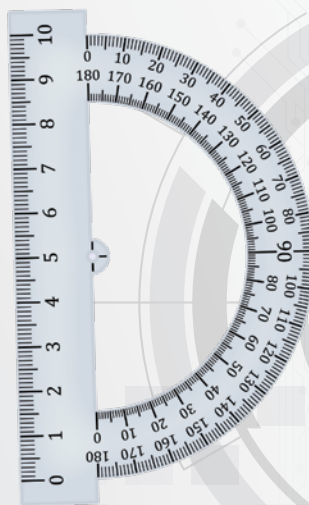


UCDAVIS

College of Letters and Science

FALL 2017

Making



Real



Making a Better World

The College of Letters and Science puts liberal arts education at the heart of the comprehensive excellence that defines UC Davis. Both in our traditional fields and in ever-evolving new degrees and disciplines, our faculty and programs are dedicated to distinguished research and creative excellence, engaged learning, and outcomes that change our world. With more than 40 percent of all undergraduates pursuing degrees across the liberal arts and sciences, we are proud to contribute to the nationally-recognized UC Davis tradition of access, excellence, and commitment to the public good.

OUR UNIVERSITY

The New York Times College Access Index ranked UC Davis third among all American universities for “doing the most for the American Dream.”

3rd

Washington Monthly magazine ranks UC Davis in top 10 among American universities for promoting social mobility and public good.

TOP 10

The Wall Street Journal/Times Higher Education ranks UC Davis as the sixth best public university in the country, and is one of only eight public schools in the top 50.

NO. 6

OUR COLLEGE

The College of Letters and Science offers over half of all undergraduate majors at UC Davis.

- **53** majors
- **60** minors



Our newest majors include:

- Cinema and Digital Media
- Cognitive Science
- Design
- Marine and Coastal Science
- Pharmaceutical Chemistry

50 percent of undergraduates at UC Davis conduct research and creative projects beyond the classroom. Nearly a quarter of participants in the 2017 Undergraduate Research Conference were L&S majors.

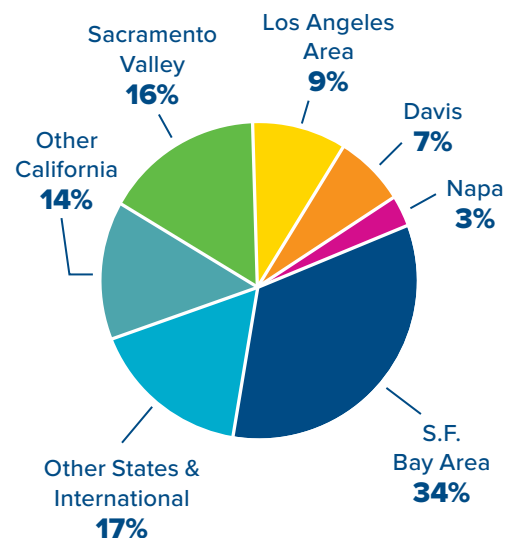


More than **12,000** undergraduates have a major in L&S:



- **32%** of L&S undergraduates are underrepresented minorities
- **62%** of L&S undergraduates are women

Nearly 80% of our alumni live in California. 17% live in other parts of the U.S.





Elizabeth Spiller, Dean
College of Letters and Science
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From the Dean



“A key priority for both the campus and college will be ensuring that UC Davis remains a leader in providing students with the knowledge and tools they need to make their communities and the world better.”

Putting the Liberal Arts at the Heart of our University

I AM PLEASED to share the 2017 issue of the UC Davis College of Letters and Science magazine. The stories we share reflect the vitality of a college on the move. While we can capture in these pages only a small portion of all that is happening across the college, we hope that you will come away with a deeper understanding of the vibrant intellectual breadth of our programs and a deep sense of pride in your alma mater.

We look to the future at a particularly exciting time in the life of the college and university. Our new chancellor, Gary May, has embarked on a year-long strategic planning process for UC Davis. As part of this larger initiative, the College of Letters and Science will likewise be building for the future over the coming year. This year, UC Davis was ranked 3rd in *The New York Times* list of “top colleges doing the most for the American dream,” and 9th in the *Washington Monthly* ranking of colleges and universities that contribute most to “the national good.” As we work with the 43 percent of all UC Davis students who are pursuing degrees in the College of Letters and Science, we are proud to make these levels of access and achievement possible across our disciplines.

A key priority for both the campus and college will be ensuring that UC Davis remains a leader in providing students with the knowledge and tools they need to make their communities and the world better. As a group, the departments across the College of Letters and Science pursue curiosity-driven research and knowledge that help us prepare students to be ethical and innovative leaders and responsible citizens who ask “why” at least as often as they ask “how” or “for what.”

I am eager to connect with as many of our alumni as possible and would love to hear your hopes and aspirations for the future of our college and campus. Please consider reaching out to me or to our program chairs and directors; be sure to visit us both online and in person. We have some amazing lectures, symposia, exhibits, and performances in the coming months, both on the Davis campus and in Sacramento. I hope you will join us.

A handwritten signature in blue ink, reading 'Elizabeth Spiller'.

Elizabeth Spiller
Dean, College of Letters and Science

Dean's Advisory Council



“To be successful as a university and as a college, to be the best we can be, requires everyone to participate. I say to my fellow alumni, give out of your passion; giving means coming back to campus, making donations, whatever you can do. I say this to the administration and faculty, too. Everything we do together is to create alumni. It's all about the students.”

– Darryl Goss, chair of the College of Letters and Science Dean's Advisory Council and executive trustee of the UC Davis Foundation

The Dean's Advisory Council is the primary volunteer advisory body for the College of Letters and Science, and is composed of civic, business, and education leaders drawn from the college's alumni, donors, emeriti, and friends. The council members act as ambassadors for the college and advise the dean on planning and implementing programs and initiatives.

CURRENT MEMBERS

Darryl Goss (B.A., African American studies, '83), Chair

Allison Lisbonne Amadia (B.A., political science, '89)

Kevin Bacon (B.A., political science, '72)

Brian Burwell (B.A., economics, '72)

Emilio Camacho (B.A., philosophy, '08, J.D., '11)

James David Cone (M.S., mathematics and physics, '10, Ph.D. '13)

Joan DePaoli

Dory Shaw Ford (B.S., agricultural and environmental sciences, '79)

Jackson Gualco (B.A., political science, '78)

Bret Hewitt (B.A., political science, public service and mass communication, '76, M.A., '83)

Diane Loranger, M.D.

Charles Louderback (B.A., history, '76)

Tim McCarthy (B.A., international relations and economics, '73)

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Curtis Rach (B.S., agricultural and managerial economics, '87)

Nancy Roe

Bob Rotstan Jr.

Joan Sallee

Patrick Sherwood (B.A., economics, '87)

Roy Shlemon

Lisa Walsh (B.A., economics and international relations, '78)

Learn more about the Dean's Advisory Council at ls.ucdavis.edu/get-involved/volunteer-leadership. Contact Charlene Mattison, assistant dean for college relations and development, at cmattison@ucdavis.edu or (530) 754-2225.



Young Alumni



Recent Graduates Take the Lead on Giving Back

WHEN LAUREN LEVIN (B.A., communications, '11) and Jacqueline Wells (B.A., English, '06) wanted to connect with a group of College of Letters and Science young alumni in the Bay Area and found no such group existed, they did what Aggies do: they made it happen themselves.

Now, after just a year, **the San Francisco Young Alumni Program of the College of Letters and Science** is off and running, with a board and several hosted events under its belt.

Young alumni—those who graduated within the last 15 years—are among the College of Letters and Science's most effective ambassadors and supporters.

As the college grows, so too do the ranks of our alumni. Our newest generation of alumni now make up 50 percent of the college's total 107,835 living alumni. They bring fresh insight to our understanding of the college's ability to prepare students for careers and success beyond college, and they infuse the college with a high level of energy and enthusiasm through their engagement in events, volunteer activities, and giving.

The Bay Area group hopes to support young alumni from the college through social and professional networking, mentoring, and a continuing connection to the college. Interested young alumni are invited to join in building this initiative by reaching out through the group's website at lssfya.ucdavis.edu.

Group co-leader Levin is particularly looking forward to building a group of alumni with different experiences and strengths. "One of the most striking qualities of Letters and Science graduates is their diversity," she said. "We want to showcase that diversity by encouraging everyone, from most recent grads to well-established alumni, to participate in our association."

To learn more about how to get engaged with young alumni, contact Ginny Hargrave, associate director of development and alumni relations, at vehhargrave@ucdavis.edu.

Music + Stats Add Up for Young Alumna

WHEN DEVON BRADSHAW (B.A., music and statistics, '17) was growing up in a one-bedroom apartment with a single mother in Hollywood, she spent over two years listening to her neighbor down the hall teaching the violin—and pleading with her mother for lessons.

