

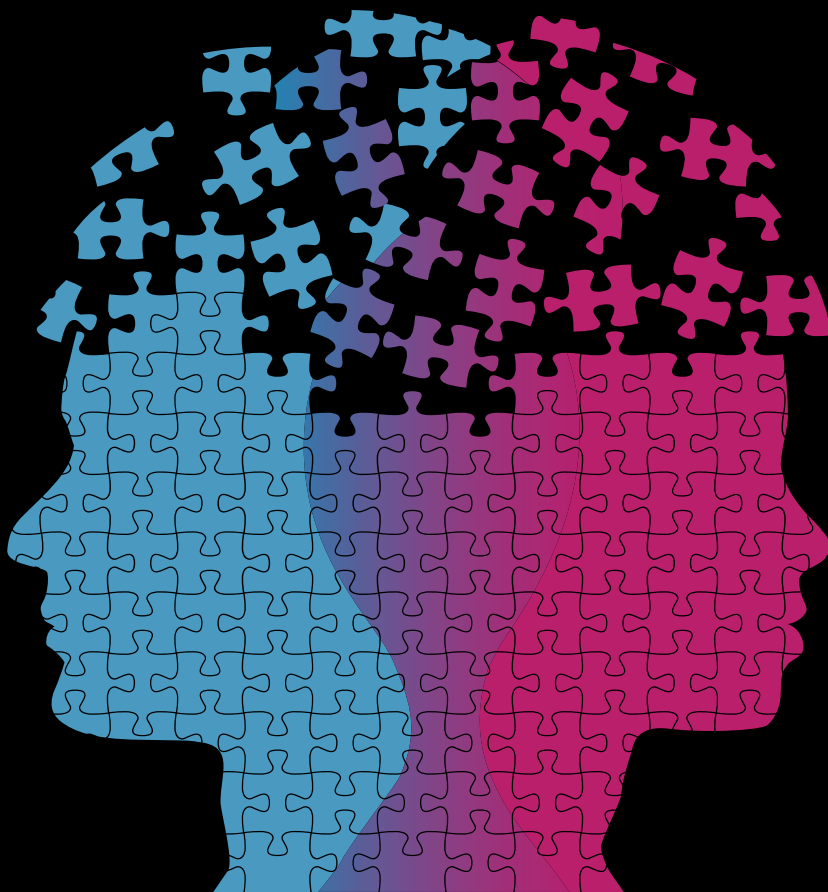


UC  
**SANTA  
CRUZ**  
MAGAZINE  
SPRING 2016

**&maybetheywontkillyou**

Interactive game lets players have  
the experience of being poor and  
black in America

# Did you know?



Emeritus Professor of Psychology Elliot Aronson was listed among the 100 most influential social psychologists of the 20th century—and the only person in the 120-year history of the American Psychological Association to win all three of its major awards for distinguished research, distinguished teaching, and distinguished writing.

It's original thinkers like Professor Aronson that make UC Santa Cruz amazing. Find more stories like these at [magazine.ucsc.edu](http://magazine.ucsc.edu).

## DO NOT FEAR CHANGE

*You may be noticing some big changes to your alumni magazine. But don't fear! It's an effort to shift the magazine—formerly known as UC Santa Cruz Review—toward shining a light on important issues and effectively delivering valuable news and information.*

*Some of the changes you'll see in this issue and going forward include:*

**The name:** Now simply called UC Santa Cruz Magazine. And with a new name comes a new online experience at [magazine.ucsc.edu](http://magazine.ucsc.edu).

**1 More Thing:** A new column serving as a lively endnote to each issue, featuring diverse expressions, perspectives, and authors. Chancellor George Blumenthal kicks it off for us (see page 28).

**Alumni Notes** now appearing exclusively in our online magazine at [magazine.ucsc.edu](http://magazine.ucsc.edu).

Exciting new online-only features such as **Pop-Up**, a series about alumni food and drink. We start with alumni breweries—cheers!

Want to skip the print magazine and catch it online only? Drop us a line at [magazine@ucsc.edu](mailto:magazine@ucsc.edu) to be taken off the print mailing list and added to an email list.

Comments? Questions? High fives? Email us at [magazine@ucsc.edu](mailto:magazine@ucsc.edu).

# UC SANTA CRUZ MAGAZINE

SPRING 2016

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An alumnus's game aims to spread understanding about being poor and black in America by challenging players to see if they can make it home from the corner store with their dignity—and their life.

**18 Building a ladder to a cure**  
A cancer diagnosis used to be a death sentence for children. Now researchers are using networking and data sharing to open a new front in the battle against the disease.

**22 Crossing borders**  
At UC Santa Cruz, the Latin American and Latino Studies Department is breaking boundaries and creating thought leaders.

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# UC SANTA CRUZ

MAGAZINE  
SPRING 2016

## UNIVERSITY OF CALIFORNIA SANTA CRUZ

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Spring 2016

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# LETTERS



## EMBRACE THE QUIRK

It's nice to see a photograph of Alan Chadwick ["Big ideas," page 12, fall 2015]. The description of him as a "quirky master gardener," who "by 1981 ... had left" leaves out far too much.

UC Santa Cruz prided itself on not being mainstream while Mr. Chadwick was there. While he may have epitomized aspects of the school's visionary character, he was no more quirky than Jasper Rose, Mary Holmes, or Ralph Abraham, to name just a few of the great, truly mind-stretching teachers who made Santa Cruz special back then.

I suggest you devote an entire issue to the quirky ones—and

don't leave out the controversies that sometimes surrounded them.

—David Hingston  
(Stevenson '73, history)

## CORRECTIONS

The fall 2015 issue of *UC Santa Cruz Review* is filled with interesting articles about the campus. However, I found a serious error in the story on page 45 about Alfred Hahn and the Hahn Student Services building [Philanthropy Focus, "Names of Fame," page 42].

The fire in 1971 did not burn the building to the ground. There was serious and extensive fire damage to the second floor and roof, but the structure remained intact, due to the concrete outer structure. I worked in the building at that time and was in the Registrar's Office on the first floor. I well remember that morning. By mid-morning of that day, I was inside the office evaluating damage and clean-up options. There was extensive smoke, water, and fire retardant damage to most of the offices on the first floor. Due to the damage, the building was evacuated and all the offices were relocated across the campus. Many offices moved into the newly completed Family Student Housing apartments. The Registrar's Office relocated to the fourth floor of McHenry Library.

Following the extensive repairs to the Central Services building, all the offices returned to the building some months later.

—Nancy Pascal,  
*UC Santa Cruz Office  
of the Registrar 1966–98;  
UC Santa Cruz Retirees  
Association 1999–present*

I've just read through the fall 2015 *Review*. What an interesting and enlightening edition!

In the "Names of Fame" article [Philanthropy Focus, page 42], the section about the Hahn family mentions that the Hahn bequest created the Leadership Opportunity Award for local community college students. The Hahn bequest did fund scholarships for local students, but this award actually was founded by Chancellor Karl Pister in the early 1990s, and later was named after him, the Karl S. Pister Leadership Opportunity Award ([financialaid.ucsc.edu/types-of-aid/scholarships/pister.html](http://financialaid.ucsc.edu/types-of-aid/scholarships/pister.html)).

I served as the Admissions liaison for the program until I retired in 2011 and just wanted to be sure that Chancellor Pister receives the credit he deserves for this remarkable program for local-area community college transfer students.

—Sharon Dimberger

*Editor's note: This is correct. Karl Pister did establish the Leadership Opportunity Program, and it was later named after him. We apologize for these errors and have made changes to the online version of the story.*





### Robert Reich

Saving Capitalism for the Many, Not the Few

**April 5**

6:30 p.m.  
Rio Theatre  
1205 Soquel Avenue  
Santa Cruz  
Free

### Alumni Weekend

**April 28–May 1**  
See page 13 for full weekend program

### Sinsheimer Distinguished Lecture

**May 5**  
Randy Schekman, UC Berkeley professor of molecular and cell biology, winner of the 2013 Nobel Prize in physiology or medicine

### Founders Celebration

**Fall 2016**  
Date and location TBD

### Farm to Fork Benefit Dinner

**Fall 2016**  
Date and location TBD

### Giving Day

**May 11**  
Join us for our first ever Giving Day—a 24-hour online fundraising drive to support UC Santa Cruz students, faculty, and programs. Learn more at [givingday.ucsc.edu](http://givingday.ucsc.edu)



### Spring Open Studios

**June 3**  
Noon to 4 p.m.  
Elena Baskin  
Visual Arts Center

### Student Print Sale

**June 3 and 4**  
10 a.m. to 6 p.m. (both days)  
Elena Baskin  
Visual Arts Studio, Room G-101



To see a full list of upcoming UC Santa Cruz events, visit [events.ucsc.edu](http://events.ucsc.edu).

# THIS IS UC SANTA CRUZ

## Slugs on parade

Banana slugs are usually secretive creatures that prefer damp hiding places to being the center of attention.

But the yellow mollusk was anything but reclusive in October when the city of Santa Cruz marked UC Santa Cruz's 50th anniversary with a "first-on-the-planet" Banana Slug Parade right through the heart of downtown.

With more than 40 entries—from a startlingly yellow Santa Cruz Metropolitan Transit District bus to the enchanting Anak Swarasanti gamelan troupe—the parade was a whimsical and entertaining celebration of UC Santa Cruz's five-decades-long residence in the county.

"The university is a major contributor to our community," said then-Santa Cruz Mayor Don Lane (Merrill '78, politics).

He noted the 4,000 jobs the university provides, the millions of dollars pumped into the local economy, the thousands of service hours donated by student volunteers, and the vibrant arts scene fed by a creative campus.

