College of Letters and Science
FALL 2018
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.”

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

The Wall Street Journal/Times Higher Education
ranks UC Davis fifth among public universities for doing the most for student outcomes and academic resources.

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

• 53 majors
• 60 minors

More than 13,000 undergraduates have a major in L&S.

• 38% of L&S undergraduates are first-generation
• 69% of incoming international students apply to major in L&S

50% of our students conduct independent research and creative projects beyond the classroom.

The College of Letters and Science has more than 800 faculty.

• 17 members of the American Academy of Arts and Science
• 38 Guggenheim Fellows
• 3 MacArthur “Genius” Fellows

See more online at lettersandscience.ucdavis.edu/faculty-honors.

Nearly 80% of our alumni live in California. 17% live in other parts of the U.S. 43% of all UC Davis living alumni are L&S graduates.

Our instructors lead more than two dozen Study Abroad programs in more than 30 countries.

Sacramento Valley

Los Angeles Area

Davis

Other California

Other States & International

Bay Area

San Francisco

Other Cities

Napa

On the cover:
Jadri Lamelas (cinema and digital media and communication, ’19), Juanetta Yue (B.A., communication and psychology, ’18), Auzuray Pittman (B.A., communication, ’18)
Experience outside the classroom
Opens Doors for a Lifetime
UC Davis is known and nationally recognized for its commitment to broadening access to students who have traditionally found higher education out of reach. More than 40 percent of entering freshmen are the first in their families to attend college. As the largest and most diverse college at UC Davis, the College of Letters and Science is at the heart of this effort.

Money Magazine recently ranked UC Davis in the top 10 on their list of the “most transformative” colleges in the U.S., while The New York Times places us third among colleges, both public and private, that are “doing the most for the American dream.”

These and other recognitions are heartening and remind us that opening the doors to the university is just a first step. One of my goals as dean is to expand opportunities for students to make the most of their degrees.

True education is always both an experience and a process, and some of the most profound and lasting student learning experiences happen beyond the classroom. Internships, travel abroad, research, and leadership skills are critical components of a liberal arts and sciences education that we value across the College of Letters and Science. The Purdue-Gallup Index, which has surveyed thousands of alumni across the nation, shows that these kinds of experiences correlate with long-term success and well-being that last a lifetime. We take these “extra” experiences seriously because we believe that they are essential. Half our students conduct independent research and creative projects beyond the classroom; our instructors lead more than two dozen Study Abroad programs in more than 30 countries.

In this issue of the College of Letters and Science Magazine, we feature just a few of the thousands of students and alumni who have pursued internships, independent research, and study abroad in ways that not only benefit them in their journey toward meaningful and fulfilling careers, but also help to bring their strengths to the world as a whole. Philanthropy and alumni support help make all of this possible.

The world beyond college is complex and ever-changing. Students who come from, no matter what you decide to do in life, you can do anything you want to do,” she said as she declared victory from atop the city’s capitol steps.

— Adapted by Donna Justice from a story in Dateline UC Davis
Young Alumni

Group connects Aggies in the Bay

When Peter Ng heard about a new group for young alumni living in the San Francisco Bay Area, he immediately called his old campus friend Chris Backer, who he knew had great networking skills.

The two have taken leading roles in the College of Letters and Science Young Alumni Program, San Francisco Bay Area, serving on the group’s seven-member advisory board, chaired by Lauren Levin (B.A., communication, ’11). “We want to be here to help younger Aggies who want to locate in the Bay Area,” said Ng (B.A., political science and economics, ’07), a field director and financial advisor for Northwestern Mutual. “Being there for networking, skill building, economics, ‘07), a field director and financial advisor for Northwestern Mutual. “Being there for networking, skill building, providing support emotionally and financially when they’re starting out is something we want to do.”

Backer (B.A., political science, ’07), who worked in the State Assembly in Sacramento and legal industry in Santa Barbara and now sells real estate in Marin County, sees plenty of potential for the group in San Francisco: “You can’t walk down the street without running into an Aggie.”

“Many people from the College of Letters and Science really want to expand their network and that’s one of the things we are trying to help them accomplish,” he said.

Want to join this dynamic group? Check out its website at lssfya.ucdavis.edu.

— Jeffrey Day

Hunting for Neutrinos

Experiment aims for nuclear weapon detection

Julie He (B.S., physics, ’16) wanted to help people — maybe by being a doctor — but discovered instead how to make a difference through physics. She is now building a science career that will fulfill her goal of ensuring a healthy world.

As a junior specialist in the UC Davis Neutrino Group, He is contributing to a new way to detect illicit nuclear activities, the WATCHMAN (WATer CHerenkov Monitor for Anti-Neutrinos) detector. This fall, He began a doctoral degree in physics with Professor Bob Svoboda, working on WATCHMAN and other neutrino experiments.

Antineutrinos are particles created in fission reactions, such as those used to produce plutonium for nuclear weapons. If successful, the detector could make it nearly impossible for countries to hide clandestine nuclear weapons programs.

He also hopes to make a positive impact closer to home. Her plans include outreach to communities like the Nob Hill neighborhood in San Francisco where she was born and raised. A first-generation college graduate, He wants to encourage more young women to follow her path.

