## Founders Celebration 2011

[ucsc.edu/founders](http://ucsc.edu/founders)

October 21, 2011

[Founders Day Gala Dinner](#)

[Cocoanut Grove, Santa Cruz](#)

## Scholarship Benefit Dinner

[ucsc.edu/sbd](http://ucsc.edu/sbd)

February 25, 2012

[Fairmont Hotel, San Jose](#)

## Reunion Weekend

[events.ucsc.edu/reunion](http://events.ucsc.edu/reunion)

April 27-29, 2012

[Campus](#)



# This is UCSC

## Shakespeare Santa Cruz: At 30, still a cultural touchstone

It may be hard to believe, but Shakespeare Santa Cruz has been thrilling audiences for three decades now. The theater company opened its latest season this past summer at the Mainstage Theater with one of the most successful productions in SSC's history, *The Comedy of Errors*, directed by award-winning UC Santa Cruz

theater arts professor, and former SSC artistic director, Danny Scheie. "Danny's original production remains to this day a favorite of SSC audience members, and is a great celebration of our history," observed Artistic Director Marco Barricelli, who just completed his fourth summer festival at SSC.

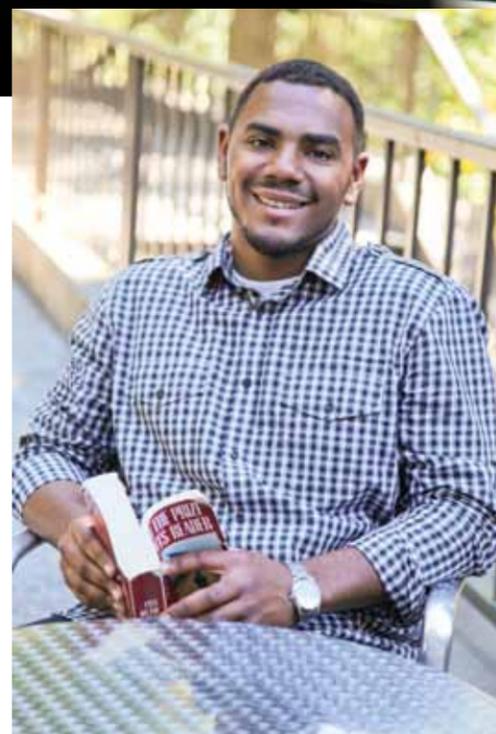
Founded in 1981, Shakespeare Santa Cruz is a professional repertory company in residence at UCSC. It has been celebrated by *USA Today* as "one of the nation's top ten most influential" Shakespeare companies.

Above: Shakespeare Santa Cruz former artistic director Danny Scheie on the set for a special run of *Comedy of Errors* at Villa Montalvo. Right: Cameron Fields, one of the student delegates to the Taiwan green workshop.

## Thinking big and going green

UCSC's undergraduates have reason to be proud of their sustainability efforts this year. This summer, a "green" delegation including undergrads Gabi Kirk and Cameron Fields (right) went to Taiwan to lead a green workshop. Students also launched a Carbon Fund to pay for eco-friendly projects on and off campus and convened a far-ranging Campus Earth Summit.

The all-student organized summit, this year the 10th annual, brought together students, faculty, staff, and community members to share ideas and strategize on how to transform UCSC into a sustainable campus. Visiting the Earth Summit on Earth Day this year was a contingent from the University of Hawaii's West Oahu campus, who were looking for sustainable ideas as they build out their campus.

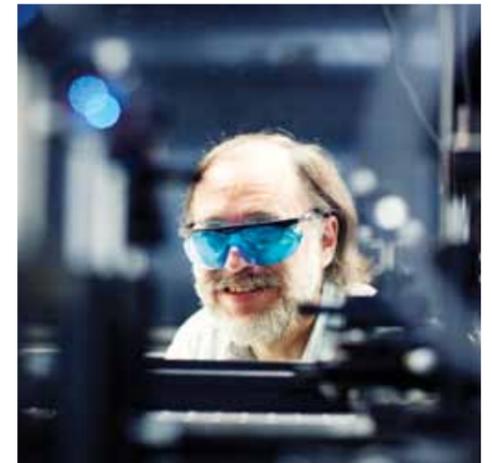


## Turning inward with adaptive optics

For the last 30 years, astronomers have used adaptive optics to get a clearer look at outer space. Now, UC Santa Cruz biologists are harnessing the same technology to get a better look at living cells and tissues, giving them a fuller picture of human biology and diseases.

Funded by a \$1 million grant from the W. M. Keck Foundation, the new W. M. Keck Center for Adaptive Optical Microscopy at UC Santa Cruz builds on efforts begun in 2006 by a group of biologists, astronomers, and optical engineers.

Principal investigator Joel Kubby, an associate professor of electrical engineering in the Baskin School of Engineering at UCSC, has worked on adaptive optics systems for large telescopes as well as for biological imaging. In astronomy, AO systems correct the blurring of telescope images caused by turbulence in the Earth's atmosphere. In microscopy, blurring is caused by the flowing cytoplasm of living cells.



Above: Joel Kubby with one of his adaptive optical systems. Below: An example of a tagged ocean predator.

## Tracking the ocean's top predators

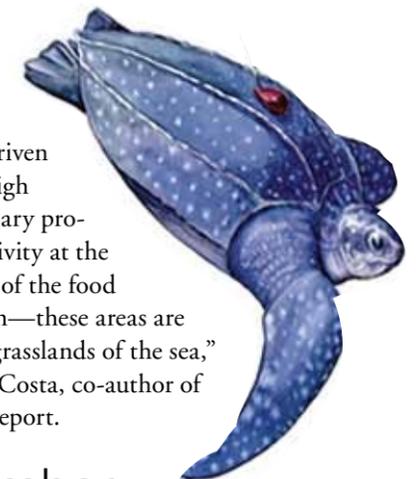
A 10-year study involving UC Santa Cruz ecology and evolutionary biology professor Daniel Costa provides a remarkable picture of top marine predators' movements, migration patterns, and critical habits across the Pacific Ocean.

Two big regions of the North Pacific Ocean are magnets for marine life, attracting a diverse array of predators in predictable seasonal patterns, according to re-

sults from the Tagging of Pacific Predators project published in *Nature* in June.

The California Current, which flows southward along the U.S. West Coast, and the North Pacific Transition Zone, a boundary between cold subarctic water and warmer subtropical water, are both hot spots for large marine predators, the study found. "These are the areas where food is most abundant, and

it's all driven by high primary productivity at the base of the food chain—these areas are the grasslands of the sea," said Costa, co-author of the report.



## Founding faculty member traces 50 years of UCSC

William Doyle, a founding faculty member of UC Santa Cruz when the campus opened in 1965, has written a book that traces the early history of the campus. *UC Santa Cruz: 1960–1991* begins with the story of how the campus came to be located in Santa Cruz and describes the challenges of designing and building the new campus.

Doyle, a professor emeritus of biology, held many important administrative positions during his years at UCSC. He is best known for his leadership

in the planning and development of the marine science program at UCSC, and several chapters of the book are devoted to those efforts.

In a foreword to the book, Chancellor George Blumenthal wrote that Doyle "was indeed a pioneer, who arrived at a nascent campus with almost no buildings, no academic programs, and very few faculty. His own commitment to the campus led to a string of developments and contributions that spanned his entire career."

Left: William Doyle with the Seymour Center's Ms. Blue in the background.

PHOTOS: FIELDS: LISA NIELSEN; SCHEIE AND KUBBY: ELENA ZHUKOVA; DOYLE: CAROLYN LAGATTUTA

# This is UCSC



Dave Rawlings and Gillian Welch

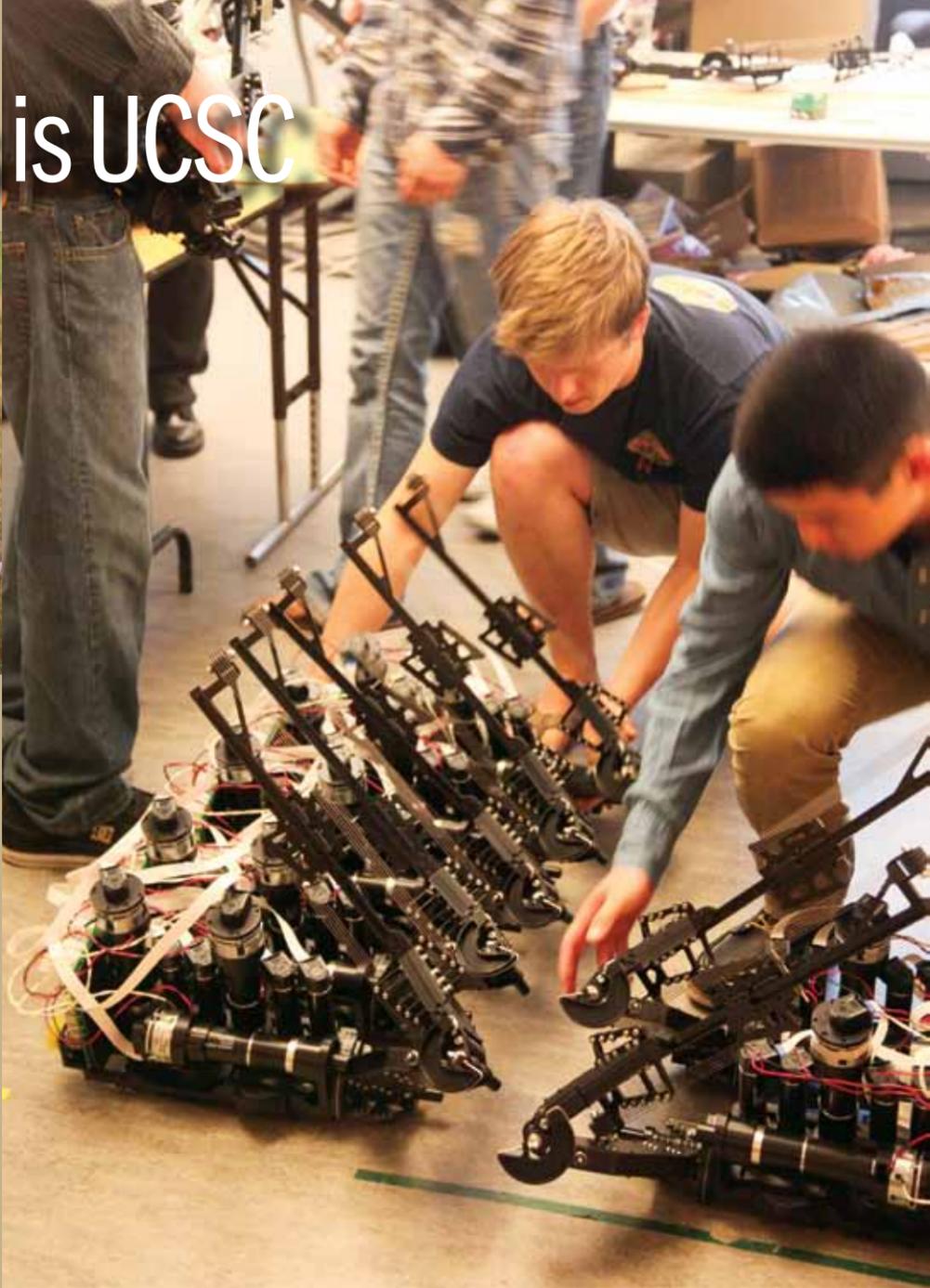
## UCSC's own Gillian Welch makes another splash

Forty-five seconds into the new Gillian Welch CD, *The Harrow and the Harvest*, you realize this is the real deal.

It's a low-key affair—in the best possible way—with exquisite musicianship, haunting harmonies, and superlative songwriting. It's also the first Gillian Welch album to come out in nearly eight years.

After the album's release, the UCSC alumna (Porter '90, art) embarked on national tour with longtime musical partner David Rawlings.

*The Harrow and the Harvest* marks Welch's fifth CD in 15 years. It features nine new songs, plus a studio version of the stunning *The Way It Will Be* ("Throw Me A Rope"), a highlight of their live shows for the past several years.



## Rise of the robots

UCSC has launched a new major in robotics engineering, an interdisciplinary field that combines electrical, computer, and mechanical engineering. The new major, leading to a B.S. degree, is the first of its kind in the UC system.

"Robots are used in many industry segments today, including automotive, aerospace, electronics and computers, industrial machinery, telecommunications, medicine, agriculture, mining, and textiles. As technology continues

to bring cyber and physical worlds together, the demand for robotics engineers will continue to increase, which makes our new major a much-needed addition to the curriculum of the Baskin School of Engineering," said J. J. Garcia-Luna-Aceves, Baskin Professor and chair of computer engineering in UCSC's Jack Baskin School of Engineering.

The Department of Computer Engineering will administer the new program. Students started enrolling in the robotics engineering major this fall.

WELCH PHOTO: MARK SELIGER / ROBOTICS PHOTO: CAROLYN LAGATTUTA  
PHOTOS: LOWRIDER: GLORIA MORÁN / MCHENRY; ELISE HERRERA-MAHONEY



## 'Soc doc' filmmakers hit the big screen

Just imagine the thrill of the senior social documentation ("soc doc") program students at UC Santa Cruz when the house lights went down at the Del Mar Theatre in Santa Cruz and their work appeared on the big screen.

These students had the chance to premiere their master's thesis video documentaries at the elegant and historic theater. It was the fifth annual Soc Doc Graduate Exhibition and the second to be showcased at the Del Mar. The screening had to be moved this year to the Del Mar's larger, downstairs screen after last year's full house resulted in many attendees being turned away.

"The work you will see, hear, and experience is the culmination of an intense two years as our students immersed themselves in documentary traditions and craft, scholarly research and analysis, and storytelling," said Renee Tajima-Peña, professor and graduate director of the social documentation program.