“When my mom agreed, I began my journey of learning to play the violin. I went from feeling different as a little girl with divorced parents to finding myself among a community of artists at my high school. Playing music helped me cope with my childhood feelings and led me to feel embraced by a talented group of people,” she said.

Devon’s early musical experience and her love of numbers came together in her choice of a double major in music and statistics. Fresh out of college, Devon shares her thoughts on choosing her majors and her plans for the future.



Photo by Ciera Pasturel

From Where I Sit *by Devon Bradshaw*

As I moved into my freshman dorm, I had two main academic goals: get a degree in music, and get a degree in another field of interest. Since I had been playing the violin for 11 years by this point, and I remained incredibly passionate about music, a degree in music was an obvious choice for me. Discovering another area of interest seemed to be the more daunting task.

You never know how many times you are going to change your mind when UC Davis offers so many possibilities. The question is which opportunity do you take? To find my answer, I decided to dabble in different departments, thinking back to what fields interested me most growing up. After a couple of years jumping from psychology to cognitive science to computer science, plus consulting with friends over late-night talks, I landed in the lap of the statistics department.

When I started the statistics major, I tried to decide which industry I wanted to go into for

data analytics. One course in particular set me down my path: “Applied Time Series Analysis.” This course introduced me to techniques used to analyze trends and forecast future data.

As I took this course, I became curious about how I could apply my knowledge. I am interested in the effects of music education on childhood development, so I realized I could use these techniques to analyze the effects of an arts education on students’ academic careers. This sparked my desire to work with educators to use the arts to maximize each student’s experience and success.

From faculty to student support, the resources offered at UC Davis have been instrumental in shaping and solidifying my career goals. I will be forever grateful for these opportunities.

“I am interested in the effects of music education on childhood development.”

– Devon Bradshaw

Student Profile

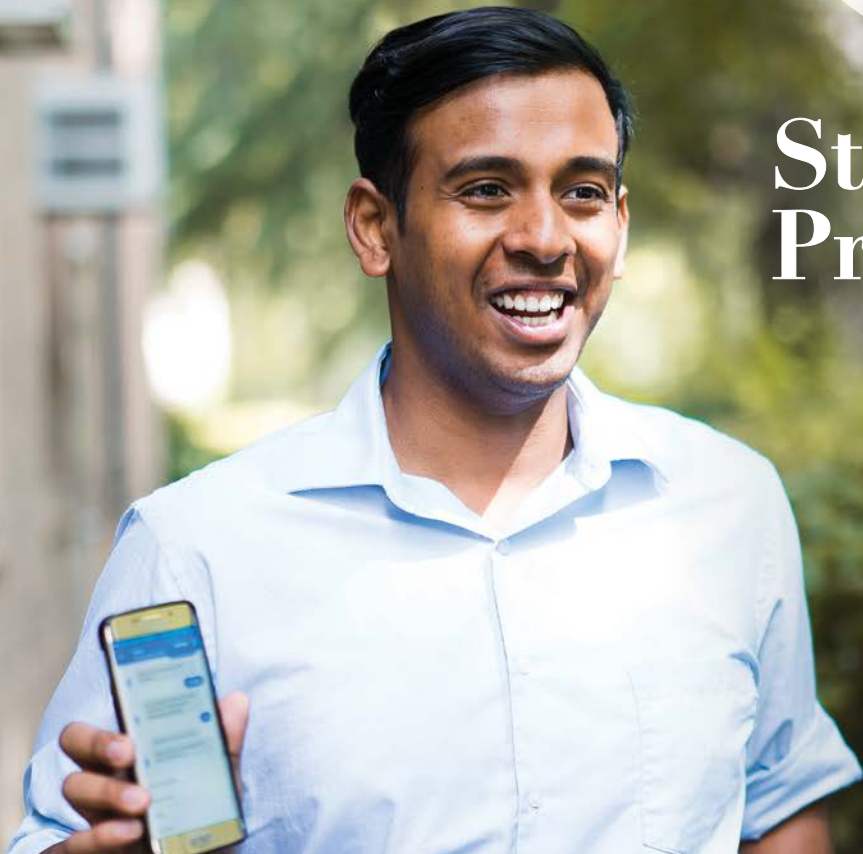


Photo by Nicholas Yoon

Economics Student Heads Tech Start-Up

by GERALYN MURRAY

International student Dhru Das (B.A., economics, '18) is one in a billion.

Dhru Das was only born 21 years ago in India, but has long been a uniquely focused talent. By the time Das was 13, he was running his own business building e-commerce sites, partnering with remote workers in India, Sri Lanka and Austin, Texas. Das took deep dives into researching Silicon Valley and its inner workings, eventually applying to UC Davis, a few hours away from the world-famous technology hub he had been studying for so long.

And despite his lifelong concentration on computer programming, he selected economics as his major with an eye on his future.

"I wanted to better understand how the economy works and how money and markets work. This understanding is very important to being an entrepreneur and building a startup," he said.

By the time Das reached his junior year, he and classmate Joshua Brown had developed the predecessor that would become Wazlo, an artificial intelligence-powered vetting tool that uses a conversational interface to screen potential job candidates. The partners found the combination of their UC Davis courses on machine learning and artificial intelligence, along with Das' business know-how, to be essential as they innovated the app.

"Wazlo replaces the resumé and the traditional recruitment process. You cannot hire someone from a resumé; people lie. With Wazlo, we can vet. We can develop an algorithm that measures quality of work, culture fit, and personality. If you don't get along with a person, no matter how smart he is, you can't work with him," Das said.



As for Wazlo's future, Das sees a bright one. He's focused on the app's potential to eliminate the muss and fuss of the current job application model.

Alumni Profile

Mother-Daughter Aggies Advocate for Civic Engagement

by GERALYN MURRAY

SABELLA ROMERO'S EARLY INDUCTION into political life occurred right here in Davis; she grew up in town while her mother, Mindy Romero, completed her undergraduate degree in political science and sociology, and eventually her Ph.D.

Today the two are both Aggies: Mindy is the founder and director of the California Civic Engagement Project (CCEP), housed in the UC Davis Center for Regional Change. Isabella graduated in 2017 with a degree in communication, a major she says has enriched her childhood experience in civil engagement with new tools.

"I study communication because social media has made skills like media literacy more critical than ever before," said Isabella, whose undergraduate research explored how social media might better involve youth in becoming more politically active.

As she looks to build on her mother's work in engagement and civic education, Isabella sees her honors thesis on social media and opinion leadership as a good first step.

"It's because of my mom that I found my passion studying new communication technologies, specifically social media, and how they have furthered engagement opportunities for youth and underrepresented communities," said Isabella. "She's an inspiration to me every day as she fights for more people to engage with politics."

It turns out that Mindy, too, has been preparing for this work since she was a young girl in Modesto, California.

"People in my community were not doing well. Elected officials were responsible for helping us, but I realized that hardly anyone in my community was voting," Mindy said.

From the high school classroom to the chambers of the California legislature to the U.S. Congress, Mindy's work with CCEP has informed young people and policymakers alike. Its impact has

both breadth and depth, as well as something else: tremendous personal connection.

After giving a TEDx talk in 2016 about the power of the youth vote, Mindy received over 150 tweets from Central Valley high schoolers inspired by her talk to raise their voices and to vote.

"These were students from a high school that is actually 28 miles from where I grew up. These students were me. And they were saying they didn't know students like them could do this," Mindy said. "I got to meet all of them and it was a privilege—just one of the biggest, most meaningful highlights of my work."



MINDY ROMERO
B.A., political science
and sociology, '01
Ph.D. sociology, '14

ISABELLA ROMERO
B.A., communication, '17

Photo by Eddie Ostrowski

Aggies at Work

UC Davis Prepped President of Fortune 500 Company for Life of Leadership

by Donna Justice



WHEN JENNIFER JOHNSON (B.A., physical education and economics, '87) entered UC Davis, she had dreams of playing on the women's basketball team. When she was cut, she didn't spend much time fretting about the loss. Instead, she joined Alpha Phi, and eventually served in student government and as a resident advisor.

Leadership seems to come naturally to Johnson, president of one of the largest global financial firms in the world, a rarity among the paltry 4 percent of Fortune 500 companies led by women.

At Franklin Templeton Investments, Johnson oversees more than 100 mutual funds and manages an international operation with offices in 35 countries and clients in more than 170.

She says the secrets to her success are an open mind and persistence, traits she honed while an undergraduate at UC Davis. "I got the opportunity to be a leader at UC Davis, made some mistakes, and learned from my experiences."

She also cites the sheer size and diversity of cultures and perspectives on campus and her ability to learn from and appreciate others' perspectives as an important foundation for her career at Franklin, where every day she must navigate different worldviews, even different kinds of boardroom cultures.

"At Davis, I met kids from all over the world. I got exposure to different views and became more open to other people's perspectives," she said. "It's healthy to be exposed to multiple views."

Finding value in the discovery of new ideas and in the perspectives of others has been the hallmarks of her "serendipitous" career path, according to Johnson, who cites the four "Ps" every great leader needs: people, passion, purpose, and persistence.

