

Fall 2013 | Volume Twenty-One

UCLA COLLEGE OF LETTERS AND SCIENCE

TANANA

Dear Friends,

Here on this beautiful campus, we are surrounded by constant reminders that the College of Letters and Science is the academic heart of UCLA.

We are home to the majority of UCLA's undergraduate students. Five of the six UCLA faculty members who have been awarded the Nobel Prize are from the College. Eight of the 12 UCLA students who have been named Rhodes Scholars studied in the College. And most of UCLA's 400,000 living alumni graduated with majors and minors from one of our departments or programs.

But those facts only begin to tell our story.

That is why we dedicate this issue of the College Report to what lures all of us, from the English professor to the evolutionary biologist to the student advisor, back to these inspiring grounds every single day — impact.

Through the stories in this College Report, we invite you to bear witness to the profound influence of our faculty and students on the world around us. In fact, we firmly believe that within our classrooms and laboratories is the budding scientist who could one day find the cure for cancer, the archaeologist who could discover the next Machu Picchu, the astronomer who could discover life on far away planets, or the writer who could publish the next great novel.

And as you will see in the following pages, it is not enough for us to merely make the discoveries — we must also ensure that they benefit the people we serve. The map at the center of this issue is a testament to how our research impacts all corners of the world and makes the College such an important institution at UCLA.

As we enter our second hundred years, we hope you will take part in celebrating our successes, and we look forward to welcoming you back to campus soon.

Sincerely

Joseph Rudnick Senior Dean, College of Letters and Science Dean of Physical Sciences

Alessandro Duranti Dean of Social Sciences

David Schaberg Dean of Humanities

Victoria Sork Dean of Life Sciences

Patricia Turner Dean and Vice Provost for Undergraduate Education



Left to right: Alessandro Duranti, Victoria Sork, Joseph Rudnick, Patricia Turner and David Schaberg





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Regents UC 2013

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UCLA Climbs in World University Rankings; Faculty and **Students Honored**



UCLA climbs in World University Rankings; recognized for campus sustainability

UCLA has been ranked 12th among the top 400 universities in the world in the respected Times Higher Education annual survey, moving up one spot from last year. The campus also was rated the world's No. 2 public university.

Also, UCLA is rated second among U.S. public universities and 12th among all universities internationally in Shanghai Jiao Tong University's Academic Ranking of World Universities for the third consecutive year.

In U.S. News & World Report's annual rankings of the nation's top colleges and universities, UCLA tied for second among public universities with the University of Virginia, and moved up a spot, to No. 23, in the overall national university rankings, sharing the spot with Carnegie Mellon University, the University of Southern California, the University of Virginia and Wake Forest University.

UCLA and the Institute of the Environment and Sustainability were saluted in the Princeton Review's 2014 Green Honor Roll. The Green Rating measured the level of environmental awareness and responsibility on a scale of 60–99. Among 823 schools, UCLA was among only 22 that received a score of 99 and made the Green Honor Roll.

College scholars named **Guggenheim Fellows**

Four College faculty

members are among 175 scholars, artists and scientists from the U.S. and Canada to receive 2013 Guggenheim Fellowships. The new fellows, chosen from a pool of nearly 3,000 applicants, are recognized for "prior achievement and exceptional promise" and receive grants to support their work. Alexander Merkurjev, professor of mathematics, is focusing on the complexity of homogeneous spaces

in algebra. His research is expected to contribute to the study of fundamental problems in the area of algebraic geometry. **David Scott**, a professor of art history and founding director (2003–11) of the UCLA/ Getty Program in Archaeological and Ethnographic Conservation, is conducting research in an attempt to integrate the artistic connoisseurship of fakes and forgeries with what he terms "scientific connoisseurship."

Rahim Shayegan, an associate professor of Iranian Studies and the inaugural holder of the Musa Sabi Term Chair in Iranian Studies (2005–09), directs the Program of Iranian Studies in the Department of Near Eastern Languages and Cultures. He is writing a multi-volume history of the Sasanian Empire (third-seventh century A.D.), which at its height ruled over much of Central Asia and the Near East.

Richard von Glahn, a professor of history, will complete a book on China's economic history from antiquity to the 19th century, the first comprehensive survey of the premodern Chinese economy to appear in any Western language.

American Academy of Arts and Sciences elects four College faculty members

Four College faculty members were elected to the American Academy of Arts and Sciences, one of the nation's oldest

and most prestigious honorary societies and independent policy research centers. UCLA is among the top six institutions in the number of 2013 fellows, along with UC Berkeley, MIT, Harvard, Princeton and Stanford.

Robert Allen Bjork, distinguished research professor and former chair of UCLA's psychology department, focuses on human learning and memory and the implications of the science of learning for instruction and training.

Margaret Candee Jacob, distinguished professor of history, has shed light on how the scientific and theoretical advancements of the Enlightenment worked their way into the mainstream of 17th- and 18th-century life, in particular, the role played by the Masonic fraternal organization.

Sorin Popa, a professor of mathematics, is an expert in functional analysis/operator algebras and ergodic theory. He elaborated a revolutionary method for classifying certain operator algebras, leading to the solution of mathematical problems previously believed to be unsolvable. Teofilo F. Ruiz, distinguished professor of history and holder of the Peter H. Reill Term Chair in European History, focuses on medieval Spain and Europe, in particular, late medieval and early modern Castile. He was awarded the National Humanities Medal in 2012.