Opposite page, right: Students in computer engineer Jacob Rosen's Bionics Lab work with components of an advanced robotic surgery system.

This page, left: The Global Village Cafe in the newly renovated McHenry Library.

Below left: Sherry Yafuso, a founder of the Unique Ladies, an all-women lowrider car club in San Diego, cruises in her customized sedan. Gloria Morán followed Yafuso and other club members for "Unique Ladies," her video documentary thesis in the social documentation master's program.

## New additions on campus

With its redwood views and terraced gardens, UC Santa Cruz's McHenry Library is a gorgeous place to cram for exams. Now the library has expanded, while stepping up its role as a community hub.

Ten years in the making, the newly completed addition and renovation project allow the library to house a growing collection of print and electronic materials and offer more comprehensive electronic resources for students. The campus has chosen locally owned Hoffman's Bistro and Patisserie to operate the new Global Village Cafe in the lobby.

Nearby, on Science Hill, construction continues for UCSC's Biomedical Sciences Facility, set for completion early next year. The building will provide 92,000 square feet of laboratory space and facilities to support health and medical research. It will be used by students, faculty, and researchers in the Departments of Molecular, Cell and Developmental Biology; Chemistry and Biochemistry; Microbiology and Environmental Toxicology; and Biomolecular Engineering. A stem cell research center, funded by a \$7.2 million grant from the California Institute for Regenerative Medicine, will occupy the fourth floor.

# This is UCSC



Above right: George Blumenthal welcomes the audience and participants to *Bridging the Gap*. Above: Emeritus Film Professor Chip Lord speaks with digital arts and new media faculty member Soraya Murray.



## Cinematic Banana Slugs in the spotlight

“The UC Santa Cruz student may not get the first job compared to his or her Ivy League competitor ... but I assure you they will get the *best* job in the end ... because they will out-think them.”

Those rousing words were delivered by Kevin Beggs (Porter '89, politics and theater arts), president of Lionsgate Television Group, during his keynote address for a film symposium called *Bridging the Gap* at UCSC in June. (For more on Beggs, see page 18.)

The alumnus was just one of many graduates of the campus who partici-

pated in panel discussions and screenings at the event.

Other featured alumni guests at the symposium included **Rick Carter**, production designer (*Sucker Punch*, *Avatar*); **Ron Yerxa**, producer, Bona Fide Productions (*Little Miss Sunshine*, *Little Children*, *Election*); **Tad Leckman**, visual effects designer (Escape Studios/Industrial Light & Magic); **Sarah Schechter**, senior vice president, production, Warner Brothers; and **Tiffany White**, assistant costume designer/costumer (*Mad Men*, *True Blood*).

## Pioneering social psychologist Elliot Aronson honored

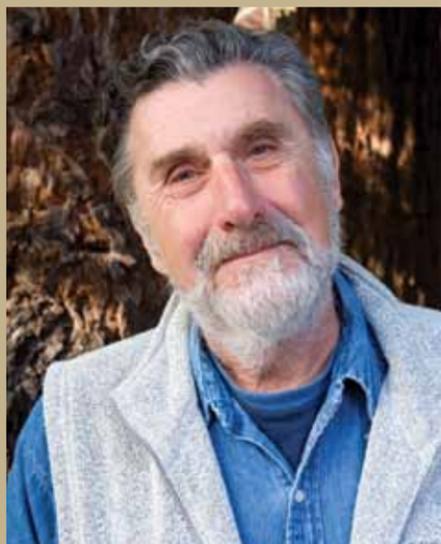
Eminent social psychologist Elliot Aronson earned one of his highest accolades this year, honoring the work he has done in his post-academic career.

Aronson, UCSC emeritus professor of psychology, was named winner of the 2010 Constantine Panunzio Distinguished Emeriti Award.

The award recognizes outstanding University of California professors in the humanities or social sciences for research and activities since retirement.

Established in 1983, it is named for Constantine Panunzio, a sociology professor at UCLA, who is known as the architect of the UC Retirement System. It includes a \$5,000 prize.

Aronson, 79, who retired in 1994, is the fifth UCSC professor to win and the third in consecutive years. “For me, doing research on social psychological issues is not work—but a great joy,” he said. “So, in a sense, I am being rewarded for having fun! Not bad.”



Elliot Aronson

## A poet's gift

This summer the campus received a gift of \$500,000 to establish The George P. Hitchcock Modern Poetry Fund at Porter College.

A renowned publisher, poet, painter, and UCSC lecturer emeritus in creative writing, Hitchcock died in August 2010 at the age of 96.

His longtime partner, Marjorie Simon, has made the gift to honor and fulfill Hitchcock's wishes—to establish an endowment, through his estate, that would support poetry-related activities in perpetuity.

Hitchcock, who published the literary magazine *kayak*, taught writing at UC Santa Cruz from 1970 to 1989.

The endowment will provide support for projects including residencies for poets, readings, a poetry prize, and more.

## Video shows tool use by a fish

The first video of tool use by a fish has been published in the journal *Coral Reefs* by Giacomo Bernardi, professor of ecology and evolutionary biology.

“What the movie shows is very interesting,” Bernardi said. “The animal excavates sand to get the shell out, then swims for a long time to find an appropriate area where it can crack the shell. It requires a lot of forward thinking, because there are a number of steps involved. For a fish, it's a pretty big deal.”

The actions recorded in the video are remarkably similar to previous reports of tool use by fish.

Bernardi shot the video in Palau in 2009.

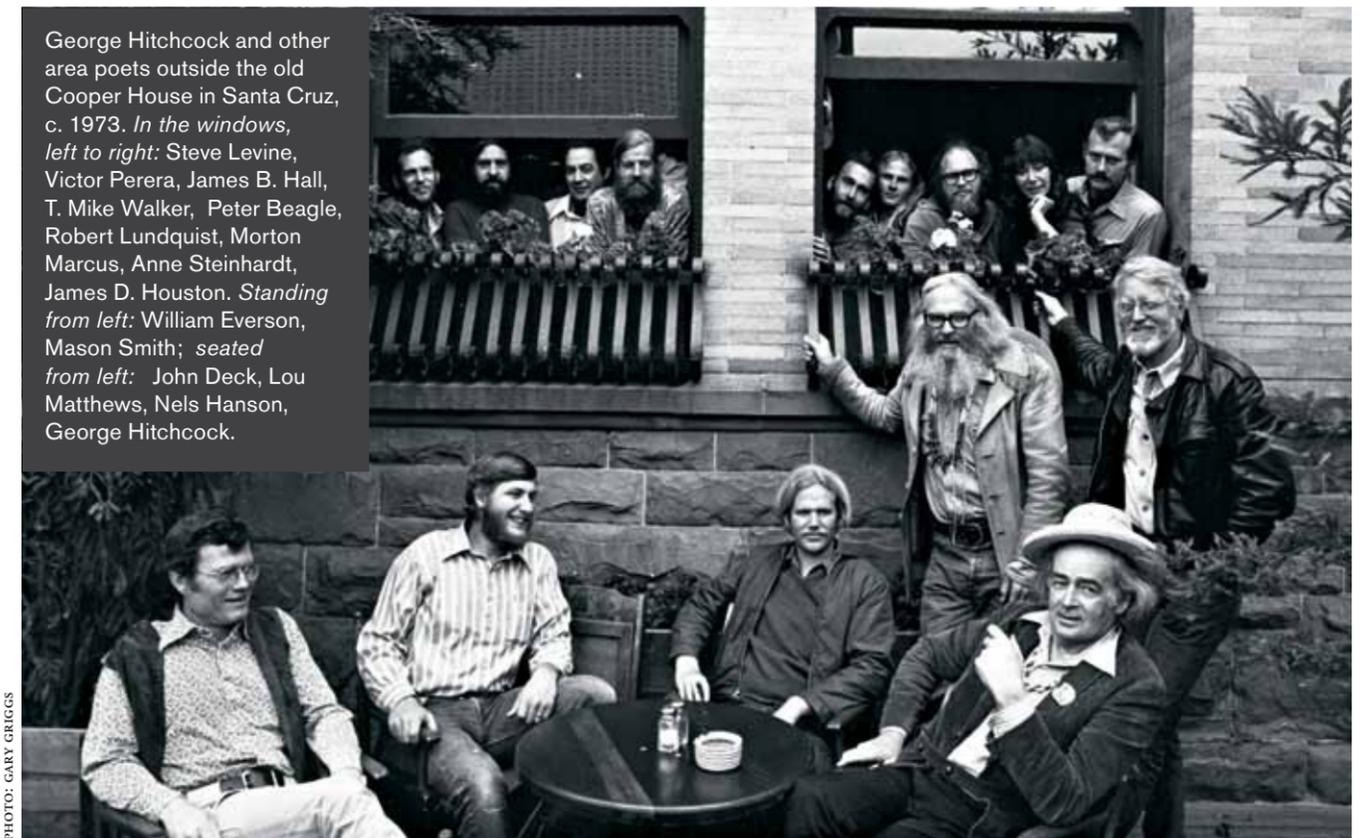
Tool use was once considered an exclusively human trait, and Jane Goodall's



Tool-using fish

reports of tool use in chimpanzees in the 1960s came as a stunning revelation. Since then, many other animals have been observed using tools, including various primates, several kinds of birds, dolphins, elephants, and other animals.

To view the video, visit [news.ucsc.edu/2011/09/fish-tool-use.html](http://news.ucsc.edu/2011/09/fish-tool-use.html).



George Hitchcock and other area poets outside the old Cooper House in Santa Cruz, c. 1973. *In the windows, left to right:* Steve Levine, Victor Perera, James B. Hall, T. Mike Walker, Peter Beagle, Robert Lundquist, Morton Marcus, Anne Steinhardt, James D. Houston. *Standing from left:* William Everson, Mason Smith; *seated from left:* John Deck, Lou Matthews, Nels Hanson, George Hitchcock.

PHOTO: GARY GRIEGGS

by Camille Mojica Rey

With the genome era dawning, UCSC researchers are at the forefront of developing new therapies for one of humanity's most heartbreaking challenges

# Has cancer finally met its match?

**"IF WE CAN PUT A MAN ON THE MOON, WHY CAN'T WE FIND A CURE FOR CANCER?"**

It's a familiar question that embodies a collective frustration Americans have over the lack of a cure for cancer. Few diseases touch as many lives, and no diagnosis is more dreaded.

This year alone, the American Cancer Society estimates that more than 1.6 million people in the U.S. will be diagnosed with cancer and roughly half a million will die from the disease.

Despite how these statistics are reported, scientists now realize that cancer is not one disease. There are types, like breast or prostate cancer, and there are subtypes of those. Tumor cells from people with the same subtype might have different genetic fingerprints. Likewise, a person's tumor itself is made up of different cell types.

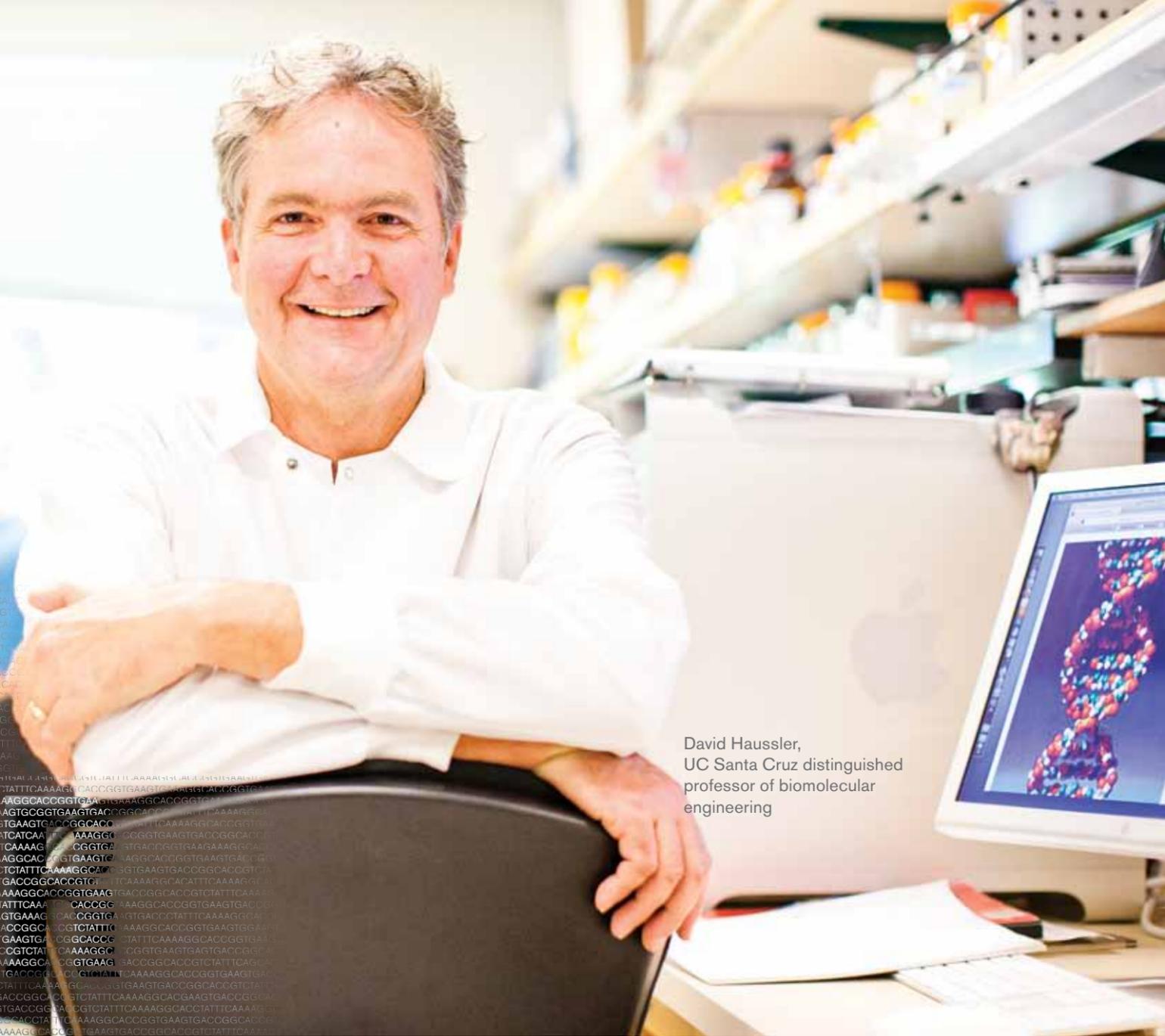
With so much variation, can we ever hope to win the war President Nixon declared on cancer more than 40 years ago?