“I want to inspire more young women of color and show them you can do what I do,” she said. “My goal is to make science more accessible and inspire the next generation to be passionate about learning.”

— Becky Oskin

Smart Parking

Young alums create startup app

A student startup is on track to solve parking problems on campus and elsewhere. The venture, Japa, provides real-time parking information through an app and website.

Launched by College of Letters and Science alumnus Mathew Magno (B.S., computer science, ’18) and classmate Charles Chen (B.S., computer engineering, ’18) while they were attending UC Davis, Japa is Magno’s response to his own commuting problems. “As a student it would take me 20 to 30 minutes sometimes to find a spot, circling parking lots and getting stressed out,” Magno recalls. “I decided to fix the problem of parking.”

With support from the UC Davis Student Startup Center and mentoring from faculty and alumni, the Japa team developed a smart parking system that employs sensors to track parking spaces in real time. Japa’s app shows parking availability in lots and structures near a driver. The team also offers a website aimed at lot owners and managers, with inventory tracking, transaction records, and a bird’s-eye view of operations.

Thanks to awards and investments, Magno and Chen now work full time on Japa. The team claimed the $10,000 first prize in the 18th annual UC Davis Big Bang! Business Competition in May. Recently an investor put $40,000 into Japa, and the startup has partnered with Transportation and Parking Services at UC Davis and the municipalities of Walnut Creek and Redwood City.

“We plan to expand to airports, amusement parks, and sports arenas — which are all in desperate need of our service,” Magno said.

Although launching a business was not in Magno’s original college plan, he says he always had an entrepreneurial spirit. In middle school he sold snacks to fellow students, and in high school he fixed laptops. A first-generation student from Rancho Cucamonga, Magno also put himself through community college and through UC Davis. Now, Magno is helping others follow in his footsteps as co-founder and director of PLASMA, a campus accelerator program where he mentors other startups.

“Being able to build a company as a student is something that people shouldn’t be afraid of,” Magno said. “It sounds like a lot of hard work, but if I could do it, other people can do it, too.”

— Mathew Magno

About PLASMA

PLASMA, a “campus accelerator” program started at UC Davis in 2014, is led by alumna Bethany Sletten. It offers mentorship, a $10,000 grant, space in the Davis Innovation and Entrepreneurship Center, and support for startups from the college to the community. In its first four years, PLASMA has led to 11 student-led startups, 14 spinouts and several paying clients for UC Davis. Visit plasmainc.com or email info@plasmainc.com for more information.

— Bethany Sletten
Philanthropy Matters

Living Lesley's Legacy
Memorial gift helps political science majors

Lesley Diane Sanchez had big dreams. She wanted to be a lawyer someday, perhaps even president of the United States. Her dreams, and those of her parents for her, were cut short in 1993 when Leslie died just two years into her studies at UC Davis.

To honor their daughter's passion for education and political science, Richard and Patricia Sanchez established an endowment to fund the Lesley Diane Sanchez Scholarship. The award supports women with financial need who are majoring in political science and excelling academically.

Recently the couple committed to a bequest of $450,000 to further fund the scholarship and expand its reach.

For more information on making a bequest to the College, contact Charlene Mattison, assistant dean, college relations and development, at cmattison@ucdavis.edu or 530-752-2225.

Richard and Patricia Sanchez caught a moment with Cassandra Christmas (center), who received the Lesley Diane Sanchez Scholarship in 2015-16.

Generosity boosts college support for students

This spring, alumni and friends came together in a big way to support the College of Letters and Science on Give Day, the campus’s annual online giving event that runs concurrently with Picnic Day. More than 300 gifts added up to nearly $350,000 for student scholarships, program support and research.

A significant driver of the College’s success were the 17 challenge gifts for student scholarships and support in different disciplines, including history, music, chemistry, geology, English, mathematics, physics, and design. Overall, UC Davis raised more than $1.7 million.

Alumnus gift makes major impact on chemistry research and students

Give Day support unlocked an additional $100,000 in scholarship support for outstanding undergraduate chemistry majors from Richard C. Larock (B.S., chemistry, ’67), distinguished professor emeritus of chemistry at Iowa State University in Ames, and his partner John Maves.

In addition to this year’s challenge gift, Larock has established the Richard C. Larock Outstanding Graduating Senior Award to be awarded annually. He also continues to help students strengthen science communication skills through a new endowment to fund the Richard Larock Undergraduate Research Conference, an annual conference organized by the Department of Chemistry. The endowment will guarantee the conference in perpetuity.

Ting Guo, professor of chemistry, said the gifts reflect Larock’s deep commitment to undergraduate education in chemistry. “Richard Larock’s creativity and generosity are a shining example of the values instilled in students at UC Davis,” Guo said.

— Becky Oskin

Scholarship Helped Student take first steps to dream career

Irene Ezran (B.A., international relations and Spanish, ’18) has had a lifelong fascination with international politics. With her sights set on a career as a foreign service officer, and with financial support from the Richard and Carolyn Palmer Scholarship, Ezran took her first summer internship at the United Nations.

There she got a close-up view of international diplomacy, attending meetings of the General Assembly and then creating reports to inform U.N. offices around the world of decisions made at U.N. Headquarters. Ezran also served as head delegate of Model United Nations at UC Davis.