To read Johnson's full profile, visit

is.ucdavis.edu/profiles/alumni-profiles1/jennifer-johnson.html.

Math Alum Fashions the Perfect Fit With Quantum Computing

by Becky Oskin

When Sonya Berg (Ph.D., mathematics, '12) came to UC Davis to study quantum computing, she didn't know her training would lead her to Stitch Fix, an online retailer that delivers a personalized shopping experience. "I assumed that I would become a professor," she said. But Berg soon realized her interests were more suited to helping companies deliver a great customer experience. The combination of creative and analytical work at Stitch Fix appeals to Berg, who was a client before she starting working at the company. "I really relate to our target market," she said.

Stitch Fix's business model relies on data science experts like Berg to develop custom algorithms to match customers with clothes they will love. Currently, Berg is exploring what site experience would best resonate with a visitor who is seeing [stitchfix.com](https://www.stitchfix.com) for the first time.

"This is a huge open research question: what data do we even have for these visitors, and how does it relate to what they want to see on the site? This is where my math background really shines because it trained me to solve very nebulous open problems by chunking them into manageable pieces and solving each of them one at a time," Berg said.





“We didn’t even know we were a finalist.”

– Matthias Gafni



Photo by Jean Tyska/East Bay Times

Alumni Win Pulitzer and Peabody

by Kathleen Holder

Two College of Letters and Science alumni who got their journalism starts at *The California Aggie* won journalism’s highest honors this year—a Pulitzer Prize and a Peabody Award. *East Bay Times* investigative reporter **Matthias Gafni** (B.A., English/rhetoric and communication, '98) was a lead writer on a Pulitzer Prize-winning series of articles on Oakland’s deadly “Ghost Ship” warehouse fire (Gafni pictured above on left). **Michael Bott** (B.A., international relations, '07), an investigative producer for NBC Bay Area/KNTV, shared a Peabody Award for a series of reports on schools’ overreliance on police officers to discipline students.

Surprise Win

In awarding *East Bay Times* the 2017 Pulitzer Prize for Breaking News in April, the Pulitzer board cited the paper’s “relentless coverage of the ‘Ghost Ship’ fire, which killed 36 people at a warehouse party, and for reporting after the tragedy that exposed the city’s failure to take actions that might have prevented it.”

Gafni helped uncover that building inspectors had launched an investigation of illegal structures in the building just three weeks before the fire but had been unable to gain access. He also shared a byline on “The Last Hours of Oakland’s Ghost Ship Warehouse,” a narrative that takes readers inside the party-turned-tragedy.

Watching the Pulitzer Prize announcements online from the newsroom, Gafni and his colleagues were stunned to hear that they had won. “We didn’t even know we were a finalist,” he told *The Davis Enterprise*.

He is one of two UC Davis alumni on the *East Bay Times* news staff. **Angela Ruggiero** (B.A., communication/Italian, '10) also has contributed to the paper’s continuing Ghost Ship coverage.

You can find links to the winning stories at pulitzer.org/winners/staff-27.

Broadcasting’s Top Prize

The Peabody Prize-winning series on the misuse of school police officers followed two years of investigative reporting by Bott and colleagues at NBC Bay Area/KNTV.

The judges cited the team’s “tenacious efforts and hard-earned findings in uncovering a disturbing trend in student civil rights violations and for its contribution to the larger conversation about rebuilding trust between police and their communities.”

Bott began digging through data on student arrests at San Francisco Bay Area schools after learning about disproportionately high rates of arrests nationwide for African American students and children with disabilities.

The series, “Arrested at School: Criminalizing Classroom Misbehavior,” found a lack of guidelines and school-focused training for school police officers. One report told the story of a 13-year-old autistic boy who was arrested for vandalism after etching his initials onto a sidewalk at his San Jose school.

The investigation inspired policy reform efforts both at the state and national level.

Watch the series at nbcbayarea.com/investigations/Arrested-At-School-419472753.html.

Major Changes

Studying Communication in

by Kathleen Holder

For a glimpse of how much the Communication program has changed at UC Davis, consider the course CMN 170v “Digital Technology and Social Change.”

Not only is it offered online—hence the “v” in the course number—“Digital Technology and Social Change” comes with a three-minute trailer on YouTube. In his video, Assistant Professor Martin Hilbert, a former United Nations economic affairs officer who studies the effects of big data on society, sums up some of the ways the digital age is transforming our lives:

“It changes the way the economy works, including the labor market that you’re about to enter. It revolutionizes government and public administration. It modernizes cultural production, entertainment. It transforms the health sector. It changes the way people find and fall in love. It triggers political

revolutions. And, last but not least, it seems to be changing education—proof of concept being that I’m talking to you through a video recording.”

In these plugged-in, data-exploding times, Hilbert says it helps to have conceptual frameworks for understanding what’s going on today in order to participate in shaping the future.

That premise underlies more than just one course. It is the new direction of the Department of Communication. The department has adopted a future-forward approach to teaching and research—with the aim of becoming one of the nation’s leading programs in information and communication technologies.

“It’s what most social scientists would hope for in a communication program, but it’s not what most people who are outside the field would expect,” said Robert Bell, professor and chair of the Department of Communication.

From the Humanities to Social Science

The department’s name changes over the past three decades tell part of the story of its transformation: once the Department of Rhetoric, it became the Department of Rhetoric and Communication in the late 1980s, and the Department of Communication in the late 1990s.

When Bell arrived 31 years ago, he was the second social scientist on the faculty. Today, all Academic Senate faculty study communication processes through the lens of the quantitative social sciences, including computational social science.

Faculty members now teach courses like “Children, Adolescents, and the Media,” “Interpersonal Technologies,” “Social Media,” and “Video Games and Virtual Environments” in addition to the more traditional areas of interpersonal, group, organizational, and mass communication.

And their research involves sifting through data and experiments to study



Focused on new information and communication technologies, Communication at UC Davis is not your parents' major. And if you graduated before 2013, it's not exactly your major either.

the 21st Century

international communication networks, social networks in massively multi-player online games, peer production on Wikipedia, the use of mobile apps to treat depression, and online health communication, among other topics.

Katlyn Hanf, a senior communication major from Turlock who hopes to go into public affairs or marketing, found her niche in organizational communication and public relations classes. "I liked thinking about persuasive communication, that kind of thing."

When Hanf started at UC Davis, she thought she was going to major in an agricultural or environmental science. But she found herself gravitating towards humanities and social sciences courses, and loved communication for its breadth. This year, she is president of a new student communication club.

In addition to communication courses, undergraduates are now required to take statistics, either an introductory computer course or symbolic logic, and an array of social science courses (psychology, sociology, and either linguistics or anthropology).

"The vast majority of our majors also have taken calculus," Bell said. "We're not an easy major."

That sort of academic rigor posed no obstacle for Shengling "Wilburn" Wang, a senior from Shanghai who studied biological sciences and sustainable agriculture before deciding to double major in economics and communication.

Likewise, Wang said, the focus on communication technology is a natural

for him and other students. "It's part of our lifestyle."

Wang, who hopes to go into management consulting after graduating next June, recommends communication as a second major or minor for students in other social sciences, engineering, and natural sciences—"basically for everybody."

"I like it so much; I want to take more."

He's hardly alone. Communication has seen a 57 percent increase in undergraduate majors since the program changes began—with 884 undergraduate majors in winter 2017, up from 564 in winter 2013.

(continued on next page)



Major Changes

(continued from page 11)

During that same period, the academic faculty has grown by 50 percent and is increasingly international. The 15 ladder-rank faculty come from eight countries: the United States, Chile, China, Korea, Germany, Canada, Russia, and Poland.

In hiring new faculty, Bell said the department has competed successfully with such outstanding universities as The Ohio State University and the University of Texas, among the nation's leading communication programs. The department has also broadened its perspective in hiring; its most recent hire comes from the field of informatics.

One of the first graduates of a new communication doctoral program at UC Davis, in turn, is now a faculty member at Ohio State—reflecting, Bell said, the program's rising stature.

Undergraduates benefit from the department adding the Ph.D. program, says Jeanette Ruiz, who earned her bachelor's degree in rhetoric and communication in

1997 before joining the first cohort of communication doctoral studies. Ruiz, who completed her doctorate in 2015, is now a tenure-track lecturer.

"Having the Ph.D. program really helps the undergraduate program in two big ways," Ruiz said. "One, we are able to offer many more research opportunities to undergrads, and, two, we are able to focus on writing in some of the discussion sections of our courses."

"I feel this has always been a strong department, in one way or another," she said. "Currently, our department is at the forefront of where the field is going."

Michael Carter, who graduated last June with a bachelor's degree in communication, was among undergraduates pursuing research opportunities.

While taking a course on computer-mediated communication from Associate Professor Jorge Peña, Carter got an idea that led to his own honors project on how Facebook posts affect users' perceptions of themselves and other people.

This fall, Carter entered the doctoral program, where he intends to research internet addiction and its links to social anxiety.