If we continue to treat cancer simply based on its organ or tissue of origin, the answer is "probably not." (Scientists are now learning that there is a subtype of breast cancer whose tumor cells more closely resemble those of a subtype of lung cancer.) If we can tailor treatments based on the genetic fingerprint of an individual's particular type of cancer, then just maybe the answer will be "yes."

Thanks to the completion of the Human Genome Project in 2003 (with help from UC Santa Cruz researchers) and faster, cheaper DNA sequencing technology, the goal of personalizing cancer diagnosis and treatment finally seems within reach.

## A CATALOG OF DEFECTS

To make this dream a reality, scientists are creating The Cancer Genome Atlas (TCGA), a catalog of the genetic defects that lead to each particular type of cancer. "Cancer is a disease that is caused by mutations in cells that make them



David Haussler, UC Santa Cruz distinguished professor of biomolecular engineering

PHOTO: ELENA ZHUKOVA

grow in an uncontrolled fashion," said David Haussler, a UC Santa Cruz distinguished professor of biomolecular engineering and a member of TCGA Research Network's central coordinating committee. "Because cancer is a genetic disease, it is fundamentally important to understand what those mutations are. We have not had the technology to do that on a large scale ever before." TCGA is a comprehensive, collaborative effort funded by the National Cancer Institute and the National Human Genome Research Institute, both part of the National Institutes of Health. It in-

volves 150 researchers at more than two-dozen institutions nationwide, including UCSC. They have begun with the 20 most common cancers and recently sequenced their 1,000th tumor genome. Haussler and his colleagues are hoping that, like women who test positive for the HER2 gene amplification and are treated with the drug Herceptin, all cancer patients will one day receive treatments that target their particular cancer. They predict that TCGA will transform the practice of cancer medicine and our understanding of the basics of cancer biology.

"TCGA is the largest cancer genomics project in the world. There is nothing like it," said Christopher Benz, professor and program director, Buck Institute for Research on Aging in Novato. Benz spent most of his career at UC San Francisco, where he set up its first laboratory dedicated to the study of human breast cancers, and where he continues to treat breast cancer patients. Now, along with Haussler, he is co-principal investigator of TCGA's UCSC-Buck Institute Genome Data Analysis Center, one of seven such centers in the network.

“Together, we have a unique synergy of expertise,” he said of his collaboration with UCSC partners. His job is to help identify genomic changes that are clinically relevant. “When we put our heads together, we can come to the right conclusions about what is making these cancers tick and how we might go about attacking them with our therapeutic arsenal.”

### PIONEERING BIOINFORMATICS

While Benz brings a clinical perspective to the team, Haussler’s expertise is in the application of computer science and information technology to the field of biology and medicine—a field called bioinformatics. Haussler’s team built the computer methods to assemble the first working draft of the human genome. They also created the UCSC Genome Browser, an open-source, online tool used by geneticists, molecular biologists, and physicians as well as students and teachers of evolution for access to genomic information.

Today, Haussler and UCSC colleagues are pioneering new methods in bioinformatics for TCGA so that researchers can transfer, access, and store the 300 gigabytes of data that are generated for each tumor genome.

“Just moving these files from one institution to another overwhelms the standard Internet,” Haussler explained. “We are building the infrastructure that will allow personalized medicine in general, and cancer treatment in particular, to become a reality,” said Haussler, who is also a Howard Hughes Medical Institute investigator.

UCSC’s TCGA team is also coming up with new ways of analyzing the data they and others are generating. “One of the big difficulties of translating cancer genomics to the clinic is that we can read mutations, but we can’t understand them,” Haussler said.

To that end, UCSC’s Josh Stuart spent a year writing code for software that searches tumor genomic data for only those combinations of mutations that are biologically relevant—that is, ones that might make a normal cell into a cancer cell.

“For years, biologists have been amassing knowledge of how genes act together in so-called genetic pathways. Recently, people have begun to make databases of this knowledge,” said Stuart, associate professor of biomolecular engineering. “Our contribution is that we came up with a computer program that uses data from a patient sample to figure out which genetic pathways are altered from their normal function.”

### A TEST CASE

Once they have identified the mutations that may be leading to a particular cancer, researchers then hope to identify existing drugs or develop new ones that interfere with the cellular or molecular changes brought about by the mutations.

Stuart, Haussler, Benz, and their TCGA collaborators put this new program to the test when they looked at data from 316 patients with ovarian cancer. Published in *Nature* in June, the TCGA study revealed that a particular pathway was characteristically disrupted in the tumors of ovarian cancer patients.

“Until we looked at the data in this way, no one had really appreciated the importance of that particular pathway,” Stuart explained. Further analysis supported the existence of four distinct subtypes of the disease and revealed 68 genes that could be targeted by existing Food and Drug Administration–approved or experimental therapeutic compounds—most already approved for the treatment of other diseases.

### BACK TO BASICS

This kind of genomic approach to cancer has not only resulted in surprising findings about individual cancers, but also promises to influence the direction of basic cancer research.

UCSC’s Jeremy Sanford is a molecular biologist who studies how gene regulators, called RNA binding proteins, work. Sanford was awarded a grant by the Santa Cruz Cancer Benefit Group to study the activity of an RNA binding protein that is associated with advanced pancreatic cancer.

“We want to identify the RNA targets of the protein, understand what pathways are influenced by it, and look at how removing the protein affects the biology of the cancer cell,” said Sanford, an assistant professor of molecular, cell, and developmental (MCD) biology.

Sanford said his research is guided by the data being generated by Haussler and his colleagues. “They identify variation. That leads to testable hypotheses.” It’s up to scientists like himself, he said, to test those hypotheses.

And just as basic scientists look to TCGA for clues to how normal cells work, so does the future of personalized medicine depend on the progress of basic science, said Doug Kellogg, a professor of MCD biology.

Kellogg studies the molecular mechanisms that control cell division, mechanisms scientists do not fully understand yet. “We really need to identify the mechanisms that control cell division,” Kellogg said. “We need ways to attack tumors, and that requires more basic biology.”

### REVOLUTIONIZING CANCER MEDICINE

In addition to more basic biology at the bench, the genomic era is also going to require changes at the bedside, Benz said.

These changes include—though may not be limited

to—a new way of assigning patients to arms of clinical trials based on their cancer genomics and new ways to find patients for those trials that does not compromise privacy.

“We need the equivalent of a transplant registry for tumor samples. We have to get organized, and we have to break down barriers so that we can disseminate information freely around the country,” said Benz.

Testing treatments for different subtypes of cancer will also be a challenge, Haussler said. “The existing system for clinical trials only tests one thing at a time. The process is too cumbersome. TCGA proves that nearly every tumor has a different combination of mutations. There are far too many combinations to test them one at a time.”

TCGA represents nothing less than a revolution in medicine. “Big revolutions like this create stresses and strains,” Haussler said.

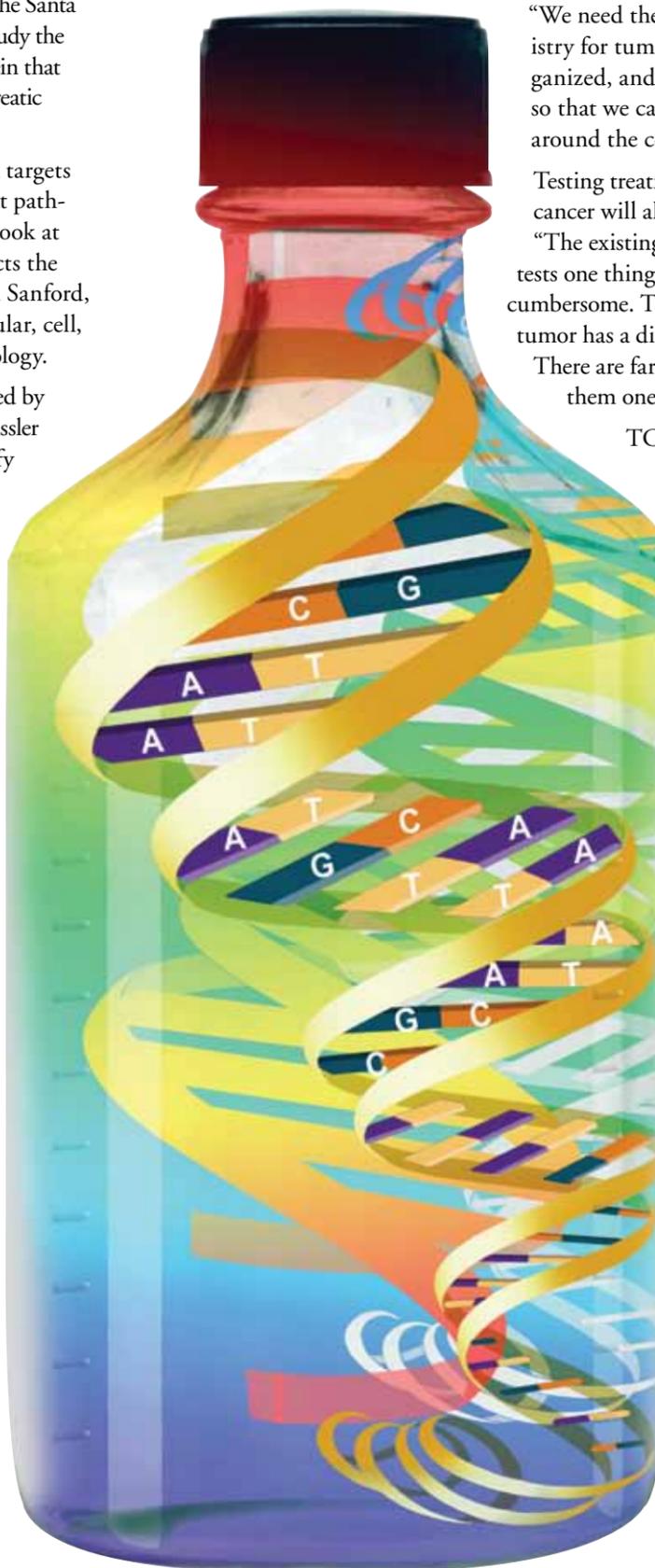
But the changes that are needed to make personalized cancer treatment the rule and not the exception will be worth it, Haussler predicted.

“We can imagine a world where we can come up with a treatment for any combination of mutations in a person’s tumor,” he said. “We have to make that world a reality.”

*For more information or to support genomic research at UCSC, visit the Center for Biomolecular Science & Engineering website at [www.cbse.ucsc.edu](http://www.cbse.ucsc.edu) or contact Steve Bourdow at [sbourdow@soe.ucsc.edu](mailto:sbourdow@soe.ucsc.edu).*

*Camille Mojica Rey is a freelance science writer based in San Jose. She is a graduate of UCSC’s science communication program.*

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VERGHESE PHOTO: JOANNE CHAN



### ARGUING FOR ‘NEW HUMANISM’ IN MEDICINE



While a new era is dawning for personalized medicine, Abraham Verghese is on a crusade to bring back the lost art of hands-on medical practice.

“Using the very simple skills of looking at a patient—noticing he is overweight and carrying a pack of cigarettes in his pocket—tells me so

much more about his phenotype, and therefore his future, than I can now tell from his genome,” says Verghese, a Stanford University professor of medicine and *New York Times* bestselling author of *Cutting for Stone*.

Verghese does not deny the power and utility of the tools of modern medicine. He marvels at how many cancer treatments can now be tailored to a person’s particular tumor type. Verghese does, however, caution physicians against focusing too much on the data generated by today’s tools.

“There is a danger that the patient becomes the ‘iPatient’—a term I coined to represent the virtual construct of the patient in the computer.”

On October 11, Verghese gave a talk entitled “The Art of Medicine in the Era of *Homo Technologicus*” as part of the Sidhartha Maitra Memorial Lecture series in conjunction with this year’s UCSC Founders Celebration events. He advocated for a new humanism in today’s health care system that, all too often, focuses on a person’s disease rather than on the person.

Verghese suspects we have come to this crossroads as doctors and patients because of health care reimbursement, which is skewed toward procedures and diagnostic tests.

The solution, Verghese says, lies in changing an entrenched system of incentives. “Hospitals make more money in the emergency room when more tests are ordered. Doctors make more money for doing things to patients than they make from listening to the patient, examining the patient, and being thoughtful. If those incentives were reversed, we would solve a lot of problems.”



Students get a chance to see history come alive in a unique humanities project

# A common man, uncommon times

Akira Nagamine came to Manchuria in 1945 as a raw Japanese Army recruit, trained primarily to hold a satchel of explosives to his chest and throw himself under a Russian tank.

But the slender 20-year-old did not die or end up in a Siberian labor camp as so many of his companions did. Abandoned in Manchuria as WWII drew to a close, Nagamine embarked on an eight-year odyssey through a country torn apart by war and revolution. He escaped bullets, starvation, conscription, and arrest. Eventually, he made his way to California, where he picked strawberries in the rich fields of Watsonville, raised a family, and bought his own land.