Fluent in French, trained in data analytics, and adding minors in mathematics and managerial economics, Ezran also managed to squeeze in work at the U.S. State Department and Department of Commerce, as well as serving as a research assistant in the UC Davis Department of Political Science.

Gifts for student scholarships not only help students pursue experiences that expand their skills and understanding of the world, but also inspire them to go boldly into a future full of possibilities.

“Thank you to our donors for their generosity; I could not have done it without your help.”

— Irene Ezran
Carito Lebrilla's pioneering work on how complex sugars affect health has led to collaborations across campus in everything from infant nutrition to cancer detection. His discoveries also played a central role in Evolve Biosystems, a startup company making probiotics to encourage a healthy environment in the infant gut and prevent digestive disorders.

In recognition of his quarter-century of trailblazing work on how complex sugars affect health and nutrition, Lebrilla was chosen as the 2018 recipient of the UC Davis Academic Senate’s Distinguished Research Award.

Complex sugars, also known as oligosaccharides, or glycans, are organic molecules made up of chains of saccharides, the ring structures that form sugars. Glycans coat all body cells and play an important role in cell signaling and activity.

When Lebrilla, distinguished professor of chemistry, began investigating glycans more than 20 years ago, he was among only a handful of researchers trying to figure them out. “Back then, people didn’t realize how important they are,” Lebrilla said. “Since then, we’ve found that they are important in cancer, in immune diseases, and in food.”

Lebrilla’s lab developed tools to measure oligosaccharides in human fluids, saliva, milk, blood, colonic fluid, feces, and urine — revealing glycans’ role in many critical biological processes. His new analytical methods showed glycan sugars were nourishing one particular microbe, Bifidobacterium infantis, in infant digestive systems.

This research, done in collaboration with Professor David Mills, microbiologist in the UC Davis Department of Food Science and Technology, led to Evolve Biosystems, which now has 50 employees.

Lebrilla continues to explore new research paths in glycans, and is collaborating with oncologists and researchers at the UC Davis Comprehensive Cancer Center to provide more specific detection of cancer. When cells become cancerous, their glycans change and shed unique markers into blood. “Since the glycan signatures don’t vary greatly among the cancers, our ultimate goal is to find a single diagnostic tool that could test for many types of tumors,” Lebrilla said.

Extended version: ucdavis.edu/news/lebrilla-wins-senate-research-award

— Becky Oskin

UC Davis News and Media Relations
The Maoist Shining Path guerrillas of Peru are more than just an academic subject to Renzo Aroni. The history graduate student grew up in the rebels’ mountainous home-base region during their 20-year war against the government.

With the help of a Mellon International Dissertation Research Fellowship, Aroni is documenting a portion of that history — the Shining Path’s massacre of 18 peasants in 1992. As part of his doctoral research, Aroni is interviewing survivors and some perpetrators of the slaughter in the village of Huamanquiquia, located in the Ayacucho region where the Shining Path recruited armed supporters during its 1980-99 guerrilla war.

He was among 70 fellows selected by the international nonprofit Social Science Research Council from 988 graduate student applicants at universities nationwide. The fellowship awards, funded by the Andrew W. Mellon Foundation, support travel, housing, and other expenses through December 2019.

Aroni is conducting his interviews in Spanish and his native Quechua with village leaders, widows, former guerrilla militants, and peasant supporters of Shining Path.

The people of Huamanquiquia had initially sided with the Shining Path, leading the Peruvian army to kill at least 30 indigenous peasants in August 1984, Aroni said. But by 1992, the villagers had shifted to actively opposing Shining Path, killing some of its members. In retribution, the Shining Path killed 18 men.

“My dissertation explores a previously undocumented story of shifting alliances, of retributive violence, and of memorialization of the 1992 event through the experiences and firsthand accounts of massacre survivors and former guerrillas,” he said.

Aroni has done fieldwork in the region before. He wrote his undergraduate thesis on the last massacre of the Shining Path in Ayacucho. His master’s thesis focused on how social and historical memories of violence find creative or artistic expression in contemporary Peru.

Before starting graduate studies at UC Davis, Aroni contributed to research projects on human rights, missing persons, and historical memory. He has worked with the Peruvian Truth and Reconciliation Commission Archive, the Peruvian Forensic Anthropology Team, and the Place of Memory, Tolerance and Social Inclusion Museum in Lima.

“The SSRC fellowship will allow me to deepen my work and produce a detailed portrait of how indigenous people experienced and influenced these horrible years,” Aroni said. — Kathleen Holder

Whether students have a clear vision for their future, or need help finding their career path, internships can help them explore their options.

For Jeanette Yue (B.A., communication and psychology, ’18), internships were crucial to figuring out how to make writing a career. “Taking classes isn’t good enough to learn what it’s like to be a full-time writer. Actual hands-on experience is really valuable,” she said.

Yue arrived on campus with an interest in journalism and was soon writing opinion columns for Davis Beat, an independent campus newspaper, and The California Aggie. Interested in exploring other kinds of writing, she took on two internships. Through the University Writing Program, she landed her first with the College of Letters and Science’s Strategic Marketing and Communications team.