Carter, who struggled with social anxiety himself while growing up in Castro Valley, said he would like to eventually help schools develop curricula and apps for improving students' personal interactions—whether online or offline.

"I want to be able to provide people with the tools they need to succeed socially," he said. "I feel digital technology is a means for accomplishing that ... I want people to connect. It's important for our psychological well-being."

Bell, an expert on health communication who holds a faculty appointment in the Department of Public Health Sciences in addition to chairing the Department of Communication, said the program's new focus is only going to become more relevant.

"This isn't a fad," he said. "Technology is going to become a more pervasive part of our lives. This is a fundamental change in the way humans communicate with each other because of technology."

Martin Hilbert



What manifestations of the quantum nature of our world are apparent and important at macroscopic scales?

What is the origin of space and time?

IN PARTICULAR, HOW DOES SPACE-TIME EMERGE FROM A MORE FUNDAMENTAL DESCRIPTION? HOW DID OUR UNIVERSE START AND WHAT IS ITS FATE?

What are the mathematical structures describing our world, and what novel surprises do they reveal?

QMAP

Rising Star: The Center for Quantum Mathematics and Physics

by Becky Oskin

EVEN BEFORE GALILEO confirmed that planets orbit the sun, mathematics played an essential role in understanding the universe. “Every breakthrough in our understanding of physics has been tied to new advances in math and often vice versa,” said Professor of Physics Andy Albrecht.

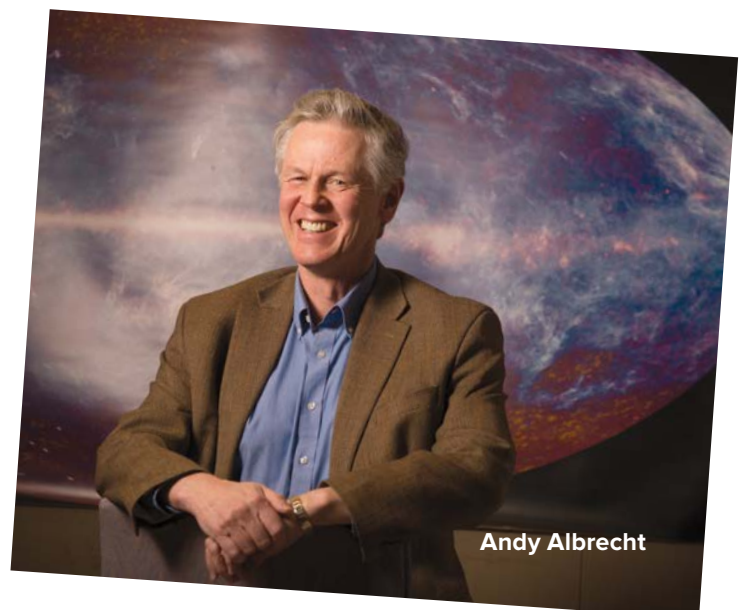
Recognizing the value of interdisciplinary research, the College of Letters and Science has long embraced collaborative efforts across disciplines. Now, with the Center for Quantum Mathematics and Physics (QMAP), the college is creating an extraordinary environment where mathematicians and physicists will work side-by-side to explore quantum field theory, string theory, and quantum gravity.

QMAP has a particular collaborative focus that is unique among the world’s theoretical physics institutes, said Professor of Physics Veronika Hubeny, one of the center’s first faculty. Founded in 2015, QMAP is moving forward with a physical location design that is conducive to creativity and vibrant exchange of ideas. The result will be both groundbreaking scholarship and engaging learning opportunities for students, said Albrecht, who was named director of QMAP in 2017.

For example, take the revolutionary work on particle interactions by Assistant Professor of Physics Jaroslav Trnka. As a doctoral student, Trnka and his advisor discovered a geometric object that dramatically simplifies calculations of particle interactions. Trnka found a way to express interactions (called scattering amplitudes) in terms of an amplituhedron, a many-dimensional polygon embedded in a geometrical space. By making the problem of particle interactions mathematical rather than physical, concepts like the amplituhedron could help

researchers unify quantum mechanics and Einstein’s general relativity.

QMAP will also host an active visitor program, with seminar series, conferences, and public lectures meant to spark new ideas about the nature of space-time. Leading researchers recently converged at UC Davis for QMAP’s first conference, a five-day event exploring new developments in quantum field theory and strings. “QMAP is becoming a rising star among U.S. institutions,” said conference attendee Tadashi Takayanagi, winner of the 2015 New Horizons in Physics Prize and a professor at the Yukawa Institute for Theoretical Physics.



Andy Albrecht



“We encourage students to think practically and humanistically about the world and their place in the world.”

– Javier Arbona, assistant professor of design and American studies



Making Ideas Real

THE DESIGN MAJOR in the College of Letters and Science may be the ultimate mash-up. Here, faculty and students defy disciplinary limits to tackle problems and explore solutions that require a mix of curiosity, creativity, technical skill, and an open mind.

The only comprehensive design department in the University of California system integrates history, theory, and criticism with design thinking, making, writing, visual literacy, and creative practice in an interdisciplinary and collaborative space. Courses and projects run the gamut, from exhibition, fashion, and graphic design to lighting, furniture, textiles, and other areas of industrial and product design—all with a focus on socially responsible, human-centered, and sustainable practice.

Research discoveries by design faculty and graduate students have led to personalized computer desktops, a fashion line for professional women with disabilities, a shipping container housing complex for low-income families, exhibition strategies for culturally sensitive subjects, and cutting-edge LED lighting systems.

In the following pages, we offer a glimpse into the breadth of design thinking and making that our students and faculty apply to everything from clothing to bicycle paths, pain management, and climate.

“We expect students to apply critical thinking to creative making.”

– Glenda Drew, professor of design



creativity...



Kombucha, Fashion, and Sustainable Design

by Jeffrey Day

Dressed in white lab coats, students examine petri dishes containing a gooey, fleshy substance they've been growing. Starting with kombucha made from green tea and symbiotic colonies of yeast and bacteria, or SCOBYs, the petri dishes issue forth a microbial cellulose that can be used like fabric sometimes dubbed "vegan leather."

In "BioDesign Theory and Practice," students get hands-on experience with materials like kombucha culture to learn about sustainable design practices that explore alternatives to the use of plant- and animal-based materials, which can take a toll on the environment through energy, water, and pesticide use.

"This is possibly the first design class at UC Davis to have a biological lab component," said Christina Cogdell, design professor and department chair, who taught the class with Marc Facciotti, a UC Davis biomedical engineering professor. "But it isn't just about kombucha—it teaches students about a wide range of design materials and new ways to think about materials. We are looking at ways forward using bio-based materials and alternatives to petroleum-based products and those that use a lot of energy to manufacture."

Students learn about the latest trends in sustainable design through research and teaching in energy-efficient lighting, natural dyes, and using recycled material like wood pulping waste in 3-D printing.

"If they want to work in this area, they need time in the lab," Cogdell said. "Some

of them were a little scared going into the lab, but they overcame the fear and got a new experience."

In the lab these students may deal with issues they've never faced in a design class.

"One of the things you have to decide: do you want it living or do you want to kill it first?" Cogdell said while walking through the Bio-Innovation Teaching Lab. And if the material needs to be alive, students need to learn how to edit its DNA to make it resistant to antibiotics found in many dyes.

Junior design major Rael Hanus, like many students in the class, was in a lab for the first time since high school.

"This isn't something most designers are exposed to," Hanus said. "As a designer—especially at a school like Davis where we are the leaders in sustainable efforts—I definitely feel a responsibility to design with purpose and be conscious of how my designs will impact people and our environment. Biodesign really allowed me to see the potential that designers have for creating products that will make a difference in the world and not just contribute to needless consumerism."

For Elisabeth McAllister, a third-year design major, the class changed her career focus.

"Designing sustainable systems and products is possible—in fact, more than possible. It is essential to the conservation of a world based on equality and balance," she said. "Watching the dance of science working with art gave me hope that there are designers out there like me who refuse to be pushed into the traditional categories of design. The future of design is here and is taking place at UC Davis."

Moving forward, Cogdell and Facciotti hope to make the class more integral to the sustainable design and biomedical engineering curricula. Next year they plan to enter the class projects into the BioDesign Challenge Competition, an international summit where the top teams present at the Museum of Modern Art in New York.





Design Class Points the Way for Bicyclists *by Jeffrey Day*

FINDING ONE’S WAY around the city of Davis is getting easier thanks to a joint effort by the Department of Design and the city. What started as an environmental design class project has turned into an easy-to-understand sign system for the city’s bicycle pathways.

“We were looking for a project and the bike paths seemed like a fun project,” said Tim McNeil, the design professor heading the project done primarily by undergraduates. “Once we did it, we invited the city to review what we’d done, and they were very interested. It all came about by chance.”

The first signs were installed in the spring at the east end of the UC Davis Arboretum. The paths in West Davis will have signs by year’s end.