Today, Nagamine owns a successful organic farming business and is the subject of a unique project that has drawn together UC Santa Cruz Associate Professor of History Alan Christy, a cadre of volunteers, and 30 young students who are working to tell his incredible tale of survival through a book, documentary film, web site, and curriculum materials in what is being called The Nagamine Project.

“His story is just remarkable,” says filmmaker and UCSC alum Jono Schaferkotter (Porter '05, art) of the now 86-year-old Nagamine. “He walked through history.”

## Extraordinary times

The first time Alan Christy heard Akira Nagamine’s story, he realized just how extraordinary a chronology it was.

Nagamine’s life encompassed not only the story of Japanese imperialism but also that of Russian expansion, the Chinese civil war, the Korean War, and Japanese immigration to America.

“What we have here is the story of a common man living in great times,” says Christy, a youthful-looking 48-year-old who is fluent in Japanese.

It wasn’t long before Christy was seated at the kitchen table of Nagamine’s youngest daughter, Janet, listening to the

grey-haired veteran recount his tale in a mix of Japanese and English with Spanish and Chinese thrown in, the linguistic footprint of his life.

Nagamine told Christy of being sent to Manchuria outfitted with a rifle, a satchel, and a pair of “chikatabi” (farmer) shoes. He described how his unit spent two or three weeks in the mountains skirmishing with Russian soldiers, emerging starved and covered in lice, to be told their country had surrendered.

He described their disbelief and how, that same day, he was shot through the hand during a fierce battle with Russian troops. He told of walking on a broken ankle, the wound on his hand infested with maggots, as he and four other soldiers tried to make

their way to safety after the fight. He explained how one of his wounded comrades shot himself through the heart rather than be taken by the Russians and how another was captured in an ambush; how he carried a hand grenade so he could kill himself if it became necessary.

Over months of meetings, Nagamine told Christy an amazing tale of being sheltered by a Chinese man named Mr. Sun who saved Nagamine from a lynch mob, of escaping the fate of half a million Japanese who were captured and sent to labor camps in Siberia, where one-quarter of them died.

His memory took Christy to the years of the Chinese civil war when Nagamine was befriended by a Japanese former secret police

Opposite page: Akira Nagamine, during a classroom visit at UCSC. This page, top: Nagamine and Christy examine ship logs at the Maizuru Repatriation Memorial Museum in Maizuru, Japan. Below: Janet Nagamine holds the only photograph of her father from his time in China.



PHOTO OPPOSITE PAGE: JONO SCHAFERKOTTER  
THIS PAGE, TOP LEFT: TOSH TANAKA / ABOVE:  
ELENA ZHUKOVA



CLASSROOM PHOTO: ELENA ZHUKOVA / PHOTOS BELOW: TOSH TANAKA

agent who not only taught Nagamine the tricks of surviving in a war-ravaged land but partnered with him in a rice-farming venture, gaining the trust of both Korean and Chinese farmers who loaned them seeds and food.

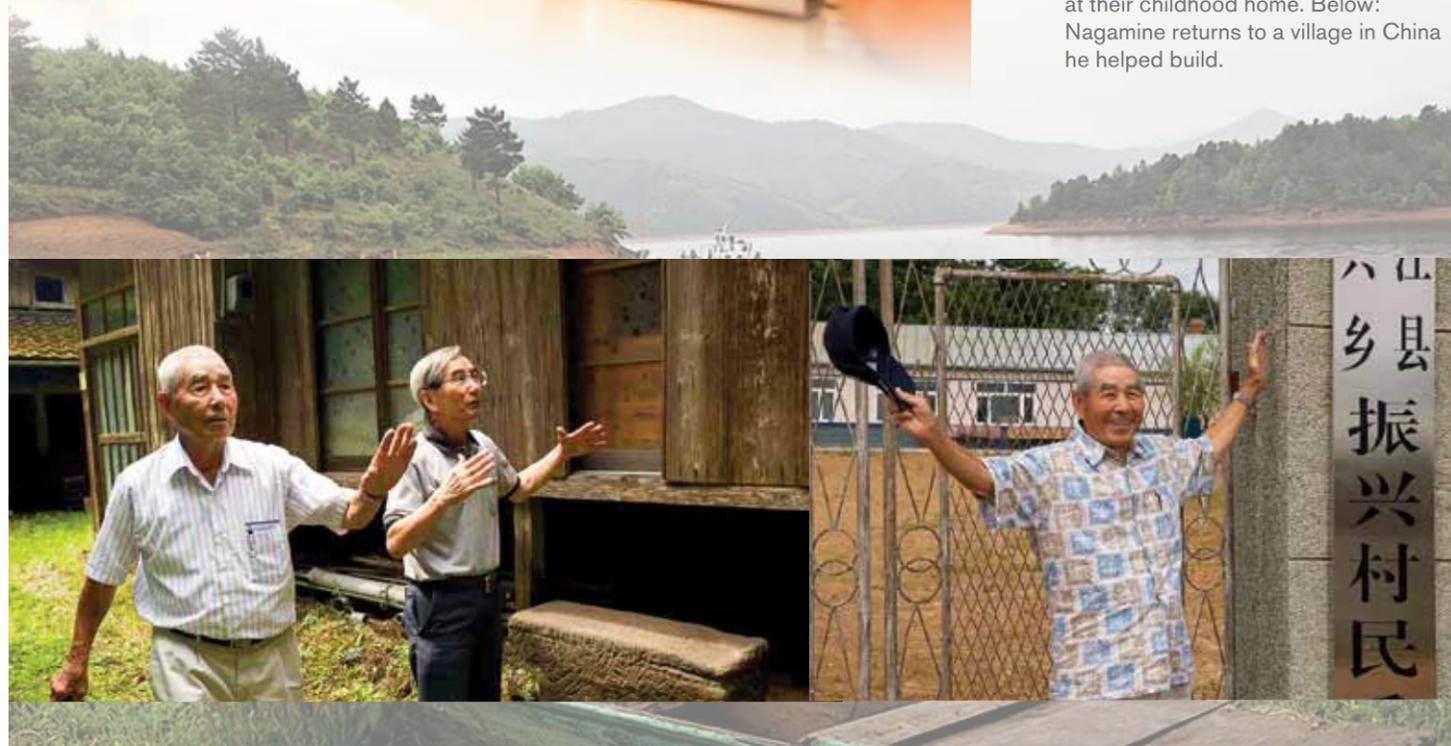
Nagamine's voice broke as he recounted how his companion was killed by a runaway wagon and how he cremated his beloved friend's remains, gathering ash and pieces of bone in a box to return to Japan some day. Now alone, he said, he wandered through Manchuria's volatile landscape, working as a lumberjack, a deliveryman, a brick layer—using his wits and physical strength to hide in plain sight.

"If I could stay alive I thought I'd get back to Japan someday," Nagamine told Christy. "I had a little hope. If I stayed alive, if I have a life, someday I'll get back."

## History is personal

In a book-lined conference room at UCSC's new Humanities Building, Janet Nagamine, an internal medicine physician and mother of a 7-year-old daughter, delicately pulls a yellowed document out of a manila folder.

It is a circa-1948 map the Japanese Ministry of Health and Welfare sent to Nagamine's father showing the direction in which soldiers were believed to have fled after the battle in which Nagamine was wounded.



It was the only clue Nagamine's father, Tosuke, had of his son's fate.

"Everyone in the village thought he (Nagamine) was dead," Janet Nagamine says as she spreads out the document to be digitized by project art director Tosh Tanaka while Porter College student Loc Le logs information about the map into what will be a searchable database. "But his father always felt he was alive, and his father never gave up."

The tattered map is both a personal record as well as a political one and an illustration of what The Nagamine Project collaboration is about. At the heart of the undertaking is the notion that, beneath the grand strokes of history is a wealth of personal stories that need to be told.

The Nagamine Project, which is under the auspices of the UCSC Center for the Study of Pacific War Memories, began when Janet

Nagamine approached Christy about her father's story two years ago.

"I thought maybe it would be a book, maybe just a family keepsake," Christy says. "I wasn't sure."

Soon, however, the story had burrowed into Christy's imagination, not just as an historian but also as an educator. Set to teach a new class, "History 150D, The Japanese Empire," Christy decided to make Nagamine's story the centerpiece of his lessons.

"I wanted students to learn by doing, rather than learn by listening," he says.

Left: Christy and students examine a family document. Below left: Nagamine and his younger brother Fujiyoshi at their childhood home. Below: Nagamine returns to a village in China he helped build.

When the course ended, 30 of the 45 students told Christy they wanted to continue the work—without pay or even class credit. Now divided into committees that include curriculum development, filmmaking, writing, web presence, fundraising, and more, the student interns are entrenched in a project they hope will inspire others the way it inspired them.

They talk of the lessons they learned from Nagamine about survival and perseverance, about how they want others to understand Japanese history as they do, to see a world story through human eyes.

Jordan Bentley, a 26-year-old history and physics major at Crown College, leans over a 1937 military map showing Japanese settlements in Manchuria. "I see history in this map," he says, touching a finger on railroad lines, on towns he recognizes. "I see my own learning. And I see Mr. Nagamine walking somewhere in there."

## A California story

Nagamine is a sturdy man with high cheekbones, closely cropped hair and a hand still half-curved from the bullet wound he sustained.

When he came to the United States on an economic refugee visa in 1956, he had \$24.32 in an envelope and a 30-month contract to work for a strawberry farmer in Watsonville. One of the first photographs he sent home shows him grinning in a farm-labor kitchen. On the back, he wrote of the wonders of American appliances and of his happiness. In Japan, he earned \$1 a day. In Watsonville, he was earning 95 cents an hour.

Like his time in Manchuria, Christy says, Nagamine's California story tells the history of Japanese immigration after WWII. He took a wife, Hideko, in an arranged marriage and worked hard. When his contract expired, they followed the crops, cutting peaches and cleaning broccoli and cauliflower for canneries. They started a family, saw the promise for year-round employment in hothouse flower growing, and pooled money with other family members to buy a five-acre plot of land. Like he had done with the rice seeds

in Manchuria, Nagamine approached lumber suppliers promising to pay his bill once his greenhouses were built and the crops harvested. Only one man, Bob Butcher of San Lorenzo Lumber, took the chance, later telling Janet Nagamine that he had looked into her father's eyes and knew he was trustworthy. Nagamine also made the same deal with the owner of a nearby grocery store, Bridge Market, so his family would have food to eat.

Now, Nagamine lives amid an array of greenhouses where he and his son grow organic cucumbers, bok choy, tomatoes, and herbs. He still gets up in the morning to water, to check the cucumber plants that spiral upward on suspended lines like delicate ballet dancers. And, on certain days, he sits down with Christy or one of the Nagamine Project volunteers to go over the details of his life.

He says he's surprised that a man with a 10th-grade education can teach college students and that he hopes his life will help youth appreciate the freedom and opportunities they have.

"His story is inspiring: his perseverance, how he survived," says Kyle Wojnar, a senior history major at Kresge College whose own father sailed from the Philippines to America on the same ship Nagamine did. "He just kept trying. That's literally what happened."

The project has been helped along the way by the UCSC Foundation Board and the UC Humanities Research Institute. This winter, students and volunteers hope to travel to Japan to do more research on a story they believe will captivate others the way it has captivated them.

"His story hits so many pieces, everyone can connect to it," said filmmaker Schaferkötter. "I think it has a power to it."

*For more information or to donate to The Nagamine Project, visit [cspwm.ucsc.edu](http://cspwm.ucsc.edu).*

*Peggy Townsend is a freelance writer based in Santa Cruz.*

## “Go where others won’t.”

That’s the time-tested credo of Kevin Beggs (Porter ’89, politics/theater arts), president of Lionsgate Television Group, one of the most powerful independent producers of TV programming.

Others might hesitate to produce a comedy series about a pot-dealing soccer mom in an upper-middle-class suburb (*Weeds*), a period drama about promiscuous ad executives working on Madison Avenue at the height of the Cold War (*Mad Men*), or a dark comedy about an ER nurse navigating the crumbling health care system while hiding an addiction to pain pills and carrying on an illicit affair with the hospital pharmacist (*Nurse Jackie*).

Others, for that matter, might run screaming from a new show starring Charlie Sheen, freshly fired from *Two and a Half Men* this spring by Warner Brothers amid allegations of Sheen’s substance abuse, and after a spectacular fracas between Sheen and the show’s co-creator, Chuck Lorre.

But Lionsgate Television—which produces *Mad Men* for AMC and *Weeds* and *Nurse Jackie* for Showtime, and is currently developing a new series called *Anger Management* with Sheen as the star—seems to thrive in dangerous places.

Beggs is part of a growing coterie of successful Hollywood Banana Slugs including Rick Carter, production designer (*Avatar*, *Jurassic Park*), and Ron Yerxa, producer, Bona Fide Productions (*Little Miss Sunshine*). In June, he served as the keynote speaker at a UCSC symposium, *Bridging the Gap*, designed to foster strong connections between the campus and its many successful entertainment-industry alumni, especially in the film and television industries (see page 8).

Beggs recently spoke about his life on the edge, and what it’s like to follow his gut instincts in a hyper-competitive market.

“I still feel, as a smaller company, we have to be bigger risk-takers creatively. We have to call bigger and longer shots,” said Beggs, 45, who is responsible for developing and producing original series, movies for TV, limited series, and reality shows for Lionsgate Television. “We have had great success with projects that other people would not do. I would not want to be known as the company that passed on something like *Mad Men* and *Weeds*.”

Rejection is part of the creation mythology of *Mad Men*. Showtime and HBO both passed on the series before the AMC network and Lionsgate took it on.

*Mad Men* is now a cultural phenomenon, but runaway success can lead to unexpected challenges. “Often, managing a successful show is more difficult than handling a less successful show,” Beggs said.