Off campus, an internship with Sacramento nonprofit Opening Doors showed Yue a new way to use her writing skills — helping refugees, immigrants, human trafficking survivors, and other underserved populations. Yue is now seeking a full-time position at a nonprofit in the Bay Area.

“I’m really glad I had these internships,” she said. “They’ve given me confidence in my experience and skills, and I’m confident I can go out and get my own opportunities.” — Becky Oskin

The benefits of internships could last a lifetime. Gallup surveys of thousands of college graduates nationwide found that internship experiences are strongly linked to increased employee engagement and well-being later in life.

Learn more online at bit.ly/2IHoRor.
Opening a waterway and connecting communities

Undergraduate design students got down and dirty — literally — learning about mud. They were part of a team of researchers and faculty from the College of Letters and Science’s Department of Design working on a project called Public Sediment for Alameda Creek. Ongoing, the project is designed to allow the creek to carry more sediment into the San Francisco Bay for rebuilding the tidal ecosystem, open the creek to fish migration, and better connect the community to the creek.

During the past year, 28 undergraduates and three graduate students attended local festivals and held workshops at schools and community centers in the Fremont/Union City area to get public input, and developed plans for educational panels and kiosks, playgrounds, and landscaping. They also got up close and personal with the mud, kayaking the edges of the bay and tramping along the creek.

“The project had me wearing a lot of hats — landscape architect, archaeologist, environmental policymaker, and graphic designer — while trying to find a way to change the mindset of 7 million people living in the Bay Area about climate change or just my own mindset about what it means to be a designer,” said student Victoria Chau.

Sonia Garcia, another student participant, said the project broadened her perspective of design. “Design is meant to solve problems for the community, the people, the world.”

A lesson that student Sabrina Perell took away was the importance of inclusion. “This project reminded me that it is critically important to consider how to involve and create awareness for people of all ages from diverse local communities in such public undertakings,” Perell said. “Community outreach, awareness-building, and public participation were integral components of our design challenge.”

Public Sediment is one of nine projects selected for Resilient by Design: Bay Area Challenge. The international competition brings together local residents, public officials and experts to develop ways to strengthen resilience to sea level rise, severe storms, flooding, and earthquakes. Design professors Brett Snyder and Beth Ferguson are part of the Public Sediment team, along with faculty from landscape architecture and environmental design and civil and environmental engineering.

Extended version: lettersandscience.ucdavis.edu/news/public-sediment-creek-climate-design

— Jeffrey Day
One of UC Davis’ newest majors is also among its fastest growing — attracting about 400 undergraduate students in its first three years. That comes as no surprise to the faculty and students in cognitive science.

A MATTER OF MIND
New major spans disciplines to study how we think and learn

Who wouldn’t be interested in acquiring a better scientific perspective on what is most central and intimate to all of us: our own minds?” asks Bernard Molyneux, an associate professor of philosophy who helped launch the cognitive science major in fall 2015. “When I heard about the major, I was telling everybody, ‘I found it!’” said senior Diana Olivan, who tried two other majors — computer engineering and neurobiology, physiology and behavior — before finding her ideal program in cognitive science as a sophomore.

Thinking about thought


Three track options
All UC undergraduate campuses, and a number of other universities, offer cognitive science majors, but the UC Davis program is unique. It offers three tracks: a Bachelor of Arts in cognitive science, a Bachelor of Science with a neuroscience emphasis, or a Bachelor of Science with a computer science emphasis. For graduates, career options run a wide gamut, including data science, mind science, law, medicine, marketing, and tech design. Steve Luck, a psychology professor and director of the Center for Mind and Brain who helped launch the major, called it “a great example of a true liberal arts education with relevance for the knowledge-based economy of the 21st century.”

Student-driven
The program, like so many other developments in the can-do history of UC Davis, originated with students. A handful of undergraduates identified cognitive science as a perfect blend of his interests in math, science, philosophy, programming and humanities. “On my first visit, I walked straight to the psychology department and asked about the individual major.”

Josh Peterson ’12 was one of those enterprising students who helped pave the way. A community college transfer, he had identified cognitive science as a perfect blend of his interests in math, science, philosophy, programming and humanities. “On my first visit, I walked straight to the psychology department and asked about the individual major.”

Peterson went on to earn a doctorate in cognition, brain and behavior at UC Berkeley and recently became a postdoctoral fellow at Princeton University, working on projects that involve using machine learning to study human minds.

UC Davis’ establishment of a cognitive science major is “a dream come true,” Peterson said. Drayson, an assistant professor in philosophy, agreed. “It’s very exciting,” she said. “The students genuinely have a role in leading it.”

A great example of a true liberal arts education with relevance for the knowledge-based economy of the 21st century. — Steve Luck

inspired to launch the major based on student interest.

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Undergraduate research, scholarship, and creative activities

“Research was something I was always interested in when I came to UC Davis. I never imagined how far it would take me.”
– Alexandra Greb

Research on antidepressants and psychedelics
Alexandra Greb (B.S., pharmaceutical chemistry, ’18) not only showcased her work, but also accomplished a rare feat for an undergraduate: she graduated in June with two publications to her name.

As a sophomore, Greb began work in the lab of David Olson, assistant professor of chemistry and of biochemistry and molecular medicine. She investigated the timing and mechanisms of a wide range of fast-acting antidepressants, including well-known psychedelic compounds such as ketamine, LSD and MDMA. Greb co-authored a report on the results that was published in June in the journal Cell Reports.