“I knew we had to find a way to collaborate on this,” said Jennifer Donofrio, City of Davis Bicycle/Pedestrian Coordinator. “What I love is that it is so hands-on. It is great to have these students as a resource, and it’s cool for them to be able to say ‘I created this.’”

The signs are dark maroon with white reverse text except for on campus where they will be UC Davis blue. They provide distance and travel time between various locations and offer travel etiquette tips, such as asking that bikers announce their presence to pedestrians by voice, bell, or horn. A digital component is being developed that will use QR codes to access information about the culture and history of places such as Putah Creek.

“I think the students learned a lot from this,” McNeil said. “As a teaching experience, it was great.”

Pain Management by Design

In the world of pain treatment, patients and doctors often struggle to speak a common language. Clarifying that conversation is a big part of the work at the UC Davis Center for Design in the Public Interest.

“Patients need better ways to express pain levels so they can be properly medicated. They also need help in avoiding overmedication and tapering off medications,” said Susan Verba, a design professor who leads the center. “The project is about making it easier for patients and doctors managing pain to communicate.”

Among the products the center has developed:

- A comic book-style pain treatment folder for patients.
- Cards patients can use to more accurately indicate the

level and type of pain (sharp, throbbing, radiating) they are experiencing.

- A card deck showing alternatives to opioids.
- An opioid patient education video.
- “Outpatient Radio,” a participatory community radio show on KKRN 88.5 FM in Round Mountain, California, focused on chronic pain.

“The more you scratch the surface of the pain and opioids, the more you see there is still so much to do,” Verba said.



curiosity...

Art and Climate Science Combine in San Francisco

by Jeffrey Day

“Visualizing Connections to OneClimate,” a temporary installation from the Department of Design, brought to life a new campuswide drive to address climate change.

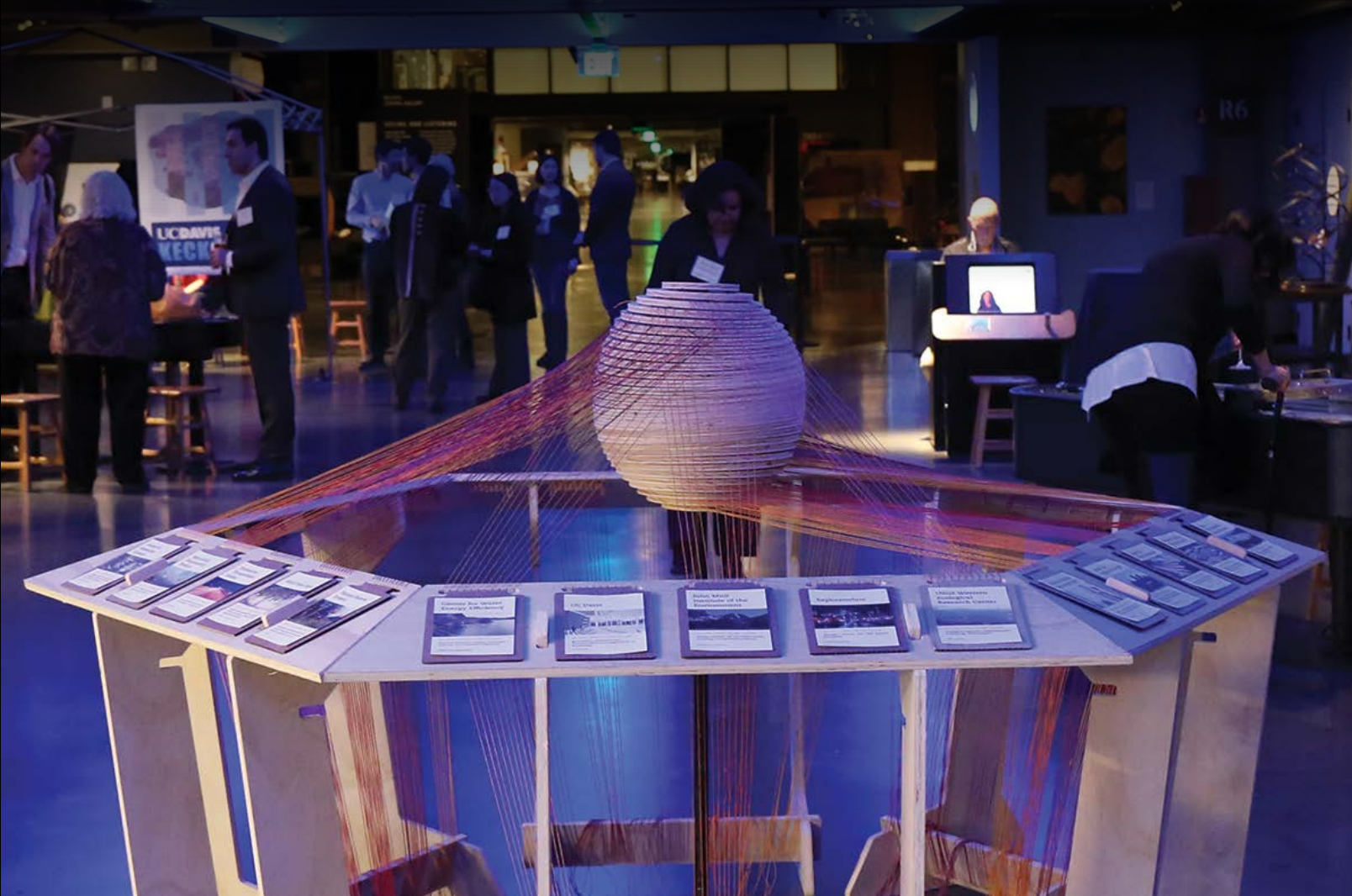
The OneClimate initiative encourages collaborative approaches to climate and environmental problems, and is led by the John Muir Institute for the Environment. The installation visualized the university’s collective strength in climate science research and was featured at a OneClimate event held March 13 at the Exploratorium in San Francisco.

The team constructed a globe-shaped orb with threads extending from its center to points representing campus

initiatives. Project lead and assistant professor of design Thomas Maiorana, explained, “We wanted to create an installation that represents the incredible wealth of knowledge and exploration at UC Davis around climate change.”

Maiorana’s team included design MFA student Victoria Baird; undergraduates Suhaila Sikand and Sandra Bae; Ben Houlton, director of the Muir Institute; and Vida Mia García, principal at Red Cover Studios.

Watch a companion video at vimeo.com/209788865



Lucky Brand Executive and Family Endow Design Lecture Series at UC Davis

IN THE SPRING, Lucky Brand CEO Carlos Alberini and his family pledged a \$300,000 gift to fund the Alberini Family Speaker Series in Design at UC Davis.



Alberini and his company's chief creative officer Kin Ying Lee gave the inaugural lecture on campus in May.

"Our family is committed to making this world a better place for all," Alberini said. "As such, our foundation consciously prioritizes impacting the fields of education, health, environment, and human and civil rights. Of these focal areas, we believe that improvements in education will benefit current and future generations the most, and regard UC Davis as a powerful institution with talented faculty who are highly committed to the development of design."

"We are delighted to be able to support the Department of Design with our contribution and are confident that all design students will benefit from the speaker series being developed by this incredible team," he continued. Alberini's daughter, Alexis, is a recent graduate of the department.

In their talk, titled "The Power of Strategy, Design and Brand Transformation," Alberini and Lee articulated the role strategy and design have played in transforming Lucky Brand and the evolving role of design. The free talk was presented in partnership with the Graduate School of Management.

Alberini joined Lucky Brand in February 2014. He formerly headed Restoration Hardware as co-CEO and executive director and led Guess Inc. as president and chief operating officer.

...and the power of mash-ups

Design Collection Named for Founder

Inside a nondescript building on the UC Davis campus is a collection that is anything but nondescript: the UC Davis design collection. The 5,000-object collection includes a 19th century Syrian wedding tunic woven from strips of metal; 19th and 20th century African-American quilts; a Congo king's raffia skirt; and 1920s "flapper" dresses. These materials are used every day in design classes, providing insight into the history of textiles and clothing as well as manufacturing and construction techniques.

The collection was started by Jo Ann C. Stabb, who taught at UC Davis from 1968 to 2002, and it was recently named in her honor.

"These textiles brought history to life in the classroom," Stabb said. "I'm happy to see the commitment to maintaining the collection and making it more visible."

"The collection provides design inspiration for our undergraduate students and research material for our graduate students and faculty members," said Adele Zhang, collection curator and manager.

Works in the collection have been frequently cited in scholarly publications and loaned to the Oakland Museum of California, Sacramento Public Library, New Jersey State Museum, and other venues.

"I have researched textile and design collections around the globe, and UC Davis is fortunate to have a world-class collection that has aided me in my own research over the years," said Mary Schoeser (B.S., design, '72), a former student of Stabb, and author of *Textiles: The Art of Mankind* and *World Textiles: A Concise History*.



A garment from the JoAnn C. Stabb Design Collection at UC Davis.