Beggs was referring to the recent negotiations between *Mad Men* creator and executive producer Matthew Weiner, Lionsgate, and AMC, the network that broadcasts the show.

AMC only had an option for the first five seasons of *Mad Men* and had to renegotiate a deal with Lionsgate. On top of this, AMC executives had no deal in place with Weiner; they returned to the negotiating table to bring him on board for the next three seasons.

The issues were resolved this summer. On the down side, *Mad Men* fanatics must wait until 2012 to see the new episodes.

Beggs said he is “relieved, absolutely” that the situation has been resolved. Such disagreements are nothing new in the industry, he said. “This one was maybe a bit more high profile because of *Mad Men*’s zealous fan base.” He thanked fans of the series for “passion and patience.”

*continued*



“The term ‘critical thinking’ is thrown around loosely, but UCSC really pushes that. . . . You don’t just turn that off when you leave college.”

—Kevin Beggs

(Porter ’89, politics/theater arts), president, Lionsgate Television

# chances

Lionsgate president dishes on *Weeds*, Charlie Sheen, *Mad Men*, critical thinking, and the element of risk

# Taking

## Getting down in the WEEDS

Beggs prides himself in running a streamlined operation with a “less-is-more” approach.

While he sometimes finds himself producing shows for larger networks “to pay the bills,” those more conventional mon-eymaking choices embolden the company to take chances and “develop the kinds of series we would like to watch, personally.”

Citing one edgy example, Lionsgate began producing *Weeds*, starring Mary-Louise Parker, almost nine years ago. The suburban upper-middle-class pot-dealer concept hit Beggs on a gut level.

“Maybe, personally, having gone to school in Santa Cruz and spent much of my childhood in Marin County, the series resonated because of the irony, the certain kind of hypocritical moral stances that a lot of people take in life.”

Still, producing any comedy series is a calculated risk because Lionsgate generates much of its income overseas.

“Most comedies don’t travel well,” Beggs said. He cited a few exceptions. “*Two and a Half Men* is very popular overseas. *The Simpsons* does great—since it’s animated, they can change all the voices. But in general it’s a risky perspective. *Weeds* proved a worthwhile risk.”

To date, *Weeds* has garnered an armful of Emmy awards and drawn upward of 3 million viewers.

## Programming on the EDGE

So far, Lionsgate’s willingness to take on this kind of risky and expectation-defying scripted programming has paid off.

All television, including cable TV shows, could be much edgier, said L. S. Kim, a critical observer of popular media and an associate professor of film and digital media at UCSC.

Kim thinks audiences can be more accepting than TV executives may believe. “Executives/producers sometimes underestimate audiences’ ability to come to terms with unfamiliar or unexpected

characters or themes; when they do, by being presented with challenging material, this is social change.”

But she said that the relatively edgy content on several scripted cable shows—including a number of offerings produced by Lionsgate—successfully gives viewers pleasure while pulling them through a discomfort zone, a process that can make viewers stronger fans while creating a “dynamic relationship” between shows and audiences.

That “gray area”—the risky territory that lies somewhere between entertainment and discomfort—is a place where most networks and TV won’t go.

“Lionsgate steps into that area, and crosses that border a little bit,” Kim said.



“Cable and premium-cable networks have relatively more ability to push the envelope to present material that may be less comfortable or less familiar. For example, *Nurse Jackie* is not quite a sitcom. When you think of female nurses, you literally expect comfort. The show is about defying expectations.”

The making of film and TV programs remains a mystery to most viewers. “In fact, it involves a series of decisions,” said Kim. “Someone like Kevin Beggs, who was influenced by his education at UC Santa Cruz, makes decisions to try something a little different, right? ‘The Banana Slug way’ is a slightly different way. It’s something I try to encourage my students to have the courage to do.”

In fact, one of Kim’s students had a chance to look at this decision-making process

firsthand when she was a Lionsgate intern this summer in Santa Monica.

## The SHEEN factor

Asked to comment on Sheen and *Anger Management*, Beggs compared it to some of the risky content produced by Lionsgate’s movie division, Lionsgate Films.

“When Disney would not release *Fahrenheit 9/11*, Lionsgate did, and had the highest-grossing box office in history [for a documentary],” Beggs said, referring to Michael Moore’s 2004 documentary about the Bush administration’s handling of the 9/11 terrorist attacks.

In a similar vein, Lionsgate Television won’t shy away from the “tricky and

touchy.... A high-profile figure like Charlie Sheen kind of falls under the same category,” Beggs said.

Besides, Beggs insisted that doing a show with Sheen was “not much of a risk, really.... For all the public scrutiny of his life, and his larger-than-life persona, he has been anchoring, for eight seasons, the most successful show on television. No one disputes what a great actor he is.”

He added that Lionsgate had been “in talks with Charlie” even before the *Anger Management* concept, spun off from a 2003 movie starring Adam Sandler and Jack Nicholson, came up.

Besides, said Beggs, Lionsgate was drawn to the idea of a show based on a movie about a man who works to help other people deal with anger issues, but is not entirely in control of his own an-

ger—and then, on top of all that, you get Charlie Sheen playing the role of the unstable protagonist.

“When you put all the elements together ... it’s kind of a no-brainer.”

## Starting out in a TOUGH business

Looking back on his trajectory, Beggs has plenty of advice for newly minted graduates who are just starting out in the entertainment world.

“Number one: You have to come to Los Angeles,” he said. “And number two, you have to pound the pavement—pound it aggressively, virtually and physically. You almost have to come to a place that is borderline stalker-like to get anywhere.”

He urges new graduates to take first jobs seriously, and not deprive themselves of that first opportunity just because an initial job “does not represent your ultimate career goal. It is almost impossible that the first job you ever get will be assistant to Steven Spielberg. It could happen, but it’s rare.”

Beggs learned all these lessons by pounding the pavement himself.

After graduating with honors from UCSC, he found work as a public school teacher, and then as the assistant to an accountant working on a reality show about the FBI—a far cry from the creative work he longed to be doing. Still, he won’t knock it. He helped the show save money by going with the U.S. Postal Service instead of relying exclusively on FedEx.

On top of that, this position led, within a couple of months, to getting on a set as a production assistant, which ultimately helped him land his first TV production job.

Networking and persistence paid off for Beggs, who first made a name for himself as a producer for the syndicated, highly successful *Baywatch* program starring David Hasselhoff.

When he was hired on at Lionsgate 13 years ago, it was primarily a film company with a smattering of TV assets. His job was to launch new series, taking a less-is-more approach. “We weren’t big or well-capitalized enough to work with big, big broadcast networks but we could work in cable.”

Gradually, the company grew along with the cable industry itself.

“Our capital structure allowed us to be good partners. We crept into larger shows as we got a little bit bigger. Then the company started making some key acquisitions, and all of a sudden we had a home-entertainment infrastructure. Shows were getting sold as DVDs—a new idea at the time.”

One early success was a show Lionsgate Television, in conjunction with CBS Paramount Television, produced for UPN called *The Dead Zone*, based on the Stephen King horror novel. It was one of the most successful premieres in cable TV history.

He believes Lionsgate benefitted from the spectacular growth of scripted cable programming.

“More and more cable networks started jumping into original programming because we’d already been in that space,” he said.

## SLUGS in Hollywood

While making his way in the entertainment world, Beggs has strengthened his connections to his alma mater.

This year, Arts Division Dean David Yager reached out to Beggs to be part of a far-ranging arts advisory board. Though Beggs had never been back to UCSC since graduating, he eagerly signed on.

“Kevin is incredibly happy and enthusiastic to give his time and energy,” Yager said.

Now Beggs hopes to be part of an effort to make UCSC loom larger in the entertainment business, growing its profile, and its presence in those industries, the way Emerson College, New York University, and Columbia University have done.

“They have giant presences in our business, and they are fostered, in some ways, by the universities themselves,” Beggs said.

Beggs has more than just an affection for UCSC. He often references his college learning in his daily work. He finds himself drawing from both his majors “in a creative field where I shape a lot of creative visions,” and “when I’m simply lobbying for things.”

“The term ‘critical thinking’ is thrown around loosely, but UCSC really pushes that,” he said. While theater arts was a “creative immersion,” his politics classes “really threw out every assumption you ever had about any kind of topic. There was an almost aggressive kind of debunking. You don’t just turn that off when you leave college.”

For more information or to support the Arts Division, visit [arts.ucsc.edu](http://arts.ucsc.edu).

# Teaching the teachers

*"I knew that my calling was to help underrepresented minorities join the math, science, and engineering fields, and teaching was the perfect avenue to do so."*

*Monica Villarón  
2011 Cal Teach graduate*



**F**or Monica Villarón, the second Monday of August was one of the most exhilarating and stomach-churning days a person can have in a career. It was her first day as a high school math teacher, the first day she stood on her own in front of eager, indifferent, bored, or hyperactive students expecting her to have all the answers.

"I was excited and nervous," she said the day after she started teaching at Ceiba College Preparatory Academy in Watsonville. "I tried to form a relationship with the kids, but also set my rules for the rest of the year. By the end of the day, I was exhausted."

There's no escaping all the jitters and mistakes of a teacher's rookie year, but Villarón has an edge over most first-year educators: the experience she gained in the Cal Teach program at UC Santa Cruz.

"Cal Teach gave me my first experience working with kids, so I feel I was able to learn how to connect with kids and became efficient at explaining things," the 2011 graduate said, also noting the importance of traditional student teaching. "This will be my first year, but I feel prepared."

## *Turning students into teachers*

Preparing talented math and science students to become secondary-level teachers is the mission of Cal Teach, a statewide initiative launched in 2005 in response to a chronic shortage of highly qualified teachers in subjects so critical to eco-

nomics competitiveness and to understanding and resolving complex modern problems.

"Often science and math majors who are the most knowledgeable and excited about the subjects are not going into teaching," said Kim Newman, coordinator of the P20 Partnerships Teaching Leadership initiative in the UC Office of the President. (P20 refers to the path from preschool to grad school.) "Being taught by non-math and science majors is reflected in the test scores of students and the number of young kids who are actually interested in math and science."

While there are many factors that play into low test scores, the results locally and statewide are disheartening.

In Santa Cruz County, only 20 percent of 9th grade students passed the basic math exam while 49 percent of 10th graders passed the science test, according to the 2011 STAR test results. Statewide, those numbers are 18 percent and 50 percent, respectively.

Typically, prospective teachers complete an undergraduate degree and then pursue the credential required to teach in California classrooms before getting their first taste of commanding a classroom.

High school graduates who know they want to teach usually attend one of the California State University campuses, but the UC system has the most science and math undergraduates in California, making it a fruitful hunting ground for future science and math teachers who may think they're headed for a lab instead of a classroom.

*UC Santa Cruz serves California through Cal Teach, a program that encourages and prepares math and science students to become teachers*



Above: Monica Villarón with students at Ceiba College Prep

“We’re open to anyone who’s willing to explore the possibility of being a teacher,” said Gretchen Andreasen, a director of Cal Teach at UC Santa Cruz. “Our undergraduate program doesn’t replace what students do in a teaching credential program, but it gives them a clear sense of whether they may like teaching.”

Cal Teach at UC Santa Cruz is a free-standing program working in collaboration with several established departments (education, math, physics, biology, and Earth and planetary sciences) and schools throughout Santa Cruz County.

That makes it risk-free for undergrads, who can test out the idea of being a teacher without straying off the pathway of their major. It also makes it effective because students are immediately in classrooms with real kids, learning about classroom management, lesson plans, and meeting the needs of diverse students.

### Cal Teachers in classrooms

It’s far too soon to truly measure the impact of the program, but five years after Cal Teach launched, its first graduates are teaching and inspiring students up and down the state, including more than 15 in classrooms in Santa Cruz, Monterey, and San Benito counties.

“They’re really starting to make a difference as strong candidates for our school districts,” Andreasen said. “One

of the things that makes me proud and happy is how delighted Santa Cruz City Schools is with our students whom they’ve hired in the past couple years.”

Cal Teach graduates show up the first day with “great depth of learning,” said Karen Hendricks, the assistant superintendent for human resources for the Santa Cruz district.

“They are prepared to engage students in rigorous and relevant curriculum and be very valuable members of our collaborative learning community,” she said. “The best package is one who has strong content knowledge and knows how to interact with students, parents, and colleagues. Students coming out of Cal Teach are very adept at those things.”

Cal Teach students start with classes in pedagogy, some of which are taught by secondary teachers, and a series of progressively intensive internships, starting with 25 hours in the classroom of a host teacher.

In five years, nearly 2,000 students statewide and 349 students at UC Santa Cruz have enrolled in at least one Cal Teach internship. Of those Santa Cruz students, 224 have graduated, and Cal Teach staff believe 73 have gone on to pursue a teaching credential.

That’s 73 new math and science teachers who otherwise might be doing something else, who might never have heard the call, for example, to serve English-language learners in South Santa Cruz County.

Villarón grew up in Watsonville. She considered other career paths in college but in Cal Teach discovered education is her passion, through activities like teaching a calculus lesson in Spanish. She even turned down a research fellowship in order to take the teaching job at Ceiba.

“It was very humbling to realize the struggle English-language learners face in our classrooms,” she said. “At the end of the day I knew that my calling was to help underrepresented minorities join the math, science, and engineering fields, and teaching was the perfect avenue to do so.”

Watsonville High math teacher Vivian Moutafian taught Villarón in high school and in Cal Teach and calls her a “star student.”

“Monica is born to teach,” she said. “She’s hardworking and articulate, and she really cares about the students. She’s got everything it takes.”

Moutafian should know. She’s been teaching for more than 30 years and has seen hundreds of young teachers.