Greb also wrote a paper with Birgit Puschner, a professor in the School of Veterinary Medicine, on cannabinoid treats for pets.

“Creativity on display”
Not long after arriving at UC Davis, Kristin Cox, who started off in pre-med, realized making art was more than a hobby and decided to major in art studio with a minor in art history.

Cox mounted an exhibit of her drawings and paintings. “Art is unique because it’s often invisible in the career world, yet very visible everywhere,” Cox said. “It’s in what people consume, and probably enjoy: advertising, video games, museums, costume design, and more.”

Cox hopes to attend graduate school and become an art therapist.

Accessible maps for the blind
For research partners Zoe Nicole Martin and Matthew Raytis, guidance and support from UC Davis design professor Susan Verba was key in turning an idea into a reality.

Martin, a design major, and Raytis, a major in sustainable environmental design, created tactile maps with raised buildings and smooth pathways to help visually impaired students navigate campus in a safer and easier manner. “[Verba] led us to resources, shared her expertise in accessibility design, and always helped us figure out our next steps,” Martin said.

“We want to use design to make a difference.”
– Matthew Raytis

They printed the maps at the UC Davis Student Disability Center, which uses thermal technology to create the 3-D guide.

— Becky Oskin and Maddy Shiber (B.A., communication, ’18)
Medieval Multiculturalism
An immersion in three cultures

“The UC Davis Summer abroad course “Three Cultures of Medieval Spain” immerses student scholars in a world where Muslim, Christian, and Jewish communities coexisted and spawned a flowering of scientific, artistic, and architectural achievement. Medieval Spain was one of the most intriguing historical periods precisely because the three ethnic groups were forced to live together, for better or worse, from 711 to 1492,” said Spanish professor Robert Blake, who created and leads the class. “The Arab world was the top of the heap with the best architecture, science, music, and medicine. Students get a real insight into how the Islamic world operated, its widespread influence, and how this multicultural society existed for hundreds of years before the word ‘multicultural’ existed.”

Examining how these cultures interacted also provides students with insights into today’s refugee crisis, mass migration, religious conflicts, and the dynamics of a multiethnic society, he said. They also get a firsthand look at places they’ve only seen in pictures and immerse themselves in the Spanish language.

Offered every two years, the course takes place in Cordoba, Seville, Cadiz, Toledo, and Granada, cities that reflect the Islamic presence. Students visit architectural masterpieces including the Great Mosque of Cordoba and the Alhambra in Granada.

Charlotte Hoefer, a Spanish major, shared her experience. “Going to the Alhambra or Alcazar — as opposed to reading about them in a textbook — transformed my view of Spanish culture and allowed me to comprehend Spain’s profound historical past.”

Aime Ozuna, a double major in international relations and Spanish, could see the roots of her Mexican heritage and learn about the differences between spoken Spanish in Mexico and Spain. Julia Gamaza, a clinical nutrition major and Spanish minor, liked the immersion into the language. “There are no outs — you have to speak it.”

All of them see the experience as a benefit for their career objectives: Ozuna in international public health policy, Gamaza in public health and nutrition, Hoefer in nursing, and Zittel in art history.

“Seeing the buildings I had studied about in class was like meeting celebrities. You experience the language of power in these spaces and how the religions play off of one another.”

— Helena Zittel, double major in art history and English

Beyond the Classroom

Professors make the gift of travel

A pair of awards, established by professors emeriti, help undergraduates study abroad in two fields. The David Traill Travel Prize, launched in 2016, supports one classics student each year. The John and Henni Fetzer Award for Advanced Undergraduate Study of German Literature and Culture will support students studying language, literature, and culture in Germany, Austria, or Switzerland, beginning in 2019.

The travel award was endowed by classics professor emeritus David Traill. A gift from John Fetzer, professor emeritus of German, and his wife Henni, longtime German teacher at Davis Senior High School, created the German literature and culture study award.

Practical and social benefits of study abroad

Half of the UC Davis students who participate in Study Abroad programs come from the College of Letters and Science. Courses and locations range from chemistry in Taiwan and filmmaking in Ireland to fashion marketing in Paris and economics in London.

Beyond opening minds to different cultures and bringing the places and events recounted in books to life, other studying abroad benefits abound. These include increases in graduation rates and GPA, according to Greg Gunderson, program coordinator and advisor for UC Davis Study Abroad.

“The professors really get to know them and they get to know the professor. They often make contacts that lead to internships and other opportunities,” he said.
Each quarter, UC Davis students make their way to the state’s and nation’s capitals with a mix of practical and lofty goals: get resume-building experience and develop the know-how to change the world.

Representing a swath of academic majors, Aggies at UC centers in Sacramento and Washington, D.C., take courses and participate in an array of internships — both inside and outside government. Many describe their experiences as life-changing.

**Intern takes on California Assembly**

Olivia Wardlaw (B.A., English and political science, ’18), said applying for the internship program at the UC Center Sacramento was the best decision she ever made in her time at UC Davis.