## Changing the face of conservation

A UC Santa Cruz program to nurture a diverse cadre of environmental conservation leaders will receive \$2 million over four years from the Doris Duke Charitable Foundation, joining four other universities in the Doris Duke Conservation Scholars Program.

"The conservation field needs greater diversity to become even more successful," said Erika Zavaleta, professor of environmental studies, who conceived of the UC Santa Cruz-based version of the conservation scholars program.

UC Santa Cruz will use its long-established strengths in conservation, experiential learning, and educating first-generation college students and students of color as it recruits 20 excep-



Then-Santa Cruz Mayor Don Lane and Campus Provost and Executive Vice Chancellor Alison Galloway greet the crowd as Sammy the Slug joins the parade.

Find UC Santa Cruz on Facebook, Instagram, Twitter, LinkedIn, YouTube, and Pinterest. Read UC Santa Cruz Magazine stories at [magazine.ucsc.edu](http://magazine.ucsc.edu).

tional students nationally each year over four years for intensive hands-on field experiences.

## Eye on environment

Kristy Kroeker, assistant professor of ecology and evolutionary biology, received a Packard Fellowship for Science and Engineering from the David and Lucile Packard Foundation.

The Packard Fellowship, one of the nation's most prestigious honors for young faculty members, gives Kroeker \$875,000 over the next five years to support her research on environmental change in dynamic environments and complex ecosystems.

Kroeker is interested in how the rapidly accelerating changes in our environment will alter the fundamental ways that marine ecosystems work in the future.

## Alumna applauded for Americana

Alumna Gillian Welch (Porter '90, art) and her musical partner David Rawlings took home a Lifetime Achievement Award in Songwriting at the 2015 Americana Music Awards.



Held at the historic Ryman Auditorium in Nashville, they were honored alongside fellow lifetime achievers Ricky Skaggs, Don Henley, Buffy Sainte-Marie, and Los Lobos.

"These artists have not only influenced the Americana community, but the musical landscape on the whole," said Jed Hilly, executive director of the AMA.

## Climate champ

Physics professor Sue Carter was chosen as the first recipient of the Faculty Climate Action Champion Award by the Sustainability Office and the Academic Senate's Committee on Research.

In her role as the award winner, Carter will establish a campus sustainability lab to support student-led research and training. Her proposal included a strong plan for student and community engagement.

The sustainability lab will promote carbon emissions reductions and sustainable use of natural resources, providing students with indoor and outdoor laboratory space, educational tools, and resources.



## Making every drop count

UC Santa Cruz worked hard last year to further reduce its water usage in the midst of the state's historic drought.

In the past fiscal year, the campus cut water use by 27 percent, exceeding the city of Santa Cruz's Stage 3 Water Emergency reduction goal of 25 percent, and water managers continue to look for ways to save even more.

The campus was recognized as a top performer in conserving water and protecting water quality by the Association for the Advancement of Sustainability

in Higher Education and was featured in its 2015 Sustainable Campus Index.

"Conserving water on campus is everyone's job," said Elida Erickson, interim director of sustainability. "In addition to reducing usage, the campus is looking at ways to harvest and reuse water."

Today, total annual campus water use is 20 million gallons less than 20 years ago, even though campus population has grown.

Gillian Welch and musical partner David Rawlings

Robin Hunicke



### Gaming the system

Robin Hunicke, renowned game designer, is thrilled to be part of UC Santa Cruz's brand-new games and playable media major, offering students a strong foundation in game making.

"It's easier to make games now than ever before—but the process of developing a fresh idea from scratch isn't something many of the students have had," Hunicke said.

The new B.A. program, being offered through the Arts Division, was conceived as a sister program to the B.S. degree currently in the School of Engineering.

"We wanted to build a unique offering by blending artistic and technological practice," Hunicke said. "That meant developing a program that integrates these two communities, through shared courses, shared projects, and a shared vocabulary."

She expects steady enrollment growth in the program over the next few years.

In addition to directing the new B.A., Hunicke also co-directs the campus's Center for Games and Playable Media.

### Studying questions of race

Excitement is building on campus about a new major that encourages students to study notions about the concept of "race" and all of its social and political implications.

Critical Race and Ethnic Studies started small but it is growing quickly. In spring of 2014, the program, informally known as CRES, had 13 students including 11 declared CRES majors. Now there are 26 students in

The program will give students a chance to explore such subjects as colonialism, slavery, displacement, migration, warfare, and racial profiling.

"We set out to study questions of race and ethnicity in a transnational, critical way," Stovall said.

The major was announced at a strategic time for the campus. "There was a critical mass of students" by the time CRES started, Stovall said. "The undergraduate body at UC Santa Cruz is increasingly diverse."



Tyler Stovall

the program, and 15 are declared majors.

And while the program is new, "CRES is the fruition of many years of debate about whether UC Santa Cruz should have some kind of ethnic studies program," said UC Santa Cruz Dean of Humanities Tyler Stovall.

### 50 ways to be amazing

We've compiled a stunning collection of the 50 things we've learned along the way to becoming today's UC Santa Cruz. These axioms demonstrate the ways UC Santa Cruz is amazing. Check out the ideals we live by: [ucsc.edu/50-ways](http://ucsc.edu/50-ways).

## COASTAL DIGEST

UC Santa Cruz's Coastal Biology building is taking shape on the Coastal Science Campus that is also home to Long Marine Laboratory and the Seymour Marine Discovery Center.

The builders expect to finish the project by summer 2017, when it will open as a center for ecology studies, habitat restoration, and work focusing on the impacts of climate change.

The building will consolidate the offices of researchers and scientists who are now dispersed across campus, while allowing the university to expand programs in coastal sustainability and policy.

The two-story, 40,000-square-foot building will have 20 labs, 43 offices, a first-floor seminar room with capacity for more than 100 people, conference spaces, autoclaves and environmental control rooms, and a secure space outside the main building with several seawater tanks.

### Special reports

Our new special reports cover topics in depth to bring new perspectives to pressing issues. Our first report, *Wild, Wild West Coast*, looks at the bizarre ocean conditions off the west coast of North America, and what it all might mean. See it at [news.ucsc.edu/west-coast](http://news.ucsc.edu/west-coast).

### Dance of art and science

Most people wouldn't find any connection between an elephant seal and the cha-cha.

But for 20-year-old Xochitl Clare, it's easy to see a link between a 4,000-pound pin-niped and a lively form of Cuban dance. Not only does the marine biology and theater major study one and practice the other, but she also sees a very real relationship between art and science.

"Science is an experiment with yourself, and art is the same way," says the fourth-year Kresge College student. "With science your medium is labs and test tubes, with art it's paintbrushes and movement."

Drawn to UC Santa Cruz by its marine biology program and its spirit of adventure, Clare eventually found herself working in Professor of Ecology and Evolutionary Biology Dan Costa's lab, doing work that has implications for deep-ocean management.

### Mercury rising

As fish-eating predators at the top of the marine food chain, elephant seals accumulate high concentrations of mercury in their bodies. A study by scientists at UC Santa Cruz shows that elephant seals shed significant amounts of mercury during molting, resulting in elevated concentrations of the toxic metal in coastal waters near the elephant seal rookery at Año Nuevo State Reserve.

The findings reveal a previously unrecognized source of mercury contamination in coastal waters.

Mercury is a problem in the marine environment because the most toxic form, methyl mercury, is readily absorbed and accumulates in the bodies of marine organisms. The toxin becomes more and more concentrated as it passes up the food chain. Thus, mercury concentrations in top predators can be 1 million to 10 million times higher than the levels found in seawater.

"Many studies have looked at biomagnification up the food chain, and we took that a step further to see what happens next," said first author Jennifer Cossaboon, who led the study as an undergraduate at UC Santa Cruz.

Artist's rendering of the planned Coastal Biology building



PHOTOS: HUNICKE BY MAUREEN DIXON HARRISON; STOVALL BY ELENA ZHUKOVA; SEAL BY PRIYA GANGULI



**&maybethey**



# wontkillyou

Alumnus's game aims to build empathy by allowing players to take the role of a poor black American, encountering aggressions from humiliating to lethal

Akira Thompson's striking work challenges one of the biggest misconceptions about police violence against black people in America, and offers privileged players the chance to experience the truth.

As designed systems, games can create spaces for people to grasp how infrastructures work, to test theories—and often to internalize how the systems of our world may not work, may promote inequality. They can be tools to create empathy and reveal injustice; they can illustrate the often-complicated answers to the “why can't you just” and “but it's probably not really” that pervade rhetorical discourse.

As human beings, it is often hard for us to accept that systems are unfair. It is also hard for many of us to want to change unfair systems when their unfairness favors us; we understand logically the disadvantages of others, but we can carry on shrouded comfortably in our denial for as long as we don't have to be confronted with their emotions.

For example: Black Americans are disproportionately more likely to be killed by police than anyone else; it's a fact we know statistically and empirically, brought into sharp relief in recent years by the volume and pace of social media and the work of activists online.

But even though black victims of police violence are likely to be unarmed, marginalized, or even already in custody, pernicious myths persist to poison the conversation about justice: the common illusion that if the latest victim “had only” done this, or not done that, or had been wearing something different or walking somewhere else or had spoken up or had not said a certain thing, they would not have died.

*Editor's note: This story was originally published in Offworld on August 5, 2015. It is reprinted with the permission of Leigh Alexander.*

*Akira Thompson received his master's degree in 2015. This story was edited to refer to him as an alumnus rather than a grad student.*

This pernicious myth inspired a series of tweets by [writer] Ijeoma Oluo highlighting the impossible rules: Don't reach for your wallet, don't play with a toy sword, shop at Walmart or wear a hoodie, Oluo wrote, "and maybe they won't kill you."