“There’s a huge turnover in new teachers,” she said. “They often experience burnout. Cal Teach gives prospective teachers an opportunity to see firsthand what it means to teach and the support of their host teachers and Cal Teach instructors. I think we’ll keep more high-quality teachers this way.”

*Matt King is a freelance writer based in San Jose.*

## Retired faculty and alumni lend strength to fundraising

On the day Cal Teach graduate Monica Villarón began her teaching career, the Dow Jones Industrial Average plunged 634 points.

That may have been a great hook for a lesson by a new math teacher, but it’s a worrisome sign the economy is a long way from a vigorous recovery, and a slumping stock market only aggravates an already difficult fundraising environment.

“The state budget crisis means inconsistent support from the state,” said Gretchen Andreasen, a director of Cal Teach at UC Santa Cruz. “Our current challenge is to find local donors.”

Two retired math faculty from UC Santa Cruz are trying to fill the void, establishing the Edward and Miriam Landesman Fund for Future Teachers of Math or Science earlier this year.

Edward Landesman, professor emeritus, and his wife Miriam, a former lecturer, have been strong supporters of Cal Teach from the start. Edward was the first director of the Aurora Project, the community college component of Cal Teach.

“If we are to succeed in research and in industry and not lose our position as far as creativity and doing major work, we need to reach students early in their careers

and motivate them to be teachers of math or science,” he said. “It’s important to the state, it’s important to the country, and it’s a profession from which participants can gain great satisfaction.”

Part of that motivation is financial. Becoming a teacher means a lot of extra expenses, everything from incidentals like the price of gas to get to a classroom internship and fees for state exams, to the significant costs of a credential program that adds a fifth year of schooling.

To encourage students to take on the challenge of teaching, the UC system has been raising money for stipends and internship expenses, and UC Santa Cruz has mobilized additional funds for scholarships for a credential program, thanks in large part to major campus donor and alumnus Stephen Bruce (Cowell ’79, economics).

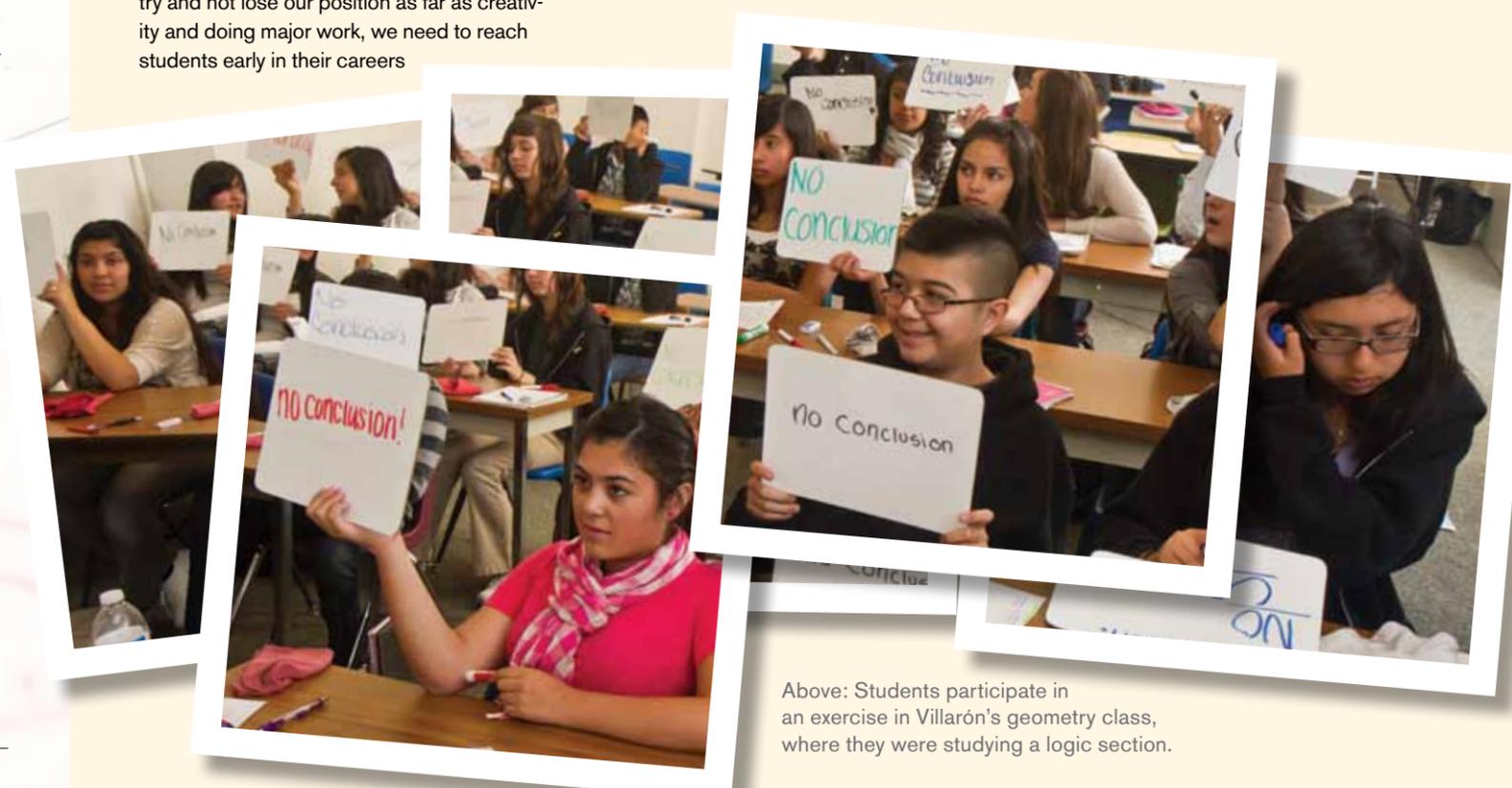
Systemwide cuts torpedoed some stipends last year, however, and enrollment in Cal Teach dropped. Through the Landesman Fund, the program is now raising about \$50,000 to restore them in 2011–12, a modest figure that would provide critical aid to students already taking on debt to pursue a profession that is not especially remunerative.

“Our idea is to begin funding with a reasonable amount and others will contribute as well,” Landesman said. “We’re hoping by associating our names with Cal Teach, alumni will see the importance of this and want to contribute too.”

This funding is essential just as the program is maturing and producing teachers—its absence would have deleterious effects in a political environment where teachers are blamed for many of society’s ills, Andreasen said.

“It can be very discouraging to go into teaching in this era. There’s a lot of bad news all the time about budgets, about how schools are not doing their job, suggesting teachers are not doing their jobs,” she said. “The students I work with are committed to making a better world by helping children learn. For them, the emotional impact is big when their choice of career is validated with financial support from Cal Teach, especially from individual donors like Stephen Bruce and the Landesmans.”

*For information or to contribute to Cal Teach at UC Santa Cruz, contact Anne Hayes at (831) 459-5238 or [adhayes@ucsc.edu](mailto:adhayes@ucsc.edu). You may also contribute to Cal Teach online at [giving.ucsc.edu](http://giving.ucsc.edu).*



Above: Students participate in an exercise in Villarón’s geometry class, where they were studying a logic section.

## David Pham: Devoted to primary care

When David Pham was a child, his mother told him a bedtime story about white knights who rode through human bloodstreams, fighting infections and other monsters.

"These special knights, dubbed the White Blood Cells, would protect the ill from invaders," Pham recalled years later. "Growing up, I admired these little defenders of the weak for their selflessness."

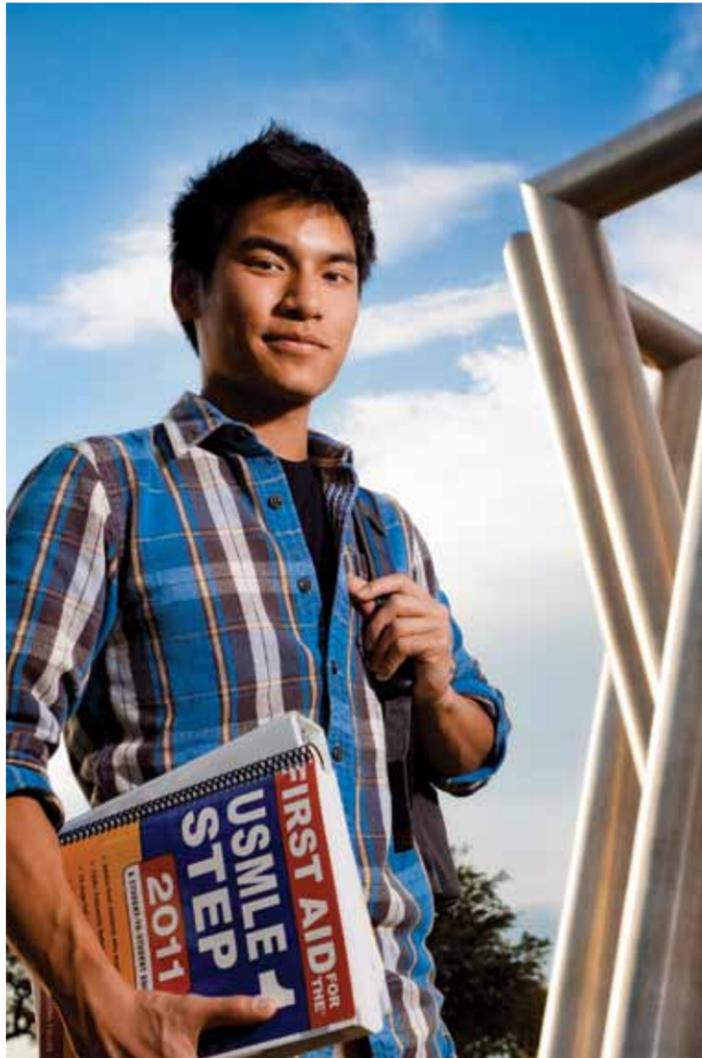
Pham, a recent UCSC health sciences graduate, is closer to his dream of helping those knights. He is this year's recipient of the prestigious Sutter Maternity & Surgery Center Central Coast Alliance for Health Primary Care Physician Award.

Since 2007, Palo Alto Medical Foundation affiliate Sutter Maternity & Surgery Center in Santa Cruz and the Central California Alliance for Health have awarded this scholarship to pay \$10,000 toward the medical school fees of a UCSC health sciences graduate who wants to return to his or her local community to help underserved populations.

Pham, 22, is now attending med school at the University of Texas Health Science Center at San Antonio, where he is interested in studying pediatrics and is committed to nutrition.

"A lot of what we see in medicine currently is the 'last minute' kind of medicine—using our advanced techniques to save people's lives because of long-term degradation," Pham said. "Early education is so important, especially when it comes to children."

He worked as an intern for a local Santa Cruz family doctor, and served on a medical mission to Honduras. Pham also volunteered at



an East Palo Alto charter school's healthy eating program and as a Spanish translator at the Watsonville RotaCare community clinic.

Dr. Larry deGhetaldi, CEO of Sutter Health's Santa Cruz Area health care services, praised Pham's combination of "head and heart. Our board met with him, and all of us picked up on that positive energy."

He also said awards that encourage students to go into primary care are a matter of urgency. "I believe that half of the newly trained physician workforce should go into primary care. The future of high-quality affordable health care depends on it, but only 10 percent

of medical school graduates end up in primary care."

Primary care doctors are extremely important because "they look at the whole picture. Primary care physicians tend to be like David—very people oriented. They are generalists who deal with the total body and total social picture, culture perspectives, and biases."

Pham's father emigrated from Vietnam to the United States in 1975, right after the fall of Saigon, while his mother arrived from that country in 1978, after living for three years under the Communist regime.

His parents, who met in Wisconsin and now live in Milpitas, Calif., did not push their son to follow a medical career.

"I think their main goal was just to raise the children in a peaceful environment and instill strong values in them," said Pham.

Pham has realized, through experience, that doctors must be able to communicate in a compassionate and concise way with patients.

This realization occurred several years ago when he was visiting a hospital and saw a

residing nurse communicating poorly with an anxious, elderly patient.

"I was very upset," he said. "At the same time, it did not discourage me from going into medicine. In fact, it strengthened my resolve."

To that end, he has worked to refine and improve his communication skills. He said that respect and clarity are of the utmost importance.

"A tiny bit of encouragement can change a person's outlook completely," he said.

Contact Dan White at [dwhite1@ucsc.edu](mailto:dwhite1@ucsc.edu)

PHOTO: OSCAR WILLIAMS

## Maria Streshinsky: Banana-Slug-in-Chief

*Miller-McCune* may be the bravest, quirkiest news magazine you've never read.

The award-winning, Santa Barbara-based bimonthly launched in 2008, with a focus on groundbreaking research and innovative solutions to untenable problems, from e-waste to unsafe airlines to morbid obesity. The focus is on the big surprise, flipping conventional thinking.

The magazine's just-below-the-national-radar status could change soon under the leadership of newly minted editor-in-chief Maria Streshinsky, 41 (Stevenson '91, comparative literature). This May, she left her managing editor post at the renowned magazine the *Atlantic* to lead a major re-launch of *Miller-McCune*.

After quickly earning a cult following among academics and pundits alike, *Miller-McCune* grew to a print-edition subscriber base of 100,000 (the magazine is also available free online).

Still, there is plenty of room for growth; consider the number of subscribers for two other ideas-and-issues-based magazines: 1 million for the *New Yorker*, and 400,000 for the *Atlantic*. Streshinsky hopes a publicity blast will increase *Miller-McCune's* impact.

"We have a great platform," Streshinsky said. "And we're going to do it. We're going to push this boulder up the hill."

Sara Miller McCune, founder and executive chair of the magazine, said Streshinsky is just the right person to expand *Miller-McCune's* presence in the national dialogue.