A Bright Idea *for* Rural India

by Jeffrey Day

In her native India, recent design MFA graduate Nikitaa Sivaakumar saw people struggling with inadequate lighting and noxious fumes from kerosene lanterns.

Solar lighting seemed like a good solution for a nation where 25 percent of the people live without electricity. But most solar lamps cost \$20 to \$30, and that's too expensive in rural India where the average monthly income is \$12.

Her solution is MakeGlow, a lantern made from a small solar panel, rechargeable battery, LEDs, and recycled cardboard. Total cost: \$2.

"I wanted to come up with an easy-to-assemble, low-cost, fun and practical approach to providing lighting and learning the basic concepts of solar technology," Sivaakumar said.

A big part of the project is having teenage students make the lights. Students build the lamps by cutting and folding a piece of discarded cardboard then adding electrical components. She tested the building process with students in Chennai, India, and Berkeley, California.

"It was designed to create awareness about solar technology through a hands-on experience in classrooms where students build their own MakeGlow," she said.

MakeGlow won second place in the Energy and Resource Alternatives category (from among 300 entries) in the Big Ideas competition at UC Berkeley; Honorable Mention (top seven of 326 projects) at the Big Ideas Pitch Day at UC Berkeley; and a Poverty Alleviation through Sustainable Solutions grant from the UC Davis Blum Center for Developing Economies.

“Here at UC Davis, we solve some of the world’s biggest social and ecological problems with design.”

– Beth Ferguson, assistant professor of industrial design

Research in Action



PROJECT AIMS TO BUILD MODEL OF HUMAN MEMORY

A multi-university study led by a UC Davis neuroscientist aims to develop a computer model of how the brain forms, stores, and retrieves complex memories.

The goal is that the model will have human-like abilities to remember, understand, and learn from events.

The project—recently awarded a \$7.5 million, five-year grant from the U.S. Department of Defense—could lead to an evolutionary leap in the development of artificial intelligence. It could also open new avenues for understanding Alzheimer’s disease, dementia, and other memory disorders.

Charan Ranganath, a professor in the UC Davis Department of Psychology and the Center for Neuroscience, leads the project team. Joining him are researchers from Princeton University, Harvard University, Washington University in St. Louis, and New York University.

“If you have tried to use Siri or voice commands on an Android phone, you’ll soon see that there is a lot that gets lost in translation,” Ranganath said.

The computer model envisioned in this project would be more like *Star Wars* droid R2-D2 — able to analyze, infer, and learn from events.



FACULTY HELP PROVIDE “ECONOFACTS”

Four UC Davis economists have joined forces with colleagues across the country on a new online publication, *EconoFact*, to bring fact-based analysis to the national debate on economic and social policy issues.

“Experts matter,” writes Katheryn “Kadee” Russ, associate professor of economics, in a recent *EconoFact* brief on the role of the federal Council of Economic Advisers.

“Highly trained economists are essential to the integrity and effectiveness of government reporting and policymaking.”

Aimed at policymakers, journalists, and the public, *EconoFact* provides analyses written by leading academic economists in short memo style and everyday language.

In addition to Russ, other UC Davis contributors are:

—Giovanni Peri, professor and chair of economics who studies immigration’s effect on the economy.

—Ann Huff Stevens, professor of economics and deputy director of the Center for Poverty Research.

—Marianne Bitler, professor of economics who studies the effects of the government safety net and its effects on low income families, the economics of the family, and the impacts of food assistance programs.



NATIVE AMERICAN STUDIES PROFESSOR BRIDGES BOUNDARIES

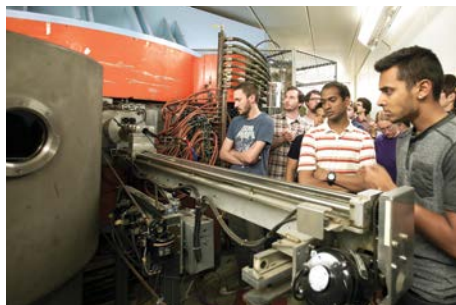
A battle with lymphoma led to Native American Studies associate professor Liza Grandia’s work building bridges between indigenous communities and experts in the environmental health sciences. Grandia recently received a \$270,000 Mellon Foundation New Directions Fellowship for her project, “Toxic Trespass.”

The fellowship will allow her to study toxicology and environmental epidemiology to become “a more productive interlocutor” between indigenous communities and the environmental health sciences and help others do the same.

“We have brilliant environmental health scientists at UC Davis, but they may not have cross-cultural training and perspectives, and scholars who work with indigenous populations that face all kinds of environmental threats,” said Grandia, a cultural anthropologist. “At UC Davis, there is an aspiration to bring the humanities and social sciences together with the hard sciences. I don’t think I would have conceived of this if I weren’t at UC Davis.”

The work builds on her collaborations with the Q’eqchi’ Mayan people of Guatemala and Belize on agro-environmental issues during the last two decades. Grandia believes exposure to pesticides during fieldwork in Central America triggered her illness.

Students try on the hijab at a campus event to raise cultural awareness. A UC Davis professor is launching a broader effort to promote understanding of Islamic cultures and Muslim women, offering training to future U.S. journalists.



NEW DIRECTOR NAMED FOR CROCKER NUCLEAR LABORATORY

Eric Prebys, a well-known particle physicist and expert in accelerator technology, joined the Department of Physics as a professor and was appointed director of the Crocker Nuclear Laboratory. Prebys' previous role was senior scientist at the Fermilab Accelerator Physics Center in Batavia, Illinois.

Centrally located on campus, the Crocker Nuclear Laboratory cyclotron is used by private industry, universities, and government agencies for nuclear science research and testing, and proton radiation therapy for ocular cancer.

Read more about the lab at [Is.ucdavis.edu/news-events/mps-news/crocker-nuclear-laboratory-future-2016.html](https://www.is.ucdavis.edu/news-events/mps-news/crocker-nuclear-laboratory-future-2016.html).



SUAD JOSEPH COUNTERING ISLAMOPHOBIA THROUGH THE MEDIA

With hate crimes against Muslim Americans on the rise—and Muslim women in headscarves a frequent target—a UC Davis professor is launching a program to better educate future U.S. journalists about Islamic cultures and Muslim women.

Anthropologist Suad Joseph, an expert on Middle East gender and family studies, received a \$340,000 three-year grant from the Henry Luce Foundation to organize seminars by leading scholars and to provide mentoring by veteran reporters for journalism and communication graduate students.

The project will also produce a series of guidebooks and other media resources to promote evidence-based coverage of Muslims, Muslim Americans, Muslim women, and Islam.

Joseph, editor of the *Encyclopedia of Women and Islamic Cultures*, has been studying how *The New York Times*, *Wall Street Journal*, and other major newspapers have covered Arabs and Muslim Americans from the 1850s to the present.

“I think there are some reporters who understand the problem of misrepresentation and account for it,” Joseph said. “But in general, the media promote an assumption, there’s a terrorist attack, ‘Oh, it must be Muslim.’”

“There is a popular image often reproduced in the media that Muslim women are all oppressed, that they are completely silenced, and that they have no voice. There’s an assumption that Europeans and Americans need to rescue Muslim women from Muslim men. In fact, Muslim women have always been highly active in all arenas of social life.”

The training will be offered for free to about 25 journalism and communication graduate students a year for three years beginning in 2018. Students accepted into the program will produce articles, videos, and photos—sharing their work at an annual meeting of the Middle East Studies Association and various media platforms.

Joseph, along with associate editors of the *Encyclopedia of Women and Islamic Cultures* and other leading scholars of Islam and women and Islamic cultures, will lead the seminars. Joseph has lined up journalists and journalism professors from around the world to give lectures and give students feedback on their work.

Philanthropy Matters

Scholarships Support Stellar Students

Back-to-school time at the UC Davis College of Letters and Science means a rededication to our mission as a liberal arts powerhouse. More than ever, we're focused on growing our students' intellectual adaptability, critical thinking, and collaborative commitment to improving themselves and the world around them.

Students like sophomore Melissa Loomis and seniors Joel Jenkins and Mary Serafin convince us we're on the right track. While each is following a unique path, they hold in common a passion for their major, a curiosity about the world, and the drive to make the world better.

And all of them credit the support of scholarships to their success at UC Davis.

Melissa Loomis

(B.S., cognitive science, '20)

Melissa Loomis is a second-generation Aggie (her mother is an '85 graduate) who attended three different high schools and yet managed to shine brightly throughout.

For Loomis, being supported by the college has proven invaluable.

"The scholarship is the reason I decided to attend UC Davis, as my financial situation wouldn't have allowed me to attend otherwise. It's given me the opportunity to pursue a major I am passionate about—one that is only offered at a few select universities."

Loomis is taking full advantage of the breadth of learning available in cognitive science, a new and growing major: a multidisciplinary study of the mind, including perspectives from philosophy, psychology, neuroscience, computer science, linguistics, and anthropology. She also studies Spanish and Mandarin, aiming to become fluent, all while deepening her knowledge of technology to become a leader in this new age of artificial intelligence.