Administered by UC Davis, the UC Center Sacramento enrolls students from eight UC campuses — with Aggies from the College of Letters and Science as the most represented. UC Davis students make up roughly half the interns each quarter, said Ken Barnes, assistant director of the campus Internship and Career Center.

As part of her internship with the Secretary of State’s office, Wardlaw worked with the first wave of counties participating in the Voter’s Choice Act, which aims to make voting more convenient with more mail-in, early in-person, and ballot drop-off options.

The experience aligned with her plans for a career in public policy, working in the press, legislative affairs at a political office, or working on election and educational reform issues.

“Eleven of my nieces and nephews were in the foster system. I have seen how broken our foster system is. I want to do everything I can to help the kids that have been overlooked in their life, and the way I am going to do that is by becoming a child advocate lawyer.”

— Ruby Koetsier, political science, intern in the office of Assemblymember Reggie Jones-Sawyer (D-Los Angeles)

**Young alumna set sights on policy in D.C.**

Allyson Nicole Camino (B.A., political science–public service and Chinese, ’17) served as a political affairs program assistant for the US-Asia Institute when she interned with UC Washington Center (UCDC) in 2017. “As someone who was often soft-spoken and inactive in the political space, this program instilled in me a deeper understanding of public service,” said Camino. “By the end of the UCDC fall quarter, I came back to California as a completely different person with renewed strength: inspired, empowered, and actively willing to take on challenges to develop professionally and to be an outspoken voice for communities I care for.”

In Washington, Camino worked with the US-Asia Institute (USAI), a private United Nations-associated nonprofit dedicated to building and strengthening ties between the United States and Asia. “Walking by the Library of Congress, the U.S. Capitol Building, and the Supreme Court every day and night was humbling and made me feel like I was contributing to something much larger than myself.”

Camino is working now to gain legal and public policy experience in immigrant rights advocacy and to encourage her local Asian-American and Pacific Islander (AAPI) community to be civically engaged. She hopes to pursue a joint law and public policy master’s degree, and would like to one day move back to Washington to work with immigrant rights and AAPI advocacy groups.

“My time in D.C. helped me to feel secure in my goal of working for an international advocacy organization to influence U.S. foreign policy and promote human rights around the world. There was no better place for me than D.C. to put the skills I learned at UC Davis to work.”

— Megan Pynes (B.A., international relations and Spanish, ’18), 2017 intern at The Latin America Working Group
Tattoo Sensors and microchip nails

Katia Vega doesn’t have a design or medical background. Nor does she sport tattoos. Yet the assistant professor of design led a team in developing biosensitive tattoos that change color in response to the body’s blood sugar levels. Called DermalAbyss, it won the SXSW Interactive Innovation Award for SciFi No Longer earlier this year.

The color-changing tattoos, created with a team from the MIT Media Lab and Harvard Medical School, are part of Vega’s ongoing research into integrating technology and the body. For an earlier project, Beauty Technology, Vega developed conductive eyeshadow that allows one to turn lights on and off with the literal blink of an eye and fake fingernails that pay the bus fare with a wave of the hand. “The goal is to create a seamless device — making the body an interactive platform,” Vega said.

Vega took an unusual path to becoming a designer. All three of Vega’s degrees are in computer science and she wasn’t particularly interested in fashion or design. “I just knew that I wanted to make something different.” She was helped along in that elusive dream by a professor who suggested she’d get a creative boost by working at an art school. So after completing her doctoral studies, Vega headed to the wearables lab at Hong Kong Baptist University.

“Changing my way of thinking,” she said. “I could see clearly how art and technology could work together.”

Vega was also inspired by the huge eyelashes, elaborate makeup, and decorated fingernails of the young women she encountered in Hong Kong.

“Seeing them made me think about what these could do other than just enhance appearance,” Vega recalled. “You can still do this to make you pretty, but also give you a superpower.”

Going forward, Vega sees her research having many applications: allowing people to use their bodies to make purchases; assisting those with disabilities to do daily tasks on their own; and letting artists turn their bodies into control units for sound and light. In bringing these to fruition, she has two overriding goals: have the technology on their own; and letting artists turn their bodies into control units for sound and light. In bringing these to fruition, she has two overriding goals: have the technology on their own; and letting artists turn their bodies into control units for sound and light.
Michael Polland attended the Volcanology class when he was an undergraduate, a formative experience.

As a volcanologist with the U.S. Geological Survey and now scientist-in-charge of the Yellowstone Volcano Observatory, Michael Poland (B.S., geology, ‘97) is on the front line during hazardous volcanic events. One day he might be working at the edge of a roiling lava lake, another briefing communities threatened by lava flows. Poland credits his “amazing professors” at UC Davis for teaching him how to communicate science clearly and vividly—an essential part of a career with the USGS.

Poland’s interest in volcanoes stretches back to his childhood fascination with Mount St. Helens’ 1980 eruption. Growing up in Sacramento, he also loved family camping trips to two of California’s volcanoes—Mount Lassen and Mount Shasta. But he didn’t know geology could be a career until coming to UC Davis. “I always intended to be a business major,” Poland said. “I had this image of earth scientists sitting in the desert dusting off rocks.”

At UC Davis, Poland was encouraged to pursue his interest in volcanoes through opportunities from faculty including Ken Verosub, Peter Schiffman, and Roland Bürgmann. “I feel very lucky I had the opportunity to be in this department,” Poland said. “The professors I met were great people who took an interest in me and what I wanted to do. Every professor wanted to foster my interest and help me succeed.”