"Maria brings to *Miller-McCune* a comprehensive knowledge of the publishing industry's best practices," said McCune, who oversees SAGE Publications, a large publisher of academic journals, textbooks, and reference materials.

Streshinsky hopes to use social media to increase the magazine's reach.

This makes sense, considering the highly tweetable content. In May, *Miller-McCune*



and countercultural happenings for *Time*, *Life*, *Look*, and other publications. Her mother, Shirley Streshinsky, wrote "big, hard-hitting pieces" for *Redbook*, *Glamour*, and *Ladies Home Journal*.

Activism and public advocacy have always been part of her life. "As a little girl, I heard Joan Baez at Berkeley's City Hall," she said. "Moving to Santa Cruz felt like an extension of what I knew and how people acted."

After graduating from UCSC, she became an editor at *Via*, AAA's magazine, and later, a contributor and editor at *Mother Jones* magazine. After moving to Washington, D.C., she worked as a programs analyst in the U.S. Department of the Interior before taking the managing editor position at the *Atlantic*.

She put in five years there. "I loved that place, and would have stayed a lot longer" if not for her unexpected opportunity to helm *Miller-McCune*.

She was also eager to return to the West Coast and be closer to her family.

Streshinsky and her small crew put out their product in an historic, Spanish-style one-story building on Anacapa Street.

Stepping outside, staffers can take in a view of the Santa Ynez Mountains before ducking back inside to edit stories about dangerous airlines, cyborg computers, and antipsychotic pharmaceuticals. The setting may be sleepy, but the pace is non-stop.

While the staff will use the online world to spread the word, they will hold on to their print edition.

"I love holding a magazine in my hand, carrying it around with me to the park and at the beach," Streshinsky said. "I know you can do that with the iPad too, but I don't care about scratching my magazine. I don't care about getting sand in my magazine."

Contact Dan White at [dwhite1@ucsc.edu](mailto:dwhite1@ucsc.edu)



## Marianne Walpert: Lighting the way

Marianne Walpert is no stranger to breaking down barriers. Having earned her bachelor's degree at UC Santa Cruz in the male-dominated disciplines of math and physics, she became interested in solar technology in graduate school, then broke into the building trades installing residential solar electric systems. That there was no one else in the business didn't slow her down.

"Semiconductor devices that turn sunlight into electricity?" she says, still enthusiastic about the technology she's championed her whole career. "I mean, it's the coolest thing in the world! It really is."

Building grid-connected photovoltaic systems in the early 1990s, she quickly encountered daunting problems for solar homes. Utilities offered to pay only wholesale rates for home-made power, which made home photovoltaic power to the grid impractical and non-competitive.

So Walpert went to Sacramento and got the law changed to permit "net metering," cutting the red tape utilities were introducing and forcing them to pay retail prices for energy produced by homeowners. "We fought it through," she says, "and we won." America has followed her lead, with the net metering she pushed for in California now the law in 46 states.

By 2006, Walpert (Oakes '79) was looking for new challenges. "After 20-plus years of working in the photovoltaic industry," she says, "I felt that I had done everything there is to do in solar." That's when an old friend called from Tanzania, saying, "We really, really need solar here."

For Tanzanians, the always-on grid power we take for granted is beyond reach. Prohibitively expensive to hook up in the few places it's available, Tanzanian grid power is also resolutely unreliable: the 14 percent of Tanzanians "on the

grid" demand more power than the nation's power plants can generate. The result is widespread power rationing.

Without reliable power, Tanzanians use kerosene lanterns for light. Even after state subsidies, though, a liter of kerosene costs about a day's wage. "Typically," Walpert says, "people say about a third of their income goes to buying kerosene for these lanterns." The lanterns, often little more than tin cans with wicks stuffed in, cast a weak light—enough to carry out household chores, but not enough to read by. Worse, they produce a toxic aerosol brew of volatile organic compounds, carbon monoxide, and fine soot, and cause an appalling number of burns and fires.

In response, Walpert created TanzSolar, which, since 2007, has brought simple, easy-to-use solar light kits to villagers in Northern Tanzania's rural Lake Zone. Consisting of a small solar panel, a battery, a charge controller, and LED bulbs, each kit produces a brighter, cheaper, safer light for work, study, and home security.

A solar light costs TanzSolar about \$40, half of which is defrayed by donations. Within a few months, the lamps earn back their price in unburned kerosene, and owners can put money they would have spent on kerosene to other essentials. Newer versions offer a USB port for charging cell phones.

With TanzSolar launched, Walpert has turned the reins over to the Tanzanian staff and is now dedicating herself to fundraising. Her next challenge is the Africa Solar Fund, a non-profit to help fund TanzSolar and similar initiatives in Africa.

"We put 20 bucks to this light," Walpert says. To Americans, "it's a night at the movies, but these Tanzanians' lives are changed forever."

—by William Abernathy

PHOTO: HEIMO SCHMIDT

# Brian Watwood and Christine Taylor: A lever to independence



PHOTO: HEIMO SCHMIDT

In September 1987, Brian Watwood (Porter '73, sociology) was riding his bike down Edgewater Road in San Mateo when an oncoming car slammed into him head-on.

At the hospital, the doctor gave the self-described “jock” a grim diagnosis: he had sustained a C5-C6 spinal cord injury and would be an “incomplete quadriplegic” for the rest of his life.

Watwood, a former mountain search-and-rescue team member and ski patrolman, spent five months in hospitals and rehabilitation centers. To his enormous frustration, he found it impossible to operate his own wheelchair. A tool for mobility became a form of confinement.

“To be able to drive a wheelchair was impossible for me,” says Watwood. “I couldn’t feel it with my arms and hands.”

Instead of giving way to despair, he channeled his energy into helping other disabled people achieve independence, while using his formidable skills as a tinkerer. The result is the Wjijt, a lever-operated driving and braking device that attaches to manual wheelchairs.

Now Watwood is using the product himself, while marketing and promoting his invention for others.

Watwood was a free-thinker before he attended UCSC, but his college years taught him the values of entrepreneurship and self-sufficiency.

“A lot of UCSC students embrace the environment and philosophy of the campus,” says Watwood. “There’s a strong undercurrent that teaches you a lot of independence.”

Watwood, who dabbled in mechanics when he was growing up, had no formal engineering training, but that didn’t stop him from pursuing his big idea. He moved to the Sacramento area and invested his own money in the project. He spent three-and-a-half years working with designers and engineers to develop a prototype.

Watwood began selling Wjijts in 1997, and the product has gone through several redesigns since then. He took the frame-based Wjijt off the market for more than five years, and launched the new wheel-based Wjijt in 2006.

After surgery and years of rehabilitation, Watwood is now able to leave his wheelchair and move around, but he still takes the chair and his Wjijt wherever he goes. His partial recovery earned him a new nickname: “SuperQuad.” In 1999, he was inducted into the National Hall of Fame for Persons with Disabilities.

A fellow Banana Slug teamed up with him to get the word out about Watwood’s project. Christine Lamson Taylor (Crown ’90, economics) joined Wjijt as CFO in March, after leaving a career as a partner with one of the “Big Four” accounting firms, Ernst & Young.

“I believe my decision to join Wjijt links back to my time at UCSC,” says Taylor. “I was encouraged to be an idealist. UC Santa Cruz helped me become the person I am and shaped how I view the world today.”

Taylor says the Wjijt is a healthier alternative to power wheelchairs because it allows users to get a cardiovascular workout, which is crucial to maintaining a healthy weight. It also has the potential to prevent shoulder pain and injuries that are associated with using a manual chair.

In addition to her finance and operational responsibilities, Taylor spends time promoting the Wjijt nationwide.

Seeing people try the product was life-changing for her, she said. Those are the times she’s relieved to have left the corporate world behind.

Says Taylor, “Working with Brian allows me to be part of something that has the potential to affect the lives of so many people. This need to have a sense of purpose is based on my time in Santa Cruz.”

To learn more about the Wjijt, contact Watwood ([bwatwood@wjijt.com](mailto:bwatwood@wjijt.com)) or Taylor ([ctaylor@wjijt.com](mailto:ctaylor@wjijt.com)) or visit [www.wjijt.com](http://www.wjijt.com).

— by Amy Ettinger

# Alumni Notes

To receive invitations and e-newsletters about alumni activities, send your e-mail address to [review@ucsc.edu](mailto:review@ucsc.edu).

**We'd like to hear from you.** ▶ Send an e-mail to [review@ucsc.edu](mailto:review@ucsc.edu)

▶ submit a note via the web at [alumni.ucsc.edu](http://alumni.ucsc.edu) (go to Online Community/Class Notes)

▶ or get social on Facebook: [facebook.com/ucsantacruz](http://facebook.com/ucsantacruz)

## COWELL COLLEGE

'74 **Don WALLACE** moved to Honolulu in 2009. He is featured in a new book, *We Wanted to be Writers: Life, Love, and Literature at the Iowa Writers' Workshop*. Also, the documentary he wrote, *Those Who Came Before: The Musical Journey of Eddie Kamae*, was screened July 28 by PBS-Hawaii. The film is dedicated to longtime UCSC creative writing professor Jim Houston, who died in 2009. Don is working on a new documentary and started a publishing house.

'09 **Alex MILLER** is going into his third year working for The Walt Disney Co. in Glendale. He has published two books and has been offered a contract to write another, this one on Florida theme parks, to be released in 2013. He recently became engaged to his girlfriend of five years, **Hanna KIM** (College Nine '10), who was a teammate on the UCSC swim team.

'11 **Xochitl ROCHA** lives in Detroit and volunteers full-time at a free clinic through Mercy Volunteer Corps, which requires a year of service and simple living off of a stipend. She is enjoying it but misses Santa Cruz.

## STEVENSON COLLEGE

'67 **Robert DODGE** worked at Sacramento County Welfare Department for a year after graduation, then attended graduate school at

CSU Sacramento for a year. In 1970 he went to Oregon and worked for the Oregon Department of Family Services until retirement in 1996. He and his wife live in McMinnville, Ore., and he volunteers with the local library, Linfield Chamber Orchestra, and Habitat for Humanity, and sits on the McMinnville City Budget Committee.

'77 **Scott FERGUSON** has been in environmental/remediation sales management since 1988 with environmental construction company Applied Environmental Solutions. He operated/owned GeoPacific Environmental Consulting Co. from 1993 to 2007. He received a B.S. in political science from UC Berkeley. He has lived in La Selva Beach since 1997, and is currently the sales manager for A+ Environmental Solutions of Santa Cruz.

**Peter KOSENKO** works for a software company, where he programs installers and maintains the company's web presence. A couple years ago he produced a guitar duet CD with his friend Alex Hebert. He has also been regularly and happily attending the UCSC Dickens Universe conference on campus in the summers.

'78 **Linda GRAY Schmale** completed her MA in fine art in ceramics and art education at Regis University

and was selected to receive the Malcolm Knowles award. She will be honored as the Colorado High School Art Teacher of the Year by Colorado Art Education Association in October at the CAEA fall conference. Her husband, **Michael SCHMALE** (Stevenson '76) works for Charles Schwab. They live in the Denver metro area.

'79 **Kevin RENNER's** upcoming book, *In Search of Fatherhood: A Mother Lode of Wisdom From the World of Daughterhood*, features interviews with 50 women on their life stories, and how they were shaped by their fathers.

'88 **Stephen MEADOWS**, Native poet, has published his 30-year collection of poetry, entitled *Releasing the Days*. Characterized by a profound connection to the past and the stark magnificence of the present, his poems strip down life to its bare essentials.

'95 **Tlaloc RIVAS** became assistant professor of directing and performance at University of Missouri—Saint Louis in 2010. For UMSL, he is directing the Midwest premiere of *The House of the Spirits*, adapted from the novel by Isabel Allende, as well as guest directing for Shakespeare Festival St. Louis and Richmond Shakespeare Festival in 2012.

'11 **Forrest PHILLIPS** has been accepted as an intern at the Buddhist Peace Fellowship.

## CROWN COLLEGE

'73 **Randy FLICK**, JD, has been a quality engineer since 2005 at TiVo in Alviso, where he annoys his managers with his knowledge of consumer protection law and FCC regulations (but they love him just as much). He is married, has three grown daughters, and far too many guitars. Life is good.

'86 **Robin HASTINGS** entered a four-month contract with Genentech in October 2010 to help out with the FACS Core group, who were down two people and needed help with sorting. The contract ended in February.

## MERRILL COLLEGE

'04 **Alissa CHAPMAN Olgun** has traveled for fun and work to six different countries since graduation. She also received a master's of education in TESOL. Within the last two years she married her senior year college roommate, Ari Olgun (Oakes '04), and opened her own English Language School—California ESL. She misses the UCSC campus very much.

## PORTER COLLEGE

'76 **Lisa HINE** spent 2009–10 playing a leading role in sci-fi legend Ray Bradbury's

new musical, *2116*. The production debuted in Laguna Beach, played Pasadena's Fremont Centre Theatre, and ran for a month at the Fringe Festival in Edinburgh, Scotland. Lisa also recorded the original cast album.

'77 **Cynthia Anne HAAGENS** won the Lesley Johnstone Nature Poetry award at California State University, Northridge, for her paean to the ocean titled "Seven Ocean Views." She is grateful to Eric Potter for the travels that inspired the poem, to composer colleague Martin Jarosewicz, poetry instructor Dr. Leilani Hall, CSUN English Department, and Anita and Dan Haagens for their support.

'90 **Eric ELKINS** is celebrating four years as CEO and chief strategist at WideFoc.us, his social media strategies agency; writes about being a single dad at DatingDad.com; and had his young adult novel, *Ray, reflected*, published early last year.

## KRESGE COLLEGE

'96 **Suzanne DANZIGER's** short essay, "Found," and accompanying photograph are included in *Still Developing: A Story of Instant Gratification*. The book is the companion to the 2010 exhibition celebrating Polaroid 600 film and is published by ism: a community project.