Joel Jenkins

(B.A., linguistics, with a minor in Spanish, '18)

Long before graduating from Berkeley City College or transferring to UC Davis, Jenkins witnessed the power of language to make the most challenging life experiences less traumatic.

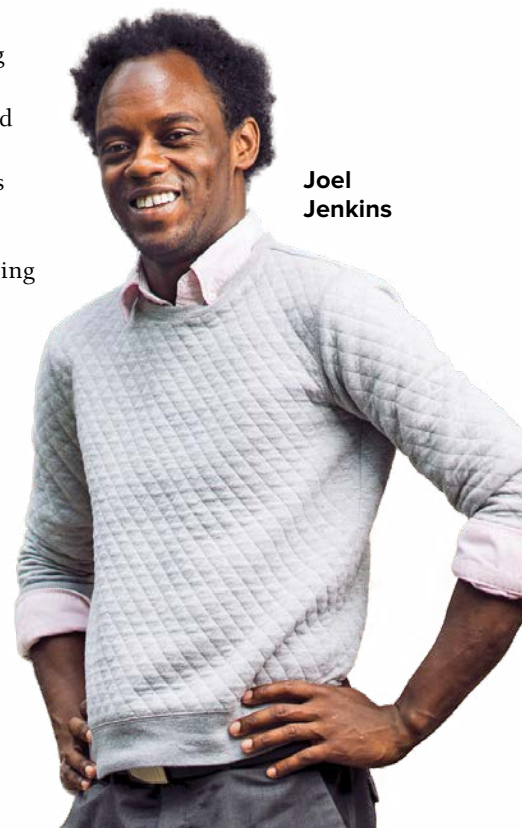
Fresh out of high school and fluent in Spanish, Jenkins worked as a medical translator in an emergency room. "The dynamics that happened in that room ... I could see I was doing something that made things better for people. And I knew language was the conduit for that."

But Jenkins craved a deeper understanding of language and the ability to make a longer-term contribution to helping others. That desire eventually led him to community college and then to UC Davis where he is considering pursuing a master's degree in linguistics, as well as a Ph.D.

"I see language as a living, breathing thing that creates another level of dimension. And I can be leading some of that conversation," said Jenkins, who speaks Spanish, French, Italian, and Portuguese, and is currently learning Arabic.

Despite Jenkins' stellar academic performance over the last several years, he says he wasn't always a star student. After enduring a move from New York to Atlanta as a child and attending five different elementary schools, his grades suffered.

Ultimately though, having two older sisters who carved out unique and rewarding careers and personal lives inspired him to create his own. "I've seen them pivot and be self-starters. They've invented life as it works for them. My sisters made me think I can do this."



Joel Jenkins

“I love being an Aggie because I am surrounded by a positive community that is constantly striving to improve itself.”



Mary Serafin

Mary Serafin

(B.A., economics and design, '18)

Mary Serafin exemplifies the ambition, creativity, and ingenuity so many liberal arts majors share. Her ultimate aspiration is to become a social entrepreneur, so she chose to double major in economics and design.

“The combination of my majors allows me to explore subject matter that both genuinely interests me and prepares me for my future career in business, consulting, and entrepreneurship,” said Serafin.

She values the college’s economics major for its breadth and for landing her internships at Intel and Accenture. She loves the design major for its combined emphasis on critical design thinking and hands-on applications. “Beyond the classroom, we’re asked to challenge how design can impact the greater community and world.”

In addition to excelling in two demanding majors, Serafin is the founder and president of Davis Women in Business, a student organization that strives to empower women to “discover their own talents and achieve success that they can share with the community and the world.” Last spring, the group launched its inaugural women’s leadership summit, OWN IT, designed to bridge the gap between female leaders and the millennials who admire them.

When she isn’t studying, working, or organizing others to do good, Serafin plays basketball. Scholarship support helps make this all possible, according to Serafin.

“Aggies are also the kinds of leaders who find strength and value in bringing each other up along the way. They deliberately go out of their way to serve as mentors and resources for other Aggies. Even after graduation, alumni are very willing to support and guide our current students,” said Serafin.

“Each gift plays a key role in helping UC Davis advance both as a student body and university,” she said. “By giving a gift to the college, you’re enabling a student who was once in your shoes to excel. Each gift can represent another resource, opportunity, or facility for another Aggie to inch closer to their academic and professional goals.”

Loomis, Jenkins, and Serafin exemplify the power of giving to the College of Letters and Science. Together, we can provide the extra support many students need to explore their passions and translate their time at UC Davis into a lifetime of opportunity and contributions to making the future bright for all of us.

Consider making a gift today to support students by visiting give.ucdavis.edu/CLAS/LSDSFH.

Bookshelf



New Book Weaves Memoir, Sociology

By Karen Nikos-Rose
UC Davis News and Media Relations

A new book by Bruce D. Haynes, UC Davis professor of sociology, and his wife, writer and educator Syma Solovitch, chronicles the journey of Haynes' Harlem family through three generations, connecting their journey to the larger historical and social forces that shaped and transformed Harlem and New York City across the 20th century.

Down the Up Staircase: Three Generations of a Harlem Family (Columbia University Press, April 2017) documents the shifting fortunes of the black middle-class family, and of Harlem itself, and illuminates the tenuous nature of status and success among the black middle class.

Using a micro-macro perspective, the authors unpeel the sociological layers that weighed on every step of the family's journey, demonstrating that not all "middle classes" are the same. Among blacks, middle-class status may provide a buffer from poverty, but it rarely brings economic security; race and segregation ultimately limit the value of social and cultural capital among the black middle class.

Haynes, an authority on race and urban communities, was initially reluctant to write the book, the most difficult of all his writings. "Telling the story meant bringing up a lot of pain and exposing it to the world. But I didn't want to write a book that would sit on a shelf—I wanted to have a book that would illustrate sociology, and show that people make choices but within constraints not of their choosing."

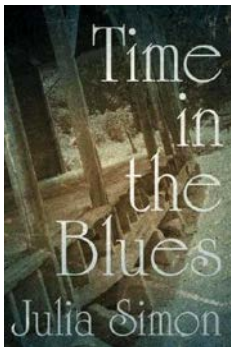
His wife and co-author convinced him to tell the story. She was the observant outsider-insider who could persuade him to tell the parts that needed to be told. "Without Syma," he said, "there is no way I could have written the book, or would have written the book."



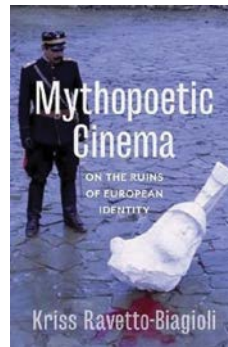
Bruce Haynes' mother Daisy with his brother George, circa 1952.
Photo courtesy of Bruce Haynes.

This is an excerpt of the full story at ls.ucdavis.edu/news-events/dss-news/haynes-book-down-up-staircase.html.

Read "A Chat with Bruce Haynes," an online Q&A with College of Letters and Science writing intern Noah Pflueger-Peters (B.A., English, '17) at sociology.ucdavis.edu/research/faculty-research-spotlight/a-chat-with-bruce-haynes.



Time in the Blues (Oxford University Press, September 2017), by **Julia Simon**, professor of French, offers an interdisciplinary analysis of the forms of temporality produced by and reflected in the blues within the historical context of Jim Crow segregation, sharecropping, racist violence, and migration.



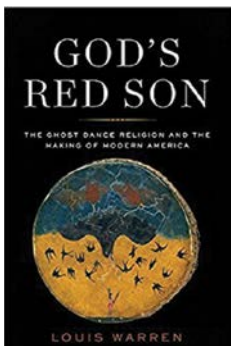
Mythopoetic Cinema: On the Ruins of European Identity (Columbia University Press, August 2017), by **Kriss Ravetto-Biagioli**, professor of science and technology studies and cinema and digital media, provides close readings of films by Alexander Sokurov and Jean Luc-Godard, among others, to demonstrate how filmmakers engage and evaluate the reconceptualization of Europe's borders, mythic figures, and identities.



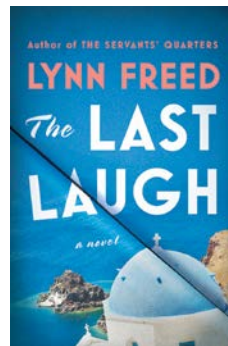
Jumping at Shadows: The Triumph of Fear and the End of the American Dream (Nation Books, September 2017), by **Sasha Abramsky**, lecturer in the University Writing Program, sets out to uncover what things frighten us most: from terrorist attacks to illegal immigrants to the Zika virus, and posits why our fears are in many cases misplaced and how we cannot let them define us.