### Taking on the 'if-onlys'

Akira Thompson is a game designer and programmer with a master's in games and playable media from UC Santa Cruz's Computer Science Department. He's also an Iraq War veteran, former Disney Imagineer, and founder of social art creative firm RainBros. Alongside the conversation about police violence, Thompson felt frustrated at these pernicious if-onlys, the insidious idea that black behavior must somehow take the lead to save black lives.

"The day of the verdict of the Grand Jury that was choosing not to prosecute Darren Wilson [the former police officer who shot and killed Michael Brown, an 18-year-old African American, in Ferguson, Mo., August 9, 2014], I had a couple of friends on Facebook that seemed to place more interest in the fact that there were protests that became riots and property was being damaged, rather than the fact that a young man was killed," Thompson reflects.

"That hurt and frustration that led to rioting didn't appear overnight. I didn't think these Facebook friends were bad people, as much as it hurt to see that they simply didn't get it, on a fundamental level," he says. "They didn't have the experiences to draw from to understand the many circumstances at play. So I wanted to make something that could help those with similar life experiences and common circumstances understand that there are two Americas. Especially when it comes to policing policies."

Inspired in part by Oluo, Thompson designed &maybetheywon'tkillyou, a live game experience where a player takes the role of a poor black American attempting to go to his corner store and return safely home. Along the way, they encounter microaggressions from strangers to the neighborhood, as well as from law enforcement. These can range from humiliating to lethal.

One player acts as the "Subject," the other as the "System." The Subject moves one theoretical space at a time, and in each space, the System draws for them a random event card—for example, a car you pass has locked its doors on sight of you. Or a police cruiser catches you in its spotlight. For each event, the player may choose to say nothing, or to speak.

Every time the Subject speaks, the System quite literally rolls a die. Whenever the result is higher than "1," the System silently consults the penal code. If the Subject chooses not to speak, their "Frustration" score increases, a number that always gets added to their result against the System. In other words, speaking up for yourself always risks a negative interaction with law enforcement; staying silent just defers that risk to later. The game can end with the Subject making it home safe despite indignities, physically carrying their own Frustration score counter. Or it can end with the Subject dead.

Your words are viewed as disrespectful, the game may decide. "I wonder how someone like you doesn't have any warrants out," an officer says, after searching you and spreading your things on the sidewalk for all to see. The officer believed their life was in danger. The officer's weapon was discharged in self-defense.

"The system is designed to do what I believe our current system

does," Thompson explains. "Pushes the victim of discrimination into a place in which they are not allowed to even speak about their injustice. Speaking up may mean that what you are saying is seen as a threat or challenge. You can make it home fine swallowing your pride and frustration by simply meeting the way you are being treated with silence."

### Creating empathy

There is a digital version of the game available on the RainBros website ([rainb.ro](http://rainb.ro)) that acts as a basic demonstration of how &maybetheywon'tkillyou's systems work. But Thompson's game design for the live experience incorporates thoughtful elements that enhance its impact: The System always rolls the outcome dice; the player is not allowed to touch them. Neither is the player allowed to touch, hold, or look at the "Resolution Penal Code" binder that the System player uses to determine the outcome of the roll. Although the focus of the game is on the experience of the black American, the person who plays as the System has no other choice but to bear power against them; the System player has no option to compromise or assist, only to sit with the discomfort of complicity while the other player suffers. The penal code binder even has the dispassionate, opaque look of a police document.

The Subject player must carry their own Frustration Counter—and the rules say the player must always wear a black hoodie, forcing them to actually inhabit the stereotype of white America's fears.

"I've had tears, quiet contemplation, disbelief, and even frustration specifically from players that wanted to speak out about how they were being treated yet knew that they would need to remain silent in order to get back home safely,"

Thompson says. "The main thread that seemed to happen when showing the game publicly, though, was a conversation about the subject matter after. As well as players really considering what it may be like."

Thompson has been influenced by other game designs that create empathy through their mechanics; on the day of the Darren Wilson verdict, his professor, Brenda Romero, was talking to the class about *Train*, an iconic board game she made about the holocaust ("human-on-human violence has a system," she says). Thompson was also influenced by *Mainichi*, a game [play and games critic] Mattie Brice made about her experiences of life as a mixed-race trans woman, particularly the elements of repetitive, harassing events. He also says *Dys4ia*, a playable diary by [video game designer] Anna Anthropy, helped him understand how powerful a game about experiences entirely other than your own can be.

Thompson continues to apply to show *&maybetheywontillyou* at festivals, and says he hopes to teach others the particulars of how to show it. For now the digital version still acts as a basic intro to his game design: "I feel the live action role play version is more powerful and successful, as a healthy conversation can follow, but I'd like the ideas to get out there as far as possible," he says.

"My favorite response was from a play-tester that when asked if he wanted to say something said, 'I'd like to say something about this, but I have no idea what to say. I've never had to deal with anything like this,'" Thompson reflects. "So at least from the players that I've been able to run the game with, I feel like it has been very successful thus far in challenging players to see another side of these issues." ■

PHOTO: ANASTASIIA SAPON

## ABOUT AKIRA THOMPSON

Akira Thompson joined the Army in 2002, wound up driving a five-ton truck in Iraq, and escaped injury from a roadside bomb.

He survived the 2008 financial collapse by working odd jobs and finally was hired at Walt Disney Imagineering to do research and development. By 2011, he was on the prestigious Forbes "30 under 30" list.

This roller coaster of experiences is what fuels the 32-year-old with a master's degree from UC Santa Cruz's Games and Playable Media Program. His goal is to create games that are both entertaining and enlightening.

His newest, *Stop! Thief!*, is a political satire drawn from the Great Recession that takes its players into a world where a petty street robber is more likely to be punished than a bank president who swindles millions.

His creative visions of social change come from his time in Iraq, he says.

"Maybe I didn't pull any triggers, but I'm partially responsible for people getting hurt, for lives getting disrupted," Thompson says. "I make games that have a positive social impact to counteract the negativity of what I've been part of."

—by Peggy Townsend



# ALUMNI ASSOCIATION CHANGES AND ADAPTS

As the way universities connect to their graduates changes, UC Santa Cruz shifts from an old model of alumni associations to a powerful new model of alumni networks

UC Santa Cruz is taking a cutting-edge approach when it comes to engaging with alumni, replacing its traditional alumni association model with a bold new networking model.

The campus began moving toward a more innovative alumni engagement strategy in the fall of 2014 when its Alumni Council unanimously voted to adopt an inclusive, dues-free system to replace the former Alumni Association dues model. At the time of the vote, the UC Santa Cruz Alumni Association consisted of 9,000 dues-paying members.

With this gesture, the Alumni Council did much more than just change the structure of the alumni group; they expanded its size more than tenfold. At 50 years old, UC Santa Cruz has amassed an impressive 100,000 Banana Slug alumni.

After taking a look at its current alumni association, and patterns of alumni engagement, “we began realizing that people under 40 are no longer joining membership organizations,” said Donna Mekis (College Eight ‘84, anthropology; education M.A., ‘91), UC Santa Cruz Alumni Council president. “That seems to be happening all around the country. Over half of UC Santa Cruz’s alumni are under 40; we have a lot of graduates who are just not the kind of folks who are going to go out and join the alumni association.”

Now, the moment students graduate from UC Santa Cruz, they automatically gain admission into that alumni network. In other words, the alumni network comes to them. There are no thresholds for membership and no dues, and therefore no need for Slugs to worry about whether or not they can afford to be part of this connected group. All alumni receive the same services offered by their alumni network.

The Alumni Council’s research revealed that alumni are very interested in career connections. As one of the first services offered, members will be able to tap into a web of potential mentors, job connections, internships, externships, and real-world learning experiences.

“I have worked in higher education most of my life, so I am very aware of the difficult transition between graduation and career for students,” said Mekis, who worked in developing and directing community college transfer programs at both UC Santa Cruz and Cabrillo College for 30 years.

To address this situation, UC Santa Cruz has built an online portal called the Career Advice Network (**ucsc.edu/can**), allowing alumni to offer career advice to students and other alumni. Whether they are interested in pursuing law, medicine, or a career in the arts, the portal is there to connect them.



Alumna Azwa Salleh and fellow alum Rob Moore

“We surveyed alumni, and this is what they want,” Mekis said. “This is the way so many alumni would like to give back. And if we make this a robust enough program, this is something that will make a difference for current and future students.”

Other offerings for members are in development.

This free membership concept appears to be spreading, with UCLA, UC San Diego, Ohio State University, and the University of South Florida, among many others, also embracing this model.

One challenge of changing the membership structure is getting the word out and building a comprehensive alumni base. Another challenge is reaching out to the full alumni group. It’s easier to reach all those people while they are still on campus—which is why supporters of the alumni network hope to nurture a strong spirit of student philanthropy.

Charles Eadie, past president of the Alumni Council, is excited about the changes.

“By moving to an inclusive, non-dues membership we can better focus on what really builds connection among alums: networks, career opportunities, and specific areas of interest and affinity,” he said. “So far the feedback has been extremely positive about the changes, and the future looks great.”

The UC Santa Cruz community is for life—once a Slug, always a Slug.

Visit **alumni.ucsc.edu** for more information.

## The power of a network

Alumna Azwa Salleh (Porter ‘08) got a job through her UC Santa Cruz connection. She saw that the CEO of Chicago marketing and communications agency Lipman Hearne—Rob Moore (Stevenson ‘70)—was a fellow alum, did some research, and sent a cold email. He responded right away, surprised to see a Banana Slug in Chicago. That’s the power of a network.

ALUMNI WEEKEND 2016

# COME HOME

*This weekend is for you!*

TRAVEL BACK TO UC SANTA CRUZ. THE REDWOODS ARE WAITING.