Extended version: lettersandscience.ucdavis.edu/alumni-profiles/michael-poland-life-living-edge

— Becky Oskin

Cool Class is actually pretty HOT

It’s 3 a.m. and a group of UC Davis students are beginning an hours-long trek across barren lava fields under a sky crowded with stars. By sunrise, they’ll have reached glowing rivers of lava flowing from Kilauea Volcano.

“Seeing the sun come up over erupting lava is pretty spectacular,” said Professor Emeritus Rob Zierenberg, who has visited volcanoes across the world.

The sunrise trek is part of Geology 138, a class that vividly brings to life the basics of volcanology—how a volcano works and what are the signs of unrest. During a weekend adventure in Hawaii, students learn to decipher puzzling rock layers and see volcano monitoring in action with U.S. Geological Survey. For alumnus Michael Poland, the trip was transformative (see accompanying story).

But Geology 138 is more than the trip of a lifetime. Students also get an eye-opening experience in crisis management. “In volcano science, there is a very short path from science to policy,” Cooper said. Experts like Cooper are often called on to explain eruption risks to the public. In the class, Cooper engages students in a real-time scenario where a volcano is about to erupt and they are responsible for deciding what to do next. Students play the roles of scientists, emergency management, government officials, and concerned citizens. They also stage a press conference. “It doesn’t matter how much you know about a volcano if you can’t communicate the information to people who need it in a way they can use it,” Cooper said.

— Becky Oskin

MAGMA P.I.

As a volcanologist with the U.S. Geological Survey and now scientist-in-charge of the Yellowstone Volcano Observatory, Michael Poland (B.S., geology, ’97) is on the front line during hazardous volcanic events. One day he might be working at the edge of a roiling lava lake, another briefing communities threatened by lava flows. Poland credits his “amazing professors” at UC Davis for teaching him how to communicate science clearly and vividly—an essential part of a career with the USGS.

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— Becky Oskin
College’s Global Tea Initiative
brews international support

Just three years old, the UC Davis Global Tea Initiative for the Study of Tea Culture and Science (GTI) is already gaining recognition as a major player in the world of tea. Tapping the growing enthusiasm of researchers, tea culture devotees, growers, and industry leaders, GTI is taking the next step toward making UC Davis as much a powerhouse in tea research as it is in wine, beer, and coffee studies.

A newly formed GTI Tea Advisory Committee brings together industry leaders committed to developing the initiative. “We are managing an avalanche of activity and garnering the support of a wide diversity of potential stakeholders,” said Katharine Burnett, associate professor of art history and GTI’s founding director.

Launched in 2015, the GTI is housed in the College of Letters and Science. Its formation was driven by several factors:

- The long history and cultural importance of tea beginning in Asia and spreading to almost every continent in the world.
- The death of tea-related scholarship in most disciplines.
- The college’s wide-ranging expertise in the humanities and social sciences.
- Complementary campus strengths and research traditions in nutrition and agricultural sciences.
- “What we are doing is unique,” said Burnett, a scholar of Chinese art and culture. “No other institution in the world has the resources or commitment to approach the study of tea in all its dimensions from such a diverse, global perspective.”

To date, 28 UC Davis faculty from disciplines ranging from agriculture, chemistry, and medicine to art, religious studies, and literature are engaged in the project.

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“Mighty Leaf Tea / Peet’s Coffee
Bitaco / Agricola Himalaya S.A.
Q Trade Teas & Herbs
International Tea Importers
Harney & Sons – Master Tea Blenders
Ito En
BiTaco / Agricola Himalaya S.A.

“College’s Global Tea Initiative brews international support. Katharine Burnett, Global Tea Initiative director, was awarded the 2018 Tea Health Advocate at the World Tea Expo, the largest annual gathering of tea industry leaders in the United States. “This is further recognition that UC Davis’ ‘global initiative’ on tea is seen as a major new force for bringing attention to tea in the U.S. and abroad,” said Burnett.

Industry Representation on the GTI Advisory Committee

- International Tea Importers
- Mighty Leaf Tea / Peet’s Coffee
- Q Trade Teas & Herbs
- Rishi Tea
- Harney & Sons – Master Tea Blenders
- Ito En
- BiTaco / Agricola Himalaya S.A.

Recent steps include creating more courses and opportunities for students to study tea and to make career connections to the wide range of industries engaged in tea and to make career connections to the wide range of industries engaged in tea and to make career connections to the wide range of industries engaged in tea and to make career connections to the wide range of industries engaged in tea.

Recent donations give a boost to Gorman Museum Collection

The fast-growing collection of the C.N. Gorman Museum is now even bigger. Three recent donations brought 500 artworks to the collection: Northwest Coast art given by Gloria and Selig Kaplan and Jill and Michael Pease, and contemporary paintings from collectors Zelma Long and Phillip Freese.

The gifts bring the museum’s collection of contemporary Native American art to nearly 2,000 works, up tenfold over the past decade. “Museum director Hulleah Tsinhnahjinnie and I have worked to create and enhance our relationships with collectors,” said museum curator Veronica Passalacqua. “The collection has been growing faster than ever through the generosity of museum members, artists and private collectors.”