'97 **Kate SHAFFER** is owner and co-founder of Black Dinah Chocolatiers, an artisanal chocolate company located on the remote island of Isle au Haut, Maine. The

company's chocolates and unusual business model have gained acclaim in such publications as *Martha Stewart Living* and *Gourmet*. Kate's first book, *Desserted: Recipes and Tales from an Island*, will be released in October.

'03 **Tiffany WHITE Stanton** was promoted to assistant designer for AMC hit show *Mad Men*.

## OAKES COLLEGE

'93 **Johanna B. JENSEN** received an M.S. in social work with a minor in law from Columbia University in 2004. She is the program director of the Child Welfare Initiative and an adjunct faculty member in social work at the University of Tennessee, Chattanooga.

'94 **Amrit KULKARNI**, a principal at Meyers Nave, was named by the *Daily Journal* to its inaugural list of California's Top 25 Land Use Lawyers. He was also recently named to the *Daily Journal's* 2010 list of California's top 20 lawyers under 40.

'02 **April YEE** lives in San Francisco and is an associate with the investor relations team at Pantheon, a private equity specialist firm. She is also the board treasurer and secretary of Kidpower Teenpower Fullpower International, an executive committee member of Friends of Roots, and chair of the selection committee of the Dr. Jennie H.Y. Yee Scholarship Fund. She is involved with UCSC's Asian American/Pacific Islander Resource Center and the UCSC Alumni Association, and she attends

the Multicultural Career Conference as often as possible.

'04 **Ari OLGUN** worked for Ernst & Young after graduation. He received a master's of accountancy at the University of Notre Dame in 2005 and received his CPA license in 2007. After working for a software company in Palo Alto and freelance consulting, he traveled for a year in New Zealand and Australia with his girlfriend, Alissa (Merrill '04), whom—he met his senior year at UCSC. He proposed underwater in the Great Barrier Reef while scuba diving. He now works as director of finance and head of the finance department for advertising agency David & Goliath, and lives in Los Angeles. He is thankful for everything that has happened as a result of his experiences as a Banana Slug.

## COLLEGE EIGHT

'83 **Richard BARR** went to graduate school in photography at the University of New Mexico. He became a financial adviser in socially responsible investing. Three years ago he retired after 20 years in the profession. Married with one daughter, he is now a full-time student again with the online school of Berklee College of Music. He resides in Santa Fe, New Mexico, and continues to blog about corporate responsibility.

'87 **Lawrence COATES's** third novel is forthcoming in February from University of Nevada Press. His first book, *The Blossom Festival*, was a Barnes & Noble

Discover selection and won the Western States Book Award in fiction. The forthcoming novel is set on a vineyard during Prohibition, and is loosely based on a true historical event. He dedicates his third book to two of the teachers he had at UCSC who have passed away, James B. Hall and Jim Houston.

'89 **Rachel SCHWARZ** is now assisting the Grey School as its marketing manager.

'97 **Derrick O. CHUA**, DMD, has two awesome boys and a beautiful wife, and is loving life. Go Slugs!

'04 **Daniel LUNA** is nearing his fourth year as an attorney working for a labor union. He also volunteers to advance immigrant rights.

## GRADUATE STUDIES

'75 **Marc Elihu HOFSTADTER** (Ph.D. literature) has a new book of essays out entitled *Healing the Split: The Collected Essays of Marc Elihu Hofstadter*. Its essays deal with philosophy, religion, science, and poetry.

## IN MEMORIAM

'84 **Wesley David BURROWS** (Cowell) died on March 17, 2011. He held a Ph.D. in chemistry from UC Berkeley ('92) and did his postdoc at the San Diego Zoo Center for the Reproduction of Endangered Species ('99). He worked for biotech companies in the Bay Area. He was 49.

By Gwen Mickelson

## Banana Slugs aren't just in Santa Cruz

I often hear from alums how much they miss UC Santa Cruz—the rolling hills and redwoods of the campus, the ocean mist, the stimulation of a challenging course or exacting professor, the conviviality of living with other bright and curious students in an intellectual environment.

Well, we can't bring you the redwoods or the ocean ... but we might be able to help with a few of the other things you miss about UCSC.

Our regional program offers a way to meet up with new and old UCSC friends and reconnect with the campus—near where you live.

There are UCSC events in California, the East Coast, the Pacific Northwest, Hawaii, and other locations. They are organized by the UCSC University Relations office or by alumni volunteers.

Recent events have included an LA summer

soiree, a Boston clambake, schmoozing with politicians in Sacramento, and meetups in Washington, D.C., and Hawaii.

Ocean sciences professor Gary Griggs gave a talk in Boulder, San Francisco alumni attended panels on politics and climate change, and young Silicon Valley alumni career-networked at Google with alumni mentors from Pixar and Adobe, along with other successful entrepreneurs.

If there isn't a group in your area, you can create one and volunteer to put on events.

Subscribe to our monthly e-newsletter to get alerts and updates on regional UCSC happenings. Go to:

[news.ucsc.edu/newsletter](http://news.ucsc.edu/newsletter)

We look forward to catching up with you, wherever you've roamed.

For more information, contact Allison Garcia at [acgarcia@ucsc.edu](mailto:acgarcia@ucsc.edu) or (831) 459-1909.

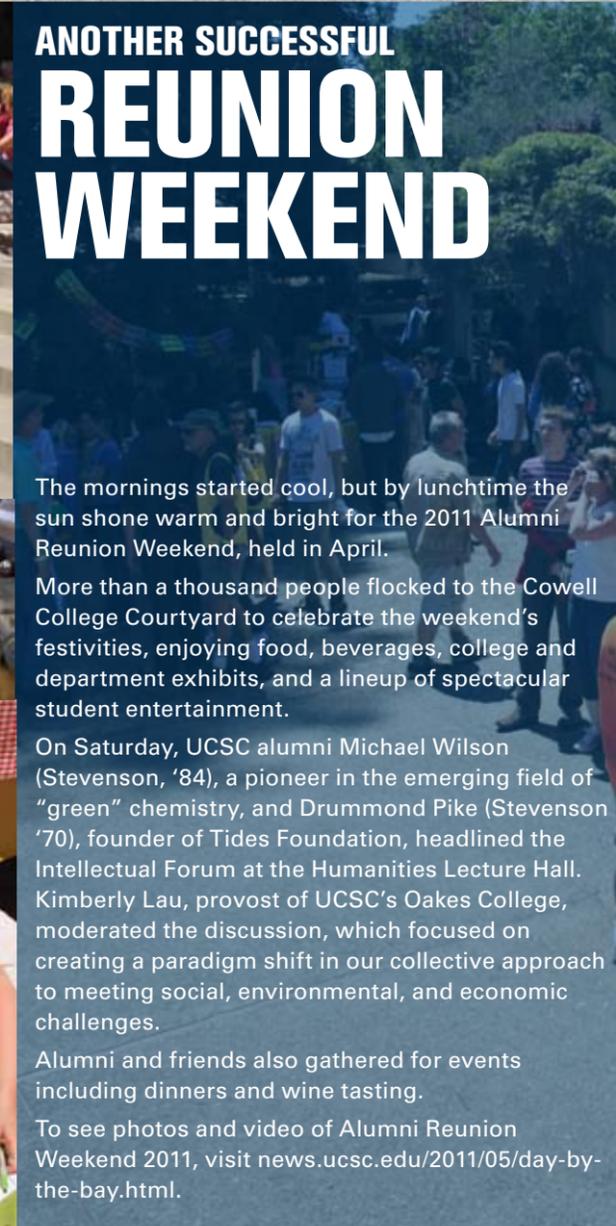
## Mark your calendars for next year's Alumni Reunion Weekend, which is scheduled for Friday, Saturday, and Sunday, April 27, 28, and 29, 2012.

It will be the perfect opportunity to reconnect with campus, reminisce with old and new friends, and celebrate UCSC's dynamic network of 80,000-plus alumni. More information will be forthcoming at [events.ucsc.edu/reunion](http://events.ucsc.edu/reunion).

To get involved or help plan a reunion for your class, contact Shayna Kent at [skent1@ucsc.edu](mailto:skent1@ucsc.edu) or (831) 459-3966.



PHOTOS: CAROLYN LAGATTUTA.



## ANOTHER SUCCESSFUL REUNION WEEKEND

The mornings started cool, but by lunchtime the sun shone warm and bright for the 2011 Alumni Reunion Weekend, held in April.

More than a thousand people flocked to the Cowell College Courtyard to celebrate the weekend's festivities, enjoying food, beverages, college and department exhibits, and a lineup of spectacular student entertainment.

On Saturday, UCSC alumni Michael Wilson (Stevenson, '84), a pioneer in the emerging field of "green" chemistry, and Drummond Pike (Stevenson '70), founder of Tides Foundation, headlined the Intellectual Forum at the Humanities Lecture Hall. Kimberly Lau, provost of UCSC's Oakes College, moderated the discussion, which focused on creating a paradigm shift in our collective approach to meeting social, environmental, and economic challenges.

Alumni and friends also gathered for events including dinners and wine tasting.

To see photos and video of Alumni Reunion Weekend 2011, visit [news.ucsc.edu/2011/05/day-by-the-bay.html](http://news.ucsc.edu/2011/05/day-by-the-bay.html).



**"Remember the time we...?" Reminisce.**

**Reconnect. Help plan a reunion for your class.**

**Contact Shayna Kent at [skent1@ucsc.edu](mailto:skent1@ucsc.edu)**

# Philanthropy Focus

Three Shakespeare Santa Cruz benefactors aim to make sure the show will go on

**“We never have to worry about losing SSC if sponsors and patrons realize that they can help.”**

—Carolyn Hyatt



PHOTOS: ELENA ZHUKOVA

Audrey Stanley and Karen Sinsheimer helped launch Shakespeare Santa Cruz, and Carolyn Hyatt helped guide its course in the early years. With a boost from UCSC Chancellor George Blumenthal, this formidable trio has stepped in to give the theater company a hefty financial lift with a \$100,000 matching gifts program.

Stanley, SSC's founding artistic director; Sinsheimer, the founding board chair; and Hyatt, who served on the SSC board for seven years, agreed to donate up to \$70,000 in a matching gifts program to honor the 30th anniversary season. Then Blumenthal agreed to commit \$30,000 out of his discretionary gift fund, bringing the matching gift figure up to \$100,000.

Stanley and Sinsheimer are two names that many theater patrons associate with SSC. In fact, the full name of the redwood-lined outdoor venue where many performances take place is the Karen Sinsheimer/Audrey Stanley Festival Glen.

Sinsheimer spoke of the “huge challenges” facing all cultural and artistic nonprofit organizations in lean economic times.

“Often, it forces people to focus their contributions on perhaps fewer organizations, but those in which they believe wholeheartedly,” Sinsheimer said. “Our job is to make the case for SSC, which is known for its superb quality.”

“From my own experience, I know that everyone feels better because their precious discretionary dollars go further when they are matched,” Sinsheimer said. “I especially wanted to make a pledge to Shakespeare Santa Cruz in their 30th year because I believe SSC truly has come of age.”

This campaign is part of a wider effort to preserve SSC far into the future, Hyatt said. “We never have to worry about losing SSC if sponsors and patrons realize that they can help,” she said.

Patrons can help ensure that SSC has a reliable source of yearly funding, Hyatt continued. “That leaves the fundraisers and the board free to explore new funding avenues.”

Throughout this campaign, which lasts through the end of the year, gifts and pledges to the Shakespeare Santa Cruz 30th Anniversary Challenge Match will be matched dollar-for-dollar up to \$100,000. For example, a \$5,000 gift or pledge will result in \$10,000 in support for SSC.

This formula brings maximum benefit from every dollar that goes to the award-winning theater company, Sinsheimer said.

Stanley praised Hyatt for making the first move—Hyatt started the process by offering a generous donation. At that point, Stanley and Sinsheimer jumped in, and so did Blumenthal. “His gift represents far more to me than just money,” Stanley said. “It acknowledges the level of achievement for UCSC that the theater company has presented and reached for over 30 years.”

It's no coincidence that there is a “30” at the front of the chancellor's donation; the trio of donors created the fundraising campaign to honor SSC's 30th anniversary season, which continues through the year with performances of the fall benefit show *Bard Babes* in November and the holiday show *A Year with Frog & Toad* in November and December.

While the challenge grant is in progress, Shakespeare Santa Cruz's annual fund campaign will continue to raise income, as well.

For more information or to contribute, contact Lesley Brander, Arts Division development director, at [lbrander@ucsc.edu](mailto:lbrander@ucsc.edu) or (831) 459-5227.

—by Amy Ettinger

Julie Barrett Heffington  
Director of UC Santa Cruz's  
Seymour Marine Discovery Center

A gift is a powerful thing. Take the Seymour Center at Long Marine Lab. Every year, thousands of people visit the center, home to approximately 400 marine animals. Children can hold a sea star, marvel at the world's largest whale skeleton—and learn to think like a scientist. The next generation will become the stewards of our coastal regions.

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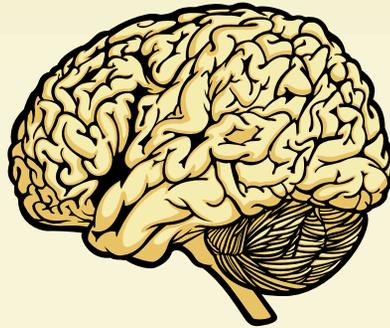
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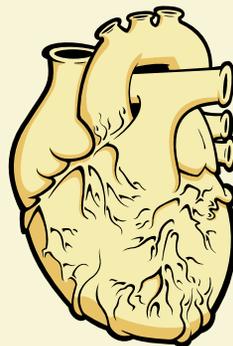
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