## THURSDAY, APRIL 28

### BORDERS AND BELONGING: A SERIES OF EVENTS ON HUMAN MIGRATION

#### MARÍA EN TIERRA DE NADIE: LALS/CLRC 15TH ANNIVERSARY FILM SCREENING

7–9 P.M. | Rio Theatre, 1205 Soquel Ave., Santa Cruz

Celebrate the Latin American and Latino Studies Department's *quinceañera* with a screening of Marcela Zamora's documentary *María en tierra de nadie*, followed by a Q&A with the filmmakers.

## FRIDAY, APRIL 29

### BORDERS AND BELONGING: A SERIES OF EVENTS ON HUMAN MIGRATION

#### THE JUNGLE AND THE BEAST: A CONVERSATION WITH LEWIS WATTS AND ÓSCAR MARTÍNEZ

10 A.M.–12 P.M. | Merrill Cultural Center

Reading and discussion with Salvadoran journalist Óscar Martínez about his celebrated book, *The Beast*. Photographer and Professor Emeritus Lewis Watts will share his photos from a makeshift migrant camp in Calais, France.

#### 12TH ANNUAL GRADUATE RESEARCH SYMPOSIUM

1–4:30 P.M. | McHenry Library

Highlighting innovative research being conducted by our graduate students. Graduate Alumni Social to follow at the Graduate Student Commons.

#### INSTITUTE OF THE ARTS AND SCIENCES: OPEN HOUSE

2–3 P.M. | Digital Arts Research Center (DARC)

Learn about the Institute of the Arts and Sciences programming, events, and artist residencies.

#### ANTHROPOLOGY DEPARTMENT'S 25TH ANNIVERSARY PH.D. ALUMNI PANEL

2–6 P.M. | Social Sciences 1

Panel of alumni Ph.D. students from 3–4:30 P.M., followed by a networking reception until 6 P.M.

#### TOUR "COLLECTIVE MUSEUM": A CAMPUS WALK AND INTERPRETATIVE TOUR OF CAMPUSWIDE ART INSTALLATION

3–5 P.M. | Digital Arts Research Center (DARC), Room 302

Take an interpretative tour of the campus-wide art installation "Collective Museum," a project by Portland-based artist group Public Doors and Windows. Each participant has provided a site and a story relating to its history and their personal experiences of it.

#### SOCIAL SCIENCES DISTINGUISHED ALUMNI AWARD CEREMONY

4–6 P.M. | Historic Cowell Ranch Hay Barn

Alumni are cordially invited to celebrate the achievements of distinguished alumni from the Division of Social Sciences for 2015.

#### UC SANTA CRUZ TEACHER EDUCATION RECEPTION

4–6 P.M. | Education Department breezeway, McHenry Library

Join the Education Department for a fun and invigorating student teacher mixer! We invite our alumni to meet with our incoming cohort of student teachers.

#### DIGITAL ARTS AND NEW MEDIA MASTER OF FINE ARTS EXHIBITION

Reception 5–9 P.M. | Exhibit 12–5 P.M. daily Digital Arts Research Center (DARC)

An innovative annual event featuring video installations, interactive experiences, and sound art. The DANM artworks of graduating students fill the DARC building throughout Alumni Weekend.

#### GRADUATE ALUMNI SOCIAL

5–7 P.M. | Graduate Student Commons

Following the 12th Annual Graduate Research Symposium, we invite graduate alumni and current graduate students to connect with fellow Banana Slug grads, the vice provost, and the dean of graduate studies.

#### INTERNATIONAL PHOTO CONTEST SHOWCASE & RECEPTION

5–7 P.M. | Bridge Gallery, Porter College

This event will showcase the winning photography from both our returned study-abroad student participants and our international students. The photo contest will also include photos submitted by UC Santa Cruz alumni.

#### DOWNTOWN MINGLE WITH COLLEGES NINE & TEN

5:30–7 P.M. | Downtown Santa Cruz, location TBD

Colleges Nine and Ten have an impressive reputation despite their youth. Help us celebrate with a lively and relaxed mingle in the heart of Santa Cruz. Enjoy reconnecting with your fellow students, staff, faculty, friends, and alumni.

#### ALUMNI SHABBAT

6:15–9 P.M. | Santa Cruz Hillel, 222 Cardiff Place, Santa Cruz

Please join past and current Jewish Slugs for Shabbat services and a home-cooked meal. We seek to provide a vibrant and welcoming community, regardless of knowledge or background. Services start at 6:15 P.M. Dinner starts at 7 P.M.

Your home away from home is waiting for you.

Remember the smell of the forest? The views of the bay? The deer you'd chance upon while walking trails to class?

It's all still here. Take a look through this listing of Alumni Weekend events, and Come Home.

[alumniweekend.ucsc.edu](http://alumniweekend.ucsc.edu)  
#UCSCAlumniWeekend



## RECENT GRAD MIXER

6:30–8:30 P.M. | Lúpulo Craft Beer House, 233 Cathcart St., Santa Cruz

A casual evening to catch up with other young alumni and connect with some current seniors who want to hear about your experiences. Enjoy lively conversation at one of the finest craft beer destinations in town! Free tapas with a no-host bar.

## WELCOME KEYNOTE: HOW WE LEARN: AN EVENING WITH JOHN DIZIKES

7–9 P.M. | Humanities Lecture Hall

Join celebrated professor emeritus of American Studies and founding UC Santa Cruz faculty member John Dizikes, notable alumni author Lawrence Weschler (Cowell '74), and special guests for a discussion on how we learn.

## SATURDAY, APRIL 30

### COFFEE IN THE COWELL COURTYARD

8:30–10 A.M. | Cowell College courtyard

Come home to the first residential college at UC Santa Cruz, founded in 1965!

### BIRDING WALK AT THE CASFS/UCSC FARM

8:30–10 A.M. | UC Santa Cruz Farm

Enjoy a morning birding walk at UC Santa Cruz's 30-acre organic farm, part of the Center for Agroecology and Sustainable Food Systems. Led by Breck Tyler, a longtime instructor with the Environmental Studies Department and seabird researcher with the Institute of Marine Sciences. Beginning birders welcome!

### STEVENSON ALUMNI LEADERSHIP BREAKFAST

9–11 A.M. | Stevenson Provost House

Start your morning in the company of fellow alumni in a beautiful natural setting on campus. We will discuss exciting new mentoring opportunities for alumni, and the Stevenson provost and student leaders will speak and share stories.

### YOUNGER LAGOON RESERVE BIOBLITZ

9 A.M.–1 P.M. | Long Marine Lab, meet at the blue whale skeleton

This event will run simultaneously with the UC Santa Cruz Campus Bioblitz on the main campus. The Bioblitz is a community-building event that will also help inventory and record some of the biodiversity of Younger Lagoon Reserve. There will be an 8 A.M. training on using the iNaturalist app for data collection, followed by a 9 A.M.–12 P.M. Bioblitz, and a 12–1 P.M. debrief.

## UCSC BIOBLITZ 1

9 A.M.–1 P.M. | Arboretum

Bioblitz is a community-building event with the goal of rapidly inventorying the campus's biodiversity. There will be two different sessions (9 A.M.–1 P.M. and 2–6 P.M., Ken Norris Center) where alumni will meet as a large group, attend a brief training, then break up into groups to survey the campus.

## ECON ALUMNI RECEPTION

10–11 A.M. | Engineering 2, Room 180

After a brief introduction and a short presentation, enjoy a continental breakfast in the courtyard while mingling with other alumni, current students, and department faculty and staff.

## PANEL ON THE EARLY DAYS OF THE COWELL PRESS

10–11:30 A.M. | Page Smith Library at Cowell

Alumnus Jim Faris and other alumni will talk about the early days of Cowell College and the Cowell Press. In particular, the panelists will discuss the influence of Jack Stauffacher, George Kane, and Bill Everson.

## TOUR OF THE UCSC FARM

10–11:30 A.M. | UC Santa Cruz Farm

Explore the farm's greenhouses, orchards, fields, and gardens, and learn about the research, education, and public service work of the Center for Agroecology and Sustainable Food Systems. Please wear comfortable walking shoes. This tour will start at the newly restored Cowell Ranch Hay Barn.

## BANANA SLUG KID ZONE

10 A.M.–4 P.M. | Oakes upper lawn

A family-friendly event where alumni and their little Slugs can visit craft booths, game stations, and more. Current students will be on hand to help.

## BRUNCH AND TOUR AT BASKIN ENGINEERING

10:30 A.M.–12 P.M. | Jack Baskin Engineering

After enjoying brunch and reconnecting with alumni, faculty, and staff, join the Baskin Alumni Advisory Council on a tour of our laboratories for a first-hand look at where our groundbreaking research happens in genomics, nano-technology, optofluidics, robotics, UAVs, synthetic biology, and more. Cost: \$10

## MERRILL SOCIETY MEETING

10:30 A.M.–12 P.M. | Charles E. Merrill Lounge

The Merrill Society is devoted both to the support of Merrill College and its students and to building a community of Merrill alumni. Please join us for our spring meeting as we discuss current programs and consider new opportunities for alumni engagement.

## UCSC SAILING TEAM ALUMNI REGATTA

11 A.M.–4 P.M. | UCSC Boating Center, Mariner Park Way, Santa Cruz

Spend Saturday on the gorgeous Pacific Coast with the sailing team. Afterward, mingle with fellow sailing team alumni and current students, and enjoy a BBQ lunch. Reminisce on your times on the sailing team and learn more about how to stay involved as alumni.