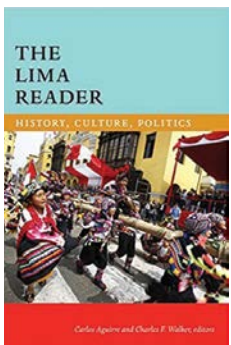
Dancing in the Blood: Modern Dance and European Culture on the Eve of the First World War (Cambridge University Press, July 2017), by **Edward Ross Dickinson**, professor and chair of the Department of History, uncovers the connections between modern dance and changing gender relations and family dynamics, imperialism, racism and cultural exchanges with the wider non-European world, and new conceptions of selfhood.



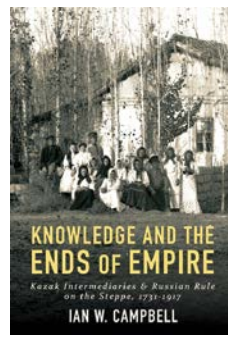
God's Red Son: The Ghost Dance Religion and the Making of Modern America (Basic Books, April 2017), by **Louis Warren**, W. Turrentine Jackson Professor of U.S. Western History, offers a startling new view of the religion known as the Ghost Dance, from its origins in the visions of a Northern Paiute named Wovoka to the Army's killing of more than 200 Lakota Sioux at Wounded Knee Creek in South Dakota.



The Last Laugh (Straus & Giroux, July 2017), by **Lynn Freed**, professor emerita of English, is a novel about three friends in their 70s who escape to an island in the Aegean Sea seeking "no peace, no service, no motherly or grandmotherly obligations." Once there, peace and quiet quickly disappear as the people in their lives crash in.



The Lima Reader: History, Culture, Politics (Duke University Press, April 2017), edited by **Charles Walker**, professor of history, with Carlos Aguirre, covers more than 500 years of history, culture, and politics, and captures the multiple viewpoints of the diverse peoples of Peru's capital city.



Knowledge and the Ends of Empire: Kazak Intermediaries and Russian Rule on the Steppe, 1731-1917 (Cornell University Press, March 2017), by **Ian Campbell**, assistant professor of history, traces tsarist officials' efforts to better govern the Kazak steppes and their desperate attempts to obtain reliable information about an unfamiliar environment and population.

Philanthropy Matters

New Professorship in Science Leadership Honors Dean Emeritus Winston Ko

by Becky Oskin

LONGTIME UC DAVIS PROFESSOR and administrator Winston Ko and his wife Katy Ko have endowed a faculty chair in science leadership in the College of Letters and Science.

The Winston Ko Professorship in Science Leadership will recognize national or international science leadership by an outstanding faculty member in the departments of chemistry, earth and planetary sciences, mathematics, physics, or statistics. The endowment will also support the Winston Ko Public Lecture Series: Frontiers in Mathematical and Physical Sciences.

The Kos launched the endowment with a challenge grant in 2013, the year of Winston Ko's retirement. Ninety colleagues, friends, and family of the Kos answered the challenge, helping the endowment surpass its \$1 million goal in 2017. "It's a great honor to recognize and encourage science leadership by my colleagues, which both advances science and brings



Winston Ko
Dean Emeritus

prominence to UC Davis and world-class education to its students," Ko said. "It's also a great honor to have so many colleagues, friends, and family joining Katy and me in establishing this professorship."

The endowment honors Winston Ko's 41 years of service to UC Davis and his leadership in research and education. Ko served as chair of the Department of Physics from 1998 to 2003 and dean of the Division of Mathematical and Physical Sciences (MPS) from 2003 to 2013. (MPS was one of three separate divisions that made up the College of Letters and Science from 1996 to 2017.)

“The [Art History] colloquium is so good for the intellectual life of the students and faculty. Scholars meet one another and share ideas. Students and graduates get to network with others in their field.”



— Alan Templeton, whose support to the College of Letters and Science established the annual Templeton Colloquium in Art History and the Templeton Endowment for the Arts and Letters.

Endowments Make Several Lectures and Colloquia Possible

Generous alumni and friends of the College of Letters and Science play a key role among our peers across the nation and world: bringing together scholars, artists, and writers to share their knowledge and collaborate on new research and projects. Several lecture series in the college have been made possible through endowed gifts. Here are some that are coming up this academic year.

Templeton Colloquium in Art History
February 2, 2018

Eugene Lunn Memorial Lecture Series
April 12, 2018


Levine Family Lecture Series in Economics
April 24, 2018

Lemert Lecture in Sociology
May 10, 2018

Check the L&S calendar for other upcoming lectures at [ls.ucdavis.edu/news-events/calendar-of-events](https://www.ucdavis.edu/news-events/calendar-of-events).

Gaming Class

is not just **Playing** *by Jeffrey Day*
Around



The “Experimental Games” class is a cacophony of light and sound as students move around the room playing one another’s games, sharing ideas, and just having fun.

“This class is like a quarter-long game jam or artist’s residency,” said Patrick LeMieux, assistant professor in the Cinema and Digital Media program.

The undergraduate course covers the history of game making, coding, and design. Students create a game each week and exit the class with a portfolio. Though most students study cinema and digital media, other majors include design, computer science, and cultural studies.

“We have a good mix of students who mainly want to make games and those interested in higher goals and having a social and political impact,” LeMieux said. “Gaming brings a lot of different people together, and it’s interesting to see how those areas intersect.”

The games that come out of the class take many forms.

Xin Ye, a cinema and digital media and design double major, made a game that involves the seemingly simple task of guiding a ball through a maze without touching the walls. It is not simple.

Trevor Morisawa, a computer science major, created a game with a jumping figure that gathers colors and sounds that enhance play.

“This is probably the hardest I’ve worked for a single class, but it was self-imposed because I wanted to do it,” Morisawa said.

Omar Mohammad, a design major, applied gaming technology to develop seating and lighting prototypes for a courtyard

that will be part of the renovation of Cruess Hall, home of the Department of Design. He designed seating/lighting structures based on the cube, sphere, and pyramid, and with gaming software created 3-D renderings and animations that show the structures from many angles and change the lighting color and intensity. He also made scale models of each seating/lighting unit that respond to what is happening in the “game.”

“He really took it a step beyond,” LeMieux said.

Ashlee Bird, a doctoral student in Native American studies, takes gamers to other worlds. One world is flat, another has low gravity making giant jumps easy, another is an ocean planet. But Bird’s larger gaming goal is very much a part of this world and practical: she plans to make games that will be used for cultural and language transmission and reclamation for young Native Americans. She intends to complete a game as well as a dissertation for her degree.

That’s the kind of big thinking about gaming the Department of Cinema and Digital Media steers students toward.

“We want to use game development as a platform to enable students to cultivate a technologically flexible and culturally relevant media art practice that exists beyond the classroom and the context of games,” LeMieux said.

“The things we learn together in class can be applied to a wide range of media industries—from software engineering, interactive design, media art production, and academic research. We work with students to engage complex tools, not as an end, but as a means to think critically about histories and practices of technology and culture.”

Events



“Outside the Lines”



Empyrean Ensemble



Manetti Shrem Museum

“Star Trek/Human Rights: To Boldly Go to Human Rights for All”

Chancellor Gary S. May and Keith David Watenpaugh
Crocker Art Museum, Sacramento
Dec. 4, 7 p.m.

Visiting Artists and Curators

Jan Shrem and Maria Manetti Shrem
Museum of Art
Dec. 5, 4:30 p.m. – Amanda Cachia
Feb. 1, 4:30 p.m. – Christine Sun Kim
Series continues through the academic year with a total of nine visiting artists.

“Outside the Lines” Dance Showcase

Wright Hall Main Theatre
Dec. 7 and 8, 7 p.m.
Dec. 9, 2 p.m.

“Recent Acquisitions from the Northwest Coast” Art Exhibition

C.N. Gorman Museum
Through Dec. 8

“The Creation” by Franz Joseph Haydn

University Chorus with the UC Davis Symphony Orchestra
Mondavi Center, Jackson Hall
Dec. 9, 7 p.m.

“It’s Bugged: Insects’ Role in Design”

Design Museum
Jan. 8 – April 22



“Revision/s” Music Festival

St. Louis Symphony Orchestra, Empyrean Ensemble and Living Earth Show
Mondavi Center, Jackson Hall
Jan. 18, 4 p.m.
Jan. 19, 7 p.m.
Jan. 20, 2 p.m.

Human Rights Lecture Series

Jan Shrem and Maria Manetti Shrem
Museum of Art Auditorium
Jan. 25, 7 p.m. – “Confederate and Civil Rights Monuments”
March 8, 7 p.m. – “Memory, Human Rights and Dictatorship in Latin America”

“Sustainability and Preservation: The Future of Tea”

Global Tea Initiative 3rd Annual Symposium
UC Davis Conference Center • Feb. 22-23

104th Picnic Day

UC Davis • April 21

Spring Commencement

ARC Pavilion • June 16

South Asia Studies: A comprehensive listing of 2017-18 performances, exhibits, and lectures is available at southasia.ucdavis.edu/events.

Calendar of Events: ls.ucdavis.edu/news-events/calendar-of-events