Jill Pease, Long, and Freese all studied at UC Davis and about one-third of the collection came directly from artists.

“The high proportion of artist gifts speaks to the Gorman’s relationships with Native American and other indigenous artists, and the long-standing commitment to representing current and contemporary art,” Passalacqua said.

The museum highlighted the gifts in “Recent Acquisitions from the Northwest Coast” last year and in the current exhibition “Recent Acquisitions from the Southwest” (through Dec. 7). “We’ve also embarked on an expanded exhibition program that reaches across the continent to represent the canon of Native American and First Nations art, and that has brought a wider range of museum visitors, including intertribal communities and collectors alongside our dedicated local visitors,” Passalacqua said.

The collection’s rapid growth has been part of the planning process to relocate the museum into the former Richard L. Nelson Gallery in Nelson Hall. The College of Letters and Science will also initiate a fundraising campaign to support the museum’s expansion.

— Donna Justice

— Jeffrey Day

*“Crooked Beak of Heaven,” by George Hunt Jr., 1991, red cedar, cedar bark, horse hair, acrylic paint, abalone, sinew, copper. Gift from Gloria and Selig Kaplan.*
Paying it Forward
Alumna professor brings restorative justice to K-12

Some children grow up playing in parks,” said Maisha T. Winn. “Colleges and universities were our playground.

Winn (B.A., English, ’94), the daughter of James Fisher, an African American studies scholar who taught at UC Davis from 1969 to 1974, fondly remembers trips she and her brother took as children to the UC Davis Arboretum and library.

But Winn said she never considered becoming an educator herself until, as a high school student, she heard her father give a lecture titled “Willie Brown as a Metaphor for the Black Rose West.” Born in a segregated town in East Texas, Brown was then a California lawmaker who would go on to become the first African American to serve as Assembly speaker and San Francisco mayor.

“This was the first time, in my recollection, I thought that I wanted to become a professor,” Winn said.

Now as a Chancellor’s Leadership Professor in the UC Davis School of Education and co-director of its Transformative Justice in Education Center, Winn works to improve educational and life opportunities for all children.

As an English major at UC Davis, Winn also minored in African and African American studies. She credits her courses and professors in African American studies with launching her career and work on restorative justice. “The faculty taught us to be careful readers, meticulous writers, and how to access academic journals,” she particularly recalls courses with Patricia Turner, whose interdisciplinary approach to scholarship inspired Winn to weave together her own interests in literacy, performance, social justice, and education.

Winn’s research spans a variety of understudied settings — her early work on literacy practices in bookstores and organizations in the African American community; work in institutions where adolescent girls are incarcerated; and the connections among juvenile justice attorneys and school-based practitioners of restorative justice.

“I am most proud of the work I have done to immerse myself in the lives and experiences of young people and their teachers in school and in out-of-school contexts,” said Winn. “I want to do bold work that asks seemingly impossible questions that we must begin to answer together: How do we teach in an era of criminalizing minoritized children and their families? How do we create classrooms and school communities where everyone has a sense of purpose and belonging? How do we teach in a way that people stop killing?”

— Maisha T. Winn
Events

“Outside the Lines” Dance Showcase
Wright Hall Main Theatre
Nov. 29, 30 and Dec. 1, 7 p.m.
Dec. 1, 2 p.m.

The University Chorus, led by new director Caleb Lewis
Mondavi Center, Jackson Hall
Dec. 7, 7 p.m.

Fall Commencement
ARC Pavilion • Dec. 15

“Blue and Yellow Corridor”
Exhibit by Bruce Nauman
Jan Shrem and Maria Manetti Shrem Museum of Art
Through Dec. 16

Creative Writing Reading Series
Peter J. Shields Library, 7 p.m.
Jan. 15 – Deb Olin Unferth
Feb. 7 – Jamel Brinkley
March 7 – Crystal Wilkinson

“Weaving & Woodwork: A Scandinavian Design Partnership”
Design Museum, Cruess Hall
Jan. 21 – April 21

“Grand Canyon” and “Petrified Forest”
Cellist Rhonda Rider, including music by professors Kurt Rohde and Laurie San Martin
Jan. 25, 7 p.m.

“Alma de Bandoneón”
UC Davis Symphony Orchestra and the Redwood Tango Ensemble
Mondavi Center, Jackson Hall
Feb. 2, 7 p.m.

Templeton Colloquium in Art History
Speaker & Topic TBA
Manetti Shrem Museum, Community Education Room
Feb. 22, 4 p.m.

“Flora, The Red Menace”
Wyatt Pavilion Theatre
Feb. 28 – March 9, 7 p.m.
March 2 and 9, 2 p.m.

“Folk & Buddhism”
UC Davis Symphony Orchestra
Mondavi Center, Jackson Hall
March 15, 7 p.m.

105th Picnic Day
UC Davis • April 13

“Aztec, Maya, and Inca Worlds”
UC Davis Symphony Orchestra
Mondavi Center, Jackson Hall
May 4, 7 p.m.

Graduate Students Exhibition
Includes art, music, writing, theater, design
Manetti Shrem Museum
May – June

Spring Commencement
ARC Pavilion • June 15

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