## ASIAN AMERICAN/PACIFIC ISLANDER MENTOR PROGRAM AND STUDENT ALUMNI INSPIRING LEADERSHIP (SAIL) LUNCHEON AND ALUMNI PANEL

12–2:30 P.M. | Cervantes and Velasquez Room, 3rd floor Bay Tree building

Connect with current students and listen as fellow alumni share their experiences and advice. SAIL offers a culturally relevant and community-oriented approach to professional development for Asian American/Pacific Islander students.

## COMMUNITY STUDIES: "URGENT AND COMPELLING"

12–5 P.M. | Oakes College, 2nd floor

Community Studies has been called "urgent and compelling" for its commitment to connecting students with social justice work. This event showcases the program's continuing vitality and enduring significance through student-produced posters featuring field-study work.

## MERRILL MOAT DAY & ALUMNI/STUDENT MIXER

12–5 P.M. | Merrill College plaza

The Merrill Moat is a vibrant and rare artistic student public art installation. Reminisce on your time at UC Santa Cruz and hear stories about how Merrill has changed over the years, but also how great traditions remain the same.

## BANANA SLUG LUNCH—FARM FRESH, FAMILY STYLE

12:30–2 P.M. | College Eight courtyard

We're excited to see our alumni friends and family fill the stunning College Eight courtyard and enjoy a gorgeous farm-to-fork, family-style feast prepared especially for this event. Seats are limited, so please sign up early. Bundle the lunch with the evening wine reception for a discount. Cost: Lunch and wine reception combo: \$45; lunch only: \$30

## ACE IS 30—CELEBRATE WITH US ON THE 30TH!

1–4 P.M. | Engineering courtyard

ACE alumni and current ACE students are invited to visit our expanded space in the Baskin Engineering building, connect with friends, network with former ACE students, and meet the students who are building their STEM community.

## OPERS FIELD DAY

1:30–3:30 P.M. | OPERS East Field

Various activities will be available on the East Field, including Ultimate Frisbee, soccer, baseball, dodgeball, Hacky Sack, live Zumba, yoga, a rock-climbing wall, and kid-friendly activities. Snacks and refreshments provided. OPERS staff will present their programs and describe how alumni can offer support and get involved.

## RÉUNION FRANÇAISE

2–4 P.M. | Cowell Senior Commons

This event will bring together current and retired French faculty, students of French, and students who participated in the Nimes program, the Maison Franco-phone, and/or International Playhouse.

## UCSC BIOBLITZ 2

2–6 P.M. | Ken Norris Center for Natural History (Nat Sci. 2 239)

Bioblitz is a community-building event with the goal of rapidly inventorying the campus's biodiversity. There will be two different sessions (9 A.M.–1 P.M., Arboretum, and 2–6 P.M.) where alumni will meet as a large group, attend a brief training, then break up into groups to survey the campus.

## TEACH-IN 1: HOW TO CLONE A MAMMOTH

2:30–4 P.M. | Location TBD

Biologist Beth Shapiro will discuss her book, *How to Clone a Mammoth: The Science of De-Extinction*, in which she addresses the scientific and ethical challenges that confront any effort to bring back extinct creatures.

## TEACH-IN 2: THE POWER OF SELF-PERSUASION

2:30–4 P.M. | Location TBD

Elliot Aronson, celebrated professor emeritus of psychology, will discuss his research illuminating a powerful form of social influence in his talk, "The Power of Self-Persuasion: My 55 Years of Research in One Hour," covering the decrease of prejudice in schools, water conservation, AIDS reduction, and getting out the vote in the last presidential election.

## LAVENDER RECEPTION

3–5 P.M. | Lionel Cantú Queer Center, Merrill College

Join fellow GLBTIQ alumni, students, and the Cantú Queer Center staff for an informal, convivial gathering with hearty refreshments.

## SUNSET AND WINE—ALUMNI WINE RECEPTION

4–6 P.M. | Oakes lower lawn

Join us and your fellow alumni on the Oakes West Field, overlooking the beautiful Monterey Bay. We will enjoy light refreshments, beers, and delicious wines from locally owned wineries. Wrap up a day full of stimulating and invigorating activities while you relax and enjoy the gorgeous dusk lighting and leisurely mingling with your UC Santa Cruz friends and family. Cost: Banana Slug Lunch and wine reception combo: \$45; wine only: \$20

## MENTOR MATCH: A STUDENT AND ALUMNI NETWORKING DINNER

6–8 P.M. | University Center, Bhojwani Dining Room

Alumni are invited to join exceptional students from across campus to open a conversation about career paths, educational journeys, and more. We will seat tables by matching students and alumni based on career interests. Cost: \$35

## STEVENSON 50TH ANNIVERSARY COMMEMORATION

7–10 P.M. | Stevenson Event Center

Mingle with your fellow Banana Slug alumni and reminisce on your time at Stevenson, share stories, and reflect on the college's last 50 years. Enjoy musical performances as we applaud our anniversary! Cost: \$10

## SUNDAY, MAY 1

### CROWN COLLEGE ALUMNI BRUNCH

9:30–11 A.M. | Crown Provost House

Hosted by Provost Manel Camps, Crown alumni are invited to reconnect with UC Santa Cruz, catch up, and reflect on your time at Crown with old and new friends.

### MERRILL PROVOST BRUNCH

10 A.M.–12 P.M. | Merrill Provost House

Hosted by Provost Elizabeth Abrams, Merrill alumni are invited to reconnect with friends, get updated on college programs, and meet current students and hear about their experience. You'll also learn about new programs developed by the Merrill Society alumni association.

### COWELL PROVOST BRUNCH

10 A.M.–12 P.M. | Cowell Provost's lawn

Gather on the lawn of the beautiful Cowell Provost House, enjoy the company of the Cowell community, and mingle while reveling in the breathtaking views of the Monterey Bay. Following the brunch, we invite you to an intimate gathering of remembrance to honor all those who have passed in the last year.

## STEVENSON ALUMNI BRUNCH

10 A.M.–12 P.M. | Stevenson Provost House

Hosted by Provost Alice Yang, Stevenson alumni are invited to reconnect with fellow alumni, share stories, and enjoy a delicious meal. Wine, champagne, and non-alcoholic beverages provided.

## KRESGE ALUMNI BRUNCH

10 A.M.–12 P.M. | Kresge Provost House

Kresge alumni and friends are invited to reminisce on our unique history and discuss the renewal and rebuilding of the college. We are eager to connect with our alumni and to hear your perspectives and ideas.

## OAKES ALUMNI BRUNCH

11 A.M.–1 P.M. | Oakes Provost House/Oakes Learning Center

Join Oakes Provost Gina Langhout as we celebrate our Oakes family. We will also honor Oakes alumni from two major areas: recent recipients of the Don Catalano Distinguished Alumni Award for Outstanding Community Service, and those who have helped create the Oakes Ambassador Program. Cost: \$10

## ANNUAL CEREMONY OF REMEMBRANCE

11:30 A.M.–12 P.M. | Cowell Provost inner courtyard

Join Cowell College for the annual ceremony of remembrance during the Cowell provost brunch to honor all those who have passed in the last year.

## WE ARE WISER TOGETHER: IGNITING POSSIBILITIES THROUGH INTERGENERATIONAL CONNECTIONS

12–2:30 P.M. | Kresge Town Hall

Enjoy an afternoon of live music, free food, and World Café conversations about how we can be wiser together through collaboration across generations. Farm-fresh lunch, included with pre-registration, will be prepared by students and Chef Jozseph Schultz of India Joze.

## DIZIKES CONCERT

12:30–1:45 P.M. | Cowell College plaza

Enjoy live music as you reconnect with your fellow Banana Slugs. This year's theme is a.m.ERICANA!

## ROAD TO ZUNI: A DOCUMENTARY ON THE LIFE OF PROFESSOR LOKI PANDEY

1–3 P.M. | Crown Classroom 208

Professor Loki Pandey will be retiring this year after 43 years of teaching at UC Santa Cruz. The film will be followed by a discussion with Prof. Pandey; reception to follow at the Crown Provost House.

Visit [alumniweekend.ucsc.edu](http://alumniweekend.ucsc.edu) for maps, parking and lodging information, and to register!



## AN EMPOWERING DECISION

### BEV CRAIR'S MOTHER WAS HER BEST FRIEND.

"My mother," said Crair, "taught me to live a full and honest life."

Now, Crair (Stevenson '83, computer science and mathematics) is sustaining her mother's name, and helping gay, lesbian, bisexual, and transgender youth, with a \$50,000 pledge establishing the Ruth Bloch Crair Memorial Scholarship, an endowed fund for students at the UC Santa Cruz Lionel Cantú Queer Center.

Crair, vice president of Intel Corporation's storage group, decided, along with her wife, Lisa, to name the chair after Ruth Bloch Crair, in part because she has such vivid memories of coming out to her mother.

When Crair told her mother she was a lesbian, "She was pretty upset. Her concern was, 'You will live a hard life,'" said Crair. "But I remember telling her at the time that I couldn't not come out

because I wouldn't be living the Jewish values that she and my father taught me. I knew that I had to be my full, authentic self."

That difficult but ultimately empowering conversation was on her mind when she decided to give to an on-campus organization that provides an open, safe, inclusive, intercultural space, promoting education about all genders and sexualities.

Crair thought it was fitting to use the endowment to help new generations of students speak their own truth. She also thought it was a beautiful way to honor her mother, who died in 2004. Crair, who is Jewish, referred to a saying associated with Judaism: "May their memory be a blessing."

"This way, it lets her memory be a blessing for a lot more people than just her family," Crair said.

—by Dan White

### RECENT GIFTS TO THE CAMPAIGN FOR UC SANTA CRUZ

#### A boost for stellar students

A gift of \$400,000 from retired UC Santa Cruz astronomy researcher Arnold Klemola establishes the James Keeler Fund for Excellence in Astronomy and Astrophysics to support graduate student research.

#### Diversifying environmental conservation

A \$2 million gift establishes the Doris Duke Conservation Scholars Program. Funded by the Doris Duke Charitable Foundation, the program is designed to increase diversity in environmental conservation (see page 4).

#### A crowd funds Smith Society scholarships

Using the [crowdfund.ucsc.edu](http://crowdfund.ucsc.edu) platform, friends of the Smith Renaissance Society raised \$39,400 from 168 donors in 30 days, funding scholarships for students who lack traditional family support systems.

*These and all gifts count toward the Campaign for UC Santa Cruz.*

#### THE CAMPAIGN FOR UC SANTA CRUZ

This fundraising effort supports excellence across the university through increased private investment in the people and ideas shaping the future. It is bringing critical new resources to each academic division, the library, and to signature initiatives in the student experience, genomics, coastal sustainability, data science, and at the intersection of the arts and sciences.

#### LEARN MORE [campaign.ucsc.edu](http://campaign.ucsc.edu)

Questions? Contact Campaign Director Rebecca Levy at [rebeccal@ucsc.edu](mailto:rebeccal@ucsc.edu) or (831) 459-1365.



# BUILDING A LADDER TO A CURE

A cancer diagnosis used to be a death sentence for children. Now UC Santa Cruz researchers are opening a new front in the battle against the disease.

## THERE CAN BE NO MORE HEARTBREAKING

diagnosis for a child than that of cancer. It doesn't seem possible—or fair—that someone so young can be afflicted with a disease we often associate with aging.

And yet, cancer kills more children in the United States than any other disease.

A cancer diagnosis used to be a death sentence for young children. Doctors could offer very little to their youthful patients, aside from words of comfort.

But a team of researchers from the UC Santa Cruz Genomics Institute is using a unique combination of high-tech networking and data sharing to open up a new front in the battle against pediatric cancer, while looking into effective, targeted alternatives to the harsh treatments of the past.

"Using genomics to help guide therapy in a patient is not new," said Olena Morozova, a postdoctoral scholar at UC Santa Cruz's Center for Biomolecular Science and Engineering, and a lead researcher for California Kids Cancer Comparison, a project that aims to fight pediatric cancer by comparing cancer data from young patients across the globe. "What is new is our vision to share and consolidate all the cancer genomic data so that we can use the knowledge and the world's data for the benefit of each new patient. We are literally learning and improving our approach with every patient."

This cancer comparison project is a clinical pilot for the UC Santa Cruz Genomic Institute's ongoing Treehouse Childhood Cancer Project, which supplies oncologists with genomic data that will help them choose targeted

treatment options for cancer patients.

The "Treehouse" name comes from Lu Haussler, wife of UC Santa Cruz Distinguished Professor of Biomolecular Engineering David Haussler. She chose it as a visual metaphor for a branching project that is also a house, or destination, for gathering and sharing all pediatric cancer genomes.

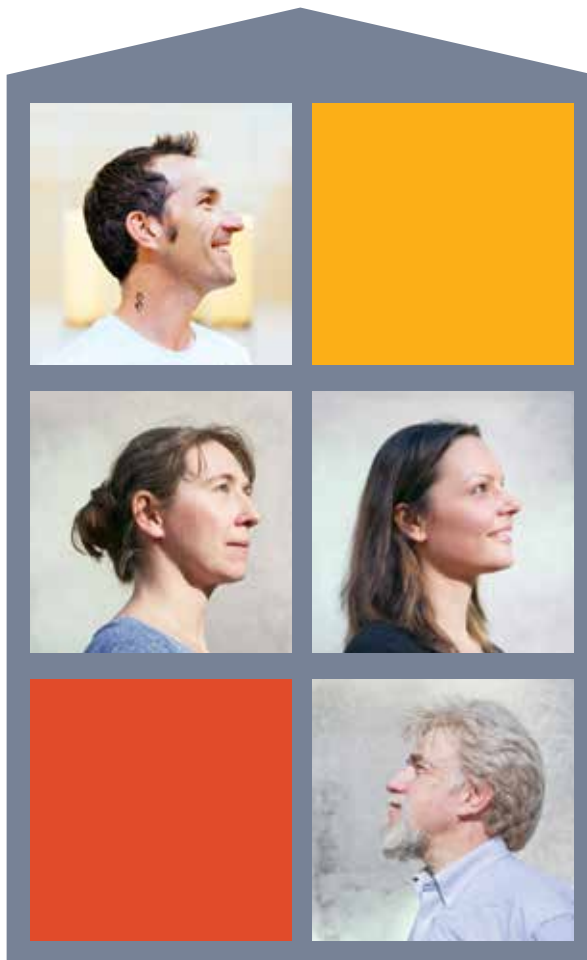
"The long-term dream for the oncology field is to eventually replace all the aggressive, brute-force therapies like chemo and radiation with therapies tailored to the cells inside a patient's cancer," Morozova said.

## Seeking a cure for 'incurable' cancer

Morozova did not expect the research-based cancer project to apply to a clinical setting anytime in the near future. But last year, when Morozova and her teammates began to study the genes of a rare sarcoma growing inside the lungs of an 8-year-old boy whose family had exhausted all the standard treatments, the project expanded its scope. Suddenly, the Treehouse was in a position to save a life—not at some distant point in the future, but right away.

The boy's doctors had given him the usual battery of "standard aggressive therapy" including chemotherapy, radiation, and a bone-marrow transplant, but it was not enough to stop the tumor from returning two years later. "The patient was out of treatment options and pretty much going on hospice," Morozova said.

That spring, a new clinical trial at the British Columbia Children's Hospital in Vancouver gave the boy and his family a reason for cautious optimism. The trial



Clockwise from top left: Josh Stuart, professor of biomolecular engineering; Olena Morozova, postdoctoral scholar; Ted Goldstein, alumnus and UC Santa Cruz Foundation trustee; Yulia Newton, Ph.D. candidate

explores the use of genomic analysis as a pathway to treatments that doctors had not yet considered. The boy's doctor asked the Treehouse team to scan through the genetic material extracted from cancer patients all over the world and do a "cancer comparison approach."

Ph.D. candidate Yulia Newton, a key researcher on the Treehouse team, said that when researchers look at a tumor in relation to "a larger cohort" of tumors, it is possible to pinpoint certain signatures in the cancer, with high-tech assistance from a tumor map program that is quite similar to the look and feel of Google Maps. Instead of exploring streetscapes, it peers into the cartography of diseases.

The researchers examined the genetic material in the tumor, with the key computational analysis provided by Newton, who works in Professor Josh Stuart's

bioinformatics lab. Stuart said the detailed maps of tumors can sometimes yield valuable "signposts" that clinicians can use for clues to suggest treatments.

After this process, researchers can then build detailed tumor maps that suggest relationships between tumors. This information can help clinicians identify the best treatment for a particular patient's tumor.

That is what happened after the Treehouse researchers ran data from the Vancouver patient. In the process, they discovered that his tumor was similar to another kind of pediatric tumor. Because there are common properties or pathways affected in cancers, the same treatments can work in multiple patients, even if their diagnoses, and the organs where the cancers occurred, are different.

"Since all of us are different genetically, the cancers we get, even if it is the same exact diagnosis, are different, too," Morozova said. "No two cancer patients are exactly identical, and we really need to read the genetic code of a patient's tumor to fully understand the disease in each patient."

Armed with this new information, the oncologist in Vancouver decided to hit the child's sarcoma with two FDA-approved drugs that had been used in adult lung cancer and blood cancer patients but are not typically considered for a pediatric sarcoma patient, Morozova said.

The Treehouse project has heard that the boy, as of late summer, was doing well. "The clinical trials and the boy have already affected the direction and the scope of the Treehouse project dramatically," Morozova said.

### Looking toward the future

In their comparative cancer project, UC Santa Cruz researchers have a valuable tool at their disposal: MedBook, a high-tech "workbench" for cancer data analysis.

Informally known as "the Facebook of Cancer," the application brings together the findings from patient tumor samples and connects scientists to help them work collaboratively while matching patients with targeted treatments.

"Using big data along with big (computing), our group can decode the molecular nature of cancer," said alumnus Ted Goldstein (Stevenson and Oakes '83, computer and information sciences; Ph.D. '13 bioinformatics/ biomolecular engineering), who is also a UC Santa Cruz Foundation trustee. Goldstein is assisting the Treehouse project.

MedBook was inspired by modern web metaphors of social networking and content sharing pioneered by Facebook, enabling clinicians and researchers to rapidly analyze and treat an individual patient's cancer.

Meanwhile, the genomic databases and intellectual firepower at the UC Santa Cruz Genomics Institute is also serving as a foundation for Treehouse's work. Major technological breakthroughs in DNA sequencing—including the historic full mapping of a human genome at UC Santa Cruz in 2000—allow researchers to “read” DNA like never before and share their information with oncologists.

### A resourceful enemy

The Treehouse pilot project is part of a wider effort to use genomic analysis against tumors that are now thought to be incurable. Treehouse will build on pediatric clinical trials, similar to the one in Vancouver, popping up across the nation.

Such projects are one reason why childhood cancer in the 21st century is not quite as devastating as it would have been in the 1950s.

Cancer is a genetic-based disease that arises from defects in human DNA. This damage to the DNA can happen over a lifetime of exposure to toxins or result from other causes, such as inherited mutations and environmental factors that result in an error in normal development.

About one in 300 children in the U.S. will get cancer by the time they are 20 years old, Morozova said. Childhood cancer consists of at least 12 unique diseases including brain tumors, sarcomas, neuroblastomas, and various kinds of leukemias and lymphomas.

About 50 years ago, only one out of every 10 children diagnosed with cancer could expect to survive longer than a couple of months. Today, doctors expect 80 percent of children to survive at least five years past diagnosis.

But there is much work to be done.

“When people hear the 80 percent survival statistic they immediately think that the pediatric cancer problem is solved, which is absolutely not the case,” Morozova said.

She points out that doctors ramped up the survival percentage by using heavy-duty treatments that can have “devastating long-term consequences,” including, in some cases, fatal secondary cancers caused by the treatments.

Even now, some cancers remain unbeatable. A type of brain cancer called diffuse intrinsic pontine glioma (DIPG) is uniformly lethal. DIPG—which killed astronaut Neil Armstrong's daughter—is as deadly now as it was a half-century ago.

Oncologists also face another daunting challenge: If children undergo an aggressive therapy regimen such as radiation but the cancer reappears anyhow, that resurgent disease is usually fatal. Such hard-to-treat patients are now the primary focus of the California Kids Cancer Comparison initiative.

The team's goal is to bring genome-based medicine to every child with “difficult-to-treat” or terminal cancer.

These children are “completely out of treatment options today,” said Morozova.

“Eventually we would like to bring genomics to every child with cancer at diagnosis, but the more immediate goal is difficult-to-treat patients,” Morozova said.

“We would like to start with them.” ■



# CROSSING BORDERS

At UC Santa Cruz, the Latin American and Latino Studies Department is breaking boundaries and creating thought leaders

## EDHER ZAMUDIO VASQUEZ

sits in a sunny courtyard at UC Santa Cruz's Merrill College, remembering his first years as an undocumented immigrant in the U.S.

Arriving in San Francisco at 15, he says, he struggled to learn English and finally mastered the language by joining a swim team at a Boys & Girls Club. He watched his mother, once a successful businesswoman at Procter & Gamble in Peru, get up each morning to work a series of jobs, eventually becoming a house cleaner.

He also learned the ways of the undocumented: how to avoid drawing the attention of police, how to get a job without the right papers, and even where to go to file your income tax so you still flew under the radar of immigration officials.

Zamudio Vasquez, who now has a green card, grins and reworks a quote from one of his early professors about his Americanization. "Peru," says the 26-year-old, "is my dear mother who I will love until the day I die, but the United States is my current affair."

And yet, one of the things that continues to confound Zamudio Vasquez is the way America uses race as a way to identify and divide people, which was different from how he was raised in Peru.

In his American high school, for example, students segregated themselves into distinct ethnic groups. Zamudio Vasquez also noticed that when he walked into a taqueria with a friend from Mexico, he would be addressed in English because his skin was light while his darker-skinned friend was greeted in Spanish.

Because of this, Zamudio Vasquez said, he was simultaneously excluded because he did not look Latino and included when he spoke Spanish.

It's that question of racialization that drew Zamudio Vasquez to UC Santa Cruz, where he is pursuing a doctorate in the country's first Ph.D. program in Latin American and Latino studies. He plans to write his dissertation comparing the experiences of Peruvian immigrants in Stockholm with those in San Francisco, and then go on to teaching.

"He is going to be a wonderful professor," says Latin American and Latino Studies Chair Pat Zavella of Zamudio Vasquez. "He has experienced (what he is researching) and not just observed it. That kind of rich perspective will allow him to teach about immigration in a way that is very helpful to students."

## Building a bridge

UC Santa Cruz's Latin American and Latino Studies Department began its life in the 1970s as a Latin America studies program. But, as it is with UC Santa Cruz's penchant for boundary crossing, discussions with faculty teaching Chicano studies courses soon created a bridge between the two fields.

By 1994, the program was officially renamed Latin American and Latino studies, reflecting the growth of the Latino population in the U.S. and a need to understand the experience of Latinos in this country, including an examination of why people were migrating and why some stayed behind. In 2001, the program received departmental status, allowing students to look at issues like globalization,



Edher Zamudio Vasquez is pursuing a doctorate in UC Santa Cruz's Ph.D. program in Latin American and Latino studies, the first of its kind in the U.S.

transnationalism, and the way immigrant groups re-created their cultures in the U.S. yet retained ties to their home communities.

In 2014, the department took the next big step. It admitted its pioneer cohort of students to a Ph.D. program in Latin American and Latino studies, the first of its kind in the United States.

Department Chair Zavella settles into her book-lined office, her phone ringing, her next appointment looming, and talks about the evolution of UC Santa Cruz's Latin American and Latino Studies Department. This year, it will celebrate its 15-year anniversary, "its quinceañera," she says.

In many Latin American cultures, a quinceañera is a celebration of a girl's 15th birthday and her transition from childhood to adulthood.

"Organizing a doctoral program is an indication that, institutionally, you've come of age," Zavella says.

### A growing influence

One can get a taste of the growing influence of Latinos on U.S. politics, economics, and culture simply by looking at a few numbers.

**17 percent of all Americans currently identify as Hispanic or Latino, according to the U.S. Census Bureau. That makes Latinos the nation's largest ethnic minority.**

**Hispanic-run businesses contribute almost \$500 billion in economic activity each year, according to a 2015 report from the Congressional Joint Economic Committee. Latinos are also 1.5 times more likely than**



Latin American and Latino Studies Chair Pat Zavella

**the general population to become entrepreneurs.**

**This year, analysts are warning that in order for the GOP to win the White House it will have to grab a whopping 42–47 percent of the Hispanic vote.**

It is this changing face of the U.S. that is making the study and understanding of the Latino experience even more relevant today.

But, according to Zavella, the influence of Latinos on the U.S. is also shaped by what goes on in Latin America. From the effects of trade agreements to tourism development and political shifts, what happens in Latin America does not stay in Latin America—especially since Latinos continue to be one of the

main sources of immigration growth in the U.S.

That cross-border effect is why, Zavella says, it's imperative for UC Santa Cruz's Latin American and Latino Studies Department to take a unique, transnational approach to its teaching and research.

“Some people say there is plenty to research here (in the U.S.),” Zavella says, “but I'm more in line with those who feel that what goes on in Latin America very much shapes peoples' experiences here and that U.S. foreign policy is profoundly influential in Latin America.”

That transnational approach is also apparent in the greater UC system with a new UC–Mexico

Initiative that provides an opportunity for faculty exchanges, research opportunities, and scholarly activity between the University of California and institutions in Mexico.

Zavella's own research for her latest book, *I'm Neither Here Nor There: Mexicans' Quotidian Struggles with Migration and Poverty*, for instance, took her into immigrant communities along the Central Coast of California, where she found migrants coping with the displacement from their homeland, the changing roles in their families, and a loss of a sense of belonging. Her book tells stories of the Mexican woman she met who had a master's degree in social work but was flipping burgers at

McDonald's, of female immigrants who struggled to balance their traditional role of raising children with the need to work outside the home, and of those women who felt the tug of their homeland but also the draw of greater freedoms in the U.S.

Research like this is what drives the Latin American and Latino studies faculty who are examining topics from transnational feminism to the history of assimilation and pro-immigrant organizations. It also fuels study by the program's first graduate students who are investigating queer migration and phenomena like Latino sororities and fraternities, which rose out of Latinos' entrance into higher education.

On May 6, an international conference titled “Rethinking Migration,” will be held at UC Santa Cruz. It is being led by the Chicano Latino Research Center and several faculty from the Latin American and Latino Studies Department.

“We are absolutely pushing the boundaries in terms of research,” Zavella says. “If you look at other Chicano/Latino doctoral programs, some of them are very U.S.-centric without the transnational approach we do, which makes us stand out.”

## Creating thought leaders

It wasn’t until she was older that Candy Martinez, 27, began paying attention to her indigenous roots. Born in Southern California to Mexican-immigrant parents who worked jobs in the food service industry and in public schools, she attended Amherst College in Massachusetts.

There, she took a class on Chicano film and became interested in how Latina and indigenous women were portrayed in the media. Her burgeoning curiosity about her Zapotec

roots then led her to UC Santa Cruz, where she is now doing research on how filmmakers tell stories about the collective trauma of indigenous people.

“I’m interested in how filmmakers work with communities to make sure they get their stories told,” Martinez says.

A doctorate will allow her to teach at a university or community college and expose students to the same topics that awakened her interests and which are often ignored at more traditional campuses, she says.

“Considering the importance of Latin America and Latinos in the U.S. and their influence and engagement with the country, being able to create thought leaders is absolutely essential to the welfare of our state and country,” says Pablo Reguerin, executive director for Retention Services and Educational Opportunity Programs at UC Santa Cruz.

“Ph.D. programs cultivate the people who will write and create knowledge in that area,” he says. ■

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

## UC Santa Cruz: A Hispanic Serving Institution

When UC Santa Cruz opened its doors in 1965, there were few Latinos among its first 652 students. Today, Latinos make up nearly 31 percent of undergrads on campus, with the result that, in 2012, UC Santa Cruz became a Hispanic Serving Institution, or HSI.

A university earns the designation, and the opportunity to join the Hispanic Association of Colleges and Universities, when 25 percent or more of its enrollment is made up of Hispanics/Latinos.

Federal HSI designation followed for UC Santa Cruz in 2015 and brought \$3.6 million in grants. The funds are being used to increase graduation rates for Latino students, which currently fall below those for white students (71 percent compared to 79 percent). Among the new initiatives are shifts in the way a required math class will be taught, help with writing, parental outreach, and a collaboration with San Jose City College.

“It’s not that they graduate at a lower rate because they’re Latinos,” says Pablo Reguerin, executive director for Retention Services and Educational Opportunity Programs at UC Santa Cruz.

“The reason is due to under-preparation. Race and poverty often do go hand-in-hand,” Reguerin says. “These students may come from under-resourced schools with lower academic rigor.”

The resulting preparation gap, combined with institutional expectations on UC campuses, can cause students to falter. A UC Santa Cruz task force spent months coming up with a four-pronged plan to increase success for these students, including changing the format of the campus’s Math 2 algebra class from a large lecture format to an active learning experience.

Writing seminars for incoming students and regional family workshops that will help develop strong support for students at home and engage parents in the university are also planned.

In addition, UC Santa Cruz will work with San Jose City College using a combination of tutoring, mentoring, teaching research skills, and advising in order to help students complete their bachelor degrees on time.

“Given the changing demographics in California and considering our goals around diversity and excellence, we can’t have institutional success without Latino success,” Reguerin says.

“This is not a UC Santa Cruz Latino success project. This is a UC Santa Cruz success project,” he continues. “This is about supporting students through education to build a middle class.”



## Anil Ananthaswamy: Self-aware

Anil Ananthaswamy treaded cautiously across the lake ice, the worn soles of his leather shoes providing little traction as he tried to avoid the cracks in the meter-thick ice. Below the ice lay the frigid depths of Lake Baikal, a 400-mile-long body of water in southeastern Siberia.

This forbidding landscape where winter temperatures regularly plunged below zero was not a place where the India-born, former software engineer might have envisioned himself when he gave up a lucrative tech career to study science communication at UC Santa Cruz in 1999, obtaining his certificate in 2000.

But it was where a story about the hunt for subatomic particles called neutrinos had led him, and so Ananthaswamy followed—onto the dangerous terrain.

It is that willingness to explore and ask questions, even when it is uncomfortable, that has marked Ananthaswamy

as a respected science journalist who is a regular contributor to *New Scientist* magazine and also resulted in praise for his most recent book, *The Man Who Wasn't There*, which explores how our brain and body create our sense of self. Ananthaswamy was interviewed about the book on NPR's *Fresh Air* in July.

"It's never boring," says Ananthaswamy, 52, of his life as a science writer, "or, more positively, it is always exciting."

Ananthaswamy's stories have taken him deep into mines and to mountaintops in Chile. They have led him to observe long-duration balloon launches from the Ross Ice Shelf off Antarctica, and he has reported on drillers using boiling water to drill 2.5 kilometers into the ice at the South Pole to build the Ice Cube neutrino telescope.

But it is his newest tome that has drawn the widest attention, with comparisons to the late neurologist and author Oliver Sacks.

In the book, Ananthaswamy follows his longtime interest in our sense of self to explore what happens to the self in conditions like Alzheimer's, schizophrenia, and autism. He also delves into disorders that tangle notions of the self, including a syndrome in which its sufferers—despite being told they are very much alive—believe with all their heart that they are dead.

Ananthaswamy's research also took him into the world of Body Integrity Identity Disorder, where he met a man named David who believed his leg was not his own. David was so tormented by this certainty, he traveled overseas to have his leg amputated.

Witnessing a man voluntarily lose his leg was unnerving for Ananthaswamy, and yet he did not doubt David's reality—rather, he tried to understand his suffering and the reasons behind such deeply held convictions and perceptions.

"And I think the fact I accepted that made a difference in how open they were with me," he says of those he interviewed for the book.

In the end, as Ananthaswamy explains, our sense of self is multi-layered, the product of varying parts of our brains working with our bodies to give us a sense of who we are.

It was Ananthaswamy's "need to tell stories" that brought him to writing, he says, but it was the lessons he learned about the rigors of reporting and journalism in UC Santa Cruz's year-long Science Communication Program that gave him a career.

"Santa Cruz feels like a campus that takes chances," Ananthaswamy says. "For me, it was taking a big chance to give up a career in software and move into something like writing, and so it seemed like the perfect campus to make my transition."

It's a decision, he says, he's never regretted.

By Peggy Townsend

Looking for Alumni Notes? They're now exclusively online. Find them at [magazine.ucsc.edu](http://magazine.ucsc.edu).



## Chris Brown: Street wise and book smart

The bullet ricocheted off a wall in the Imperial Courts housing project in Watts and headed toward a group of teens. It passed through the bushy Afro of a boy named Gregory Chris Brown, missing his skull by millimeters.

It was not the first time Brown was shot at or faced down a knife. He'd been raised in Watts Willowbrook after all, the son of a woman who was only 13 when he was born.

But, Brown says, it was the closest he ever came to death and is one of the reasons he not only teaches criminal justice at Cal State Fullerton now but also works to end the gang violence on the streets of Los Angeles.

In August, the 56-year-old Brown was recognized by L.A. Mayor Eric Garcetti for the work he does with the Southern California Cease Fire Committee, an anti-gang violence coalition.

"The only difference between me and a gang member is that I chose to get an education," Brown says.

Brown (Oakes '81, sociology) is 6-foot-3 with a deep radio-announcer voice and a penchant for wearing suits and ties to work.

"I've got over 40 suits, 75 ties, and 15 pairs of shoes," he says with a rich laugh. "My closet is bigger than my wife's."

It's far cry from the way he grew up.

His mother was 12 when she was impregnated by an older man and was 16 when she married Brown's stepfather. She worked as a janitor and at convalescent homes. Brown, whose first job was selling candy door-to-door at the age of 10, says he sometimes made more money than she did.

She was "a strong woman, a godly woman," Brown says, but could be as tough as a drill sergeant.

It was his fear of her displeasure and also his love for learning that kept him out of the gangster life, he says.

Introduced to UC Santa Cruz through the Educational Opportunity

Program (EOP), he found mentors in Oakes College founding provost J. Herman Blake and the late writing lecturer Don Rothman. It was also where he met his wife of 31 years, Nora Lake-Brown (Oakes '81, economics and environmental studies).

Today, Brown teaches criminal justice courses at Cal State Fullerton and does research into gangs, including a study of the sometimes-violent effects of social media on gang life.

He doesn't believe society can get rid of gang violence completely but says "if we, as a society, can invest more energy into things that ameliorate some of the problems in poor urban areas—poor schools, poor nutrition, lack of jobs—we can go a long way toward eliminating gangs."

Brown is a walking advertisement for the idea of investing energy in others. Besides volunteering as a church elder and serving on the boards of various nonprofits, Brown

is just as likely to bring home a stranger in need.

"I guess he has a big heart for people," his wife Lake-Brown says. "He's just one of those people who will always stop to help somebody. I think a lot of it is his faith in God."

Nearly every year since 1977, Brown also has served as an usher at the Oakes College graduation, parting the crowds to lead the processional.

"For me, seeing Chris every year at commencement is really a renewal of our shared commitment to the type of powerfully transformative education that Oakes represents," former Oakes Provost and Professor of Literature Kimberly Lau says.

"People always ask me why I'm so happy, and my response is: Life is beautiful, and every day I wake up is a blessing," Brown says. "...God saw fit to put me in this place, and I'm happy as heck about it."

*By Peggy Townsend*

## A new era for alumni

—by Chancellor George Blumenthal

Our 50th anniversary celebration last year was a great success. We invited you to the party, and you came.

You might think that we'd just tidy up after the festivities and get back to business as usual. Nothing could be further from the truth.

We want to invite you to more than a party. We want you to be a close member of the UC Santa Cruz family. And because of that, we've made major changes to the UC Santa Cruz Alumni Association.

I'm happy to announce that all alumni now have free, unlimited access to the services and support of the UC Santa Cruz Alumni Association. No dues. No barriers.

We've made this change to help build connections between our 100,000 alumni around the world—a global community of Banana Slugs. We

are making it easier for graduates to network—and to spark, or rekindle, friendships.

We've also heard from alumni that they want to support current students and recent graduates as they navigate the transition from college to career. Our new online Career Advice Network (CAN) connects alumni with students by profession to promote mentoring and conversation. Visit [ucsc.edu/can](http://ucsc.edu/can).

From the moment students arrive at UC Santa Cruz, they will join a vast, open community that will support them for the rest of their lives.

See page 12 and/or [alumni.ucsc.edu](http://alumni.ucsc.edu) for more information about these changes and the benefits and opportunities of your membership.

Welcome to the family, Slugs! With the power of the alumni network behind you, you can accomplish almost anything.



# A literature professor's legacy



*Above:* Priscilla “Tilly” Shaw was a pioneering faculty member on our campus. She died in 2015 at the age of 84. Her gift benefits the George P. Hitchcock Modern Poetry Fund at Porter College and Shakespeare Performance—Support and Research at UC Santa Cruz.

Literary scholar and poet **Priscilla “Tilly” Shaw** graced the Literature Department at UC Santa Cruz for three-and-a-half decades. As a professor emerita, she continued her involvement in the subjects she loved and in the campus community that was her home.

Tilly was intimately involved in the study and advancement of modern poetry and Shakespeare on campus. Through a legacy gift to programs in these areas, her impact will continue to be felt.

## Your Legacy is Our Future.

If you have included UC Santa Cruz in your estate plan, please contact the Office of Planned Giving at (831) 502-7112 or [gift.planning@ucsc.edu](mailto:gift.planning@ucsc.edu).

# ARE YOU GAME?

**ON MAY 11, 2016, WE WILL HOLD OUR FIRST EVER GIVING DAY—**

a 24-hour online fundraising drive to support UC Santa Cruz students, faculty,  
and programs.

You can join the fun by making a gift on May 11, and by spreading the word about  
Giving Day and UC Santa Cruz as game day draws near.

**JOIN IN THE SPIRIT — AND FUN — OF GIVING!**

**Keep up on our plans at [givingday.ucsc.edu](http://givingday.ucsc.edu)**



**GAME ON  
GIVE ON**

**GIVING DAY AT UC SANTA CRUZ ★ MAY 11, 2016**

ALL GIFTS COUNT TOWARD THE CAMPAIGN FOR UC SANTA CRUZ.