Left to right: Tudor Padurariu, Francisc Bozgan, Ufuk Kanat and Dillon Zhi

Bruin Kay Ryan Awarded National Humanities Medal

UCLA alumna and Pulitzer Prize winner Kay Ryan '67, MA '68 was among two dozen writers, performers, artists and scholars to receive the National Humanities Medal from President Obama. She was praised for demonstrating the "power of language to evoke wisdom from the ordinary." In 2011, she won the Pulitzer Prize for poetry for "The Best of It: New and Selected Poems." In 2008, Ryan was named 16th Poet Laureate of the United States by the U.S. Library of Congress.

UCLA math students place third in Putnam

A team of Bruins achieved UCLA's best result in more than 40 years in the William Lowell Putnam Mathematical Competition for university undergraduates — finishing third out of more than 400 colleges and universities, behind only Harvard and MIT. A UCLA team finished third at the 1968 Putnam.

Two UCLA students ranked in the top 20 of the more than 4,200 entrants: sophomore Tudor Padurariu (11th place) and junior Xiangyi Huang (18th). They, along with freshman Dillon Zhi, were selected to represent UCLA in the team competition. Among UCLA's other top scorers in the individual competition were Francisc Bozgan Zhongnan Li, Man Cheung Tsui, Ufuk Kanat, Cheng Mao, Derek Jung and Tianyi Zhang.

Professor Dimitri Shlyakhtenko, chair of UCLA's mathematics department, said the performance "reflects the attention and investment we are making in undergraduate education."

Under the leadership of Sorin Popa, its previous chair, the department created Mathematical Merit Undergraduate Scholarships, aimed at bringing exceptional mathematics students to UCLA. Harvard, MIT and Princeton each offer several undergraduate math scholarships; UCLA's mathematics department awards only one per year. Shlyakhtenko said he hopes donor support will enable the department to increase the resources available for outstanding undergraduates.

Nobel Prize Awarded to College Alumnus

By Cynthia Lee

MEDICINE.

"UCLA students, alumni and faculty are leaders in their fields, and their contributions have bettered society in innumerable ways," said UCLA Chancellor Gene Block. "Our legacy of Nobel laureates reflects our university's role at the forefront of discovery, and we congratulate Professor Schekman and his fellow Nobel Prize winners on this extraordinary honor."

Schekman's path to cutting-edge scientific discoveries was set early on at UCLA, where he initially chose pre-med as his major. "Then I realized there was a whole other world at



As a sophomore at UCLA, Schekman joined the lab of Dan Ray to work on the replication of DNA viruses. Ray, now an emeritus professor of microbiology, immunology and molecular genetics, recognized Schekman as "a most incredible undergraduate" who knew more about molecular biology than entering graduate students.

"He had incredible insight for an undergrad," said Ray, who continues to do research at UCLA. "I once asked him how he knew so much about molecular biology. He said he got it all by reading a textbook written by Gunther Stent. He totally devoured it. His enthusiasm for research really was infectious." Ray said he was not at all surprised to learn that his former student had won the Nobel

Prize, given his passion for research. After graduating from UCLA with a bachelor's degree from the College of Letters and Science, with an independent field of concentration in molecular biology, Schekman earned his doctorate in biochemistry at Stanford. He joined the UC Berkeley faculty in 1976. Schekman, a Howard Hughes Medical Institute investigator and a faculty member at the Li Ka Shing Center for Biomedical and Health Sciences, was elected to the National Academy of Sciences in 1992. He received the Gairdner International Award in 1996 and the Lasker Award for basic and clinical research in 2002. He was elected president of the American Society for Cell Biology in 1999. On Oct. 3 this year, Schekman received the Otto Warburg Medal from the German Society for Biochemistry and Molecular Biology, considered Germany's highest honor for research in the fields of biochemistry and molecular biology. Schekman is currently editor-in-chief of the new open-access journal eLife.

UCLA ALUMNUS RANDY SCHEKMAN '71, A PROFESSOR OF MOLECULAR AND CELL BIOLOGY AT UC BERKELEY, HAS WON THE 2013 NOBEL PRIZE IN PHYSIOLOGY OR MEDICINE FOR HIS ROLE IN SOLVING THE MYSTERY OF HOW THE CELL ORGANIZES ITS TRANSPORT SYSTEM. SHARING THE PRIZE WITH JAMES E. ROTHMAN OF YALE UNIVERSITY AND THOMAS C. SÜDHOF OF STANFORD UNIVERSITY, SCHEKMAN IS THE SEVENTH UCLA ALUMNUS TO WIN THE NOBEL PRIZE AND THE FIRST TO RECEIVE THE PRIZE IN PHYSIOLOGY OR

> the university that I hadn't really known about," he recalled in Proceedings of the National Academy of Sciences, where he became editor in 2006.

After doing well in a freshman course in his first semester, Schekman found a place in an honors course taught by Willard Libby, the inventor of carbon-14 dating and a Nobel Prize winner himself. As part of the course, Schekman was placed in the lab of molecular biologist Michael Conrad.

"The first thing he had me do was read the then-first edition of a book by James Watson called Molecular Biology of the Gene, which really opened my eyes," Schekman recalled.

That experience, and his real-world work in the lab, ended his aspirations to be a physician. From then on, he was hooked on basic science.

Anthony & Jeanne Pritzker Family Foundation's \$20-million gift to UCLA targets environment and other societal challenges

THE CHARITABLE FOUNDATION OF LOS ANGELES PHILANTHROPISTS ANTHONY AND JEANNE PRITZKER HAS DONATED \$20 MILLION TO UCLA TO CREATE SEVERAL ENDOWMENTS, LARGELY TO SUPPORT ENVIRONMENTAL AND SUSTAINABILITY RESEARCH AIMED AT HELPING LOS ANGELES AND CITIES AROUND THE GLOBE CONFRONT 21ST-CENTURY CHALLENGES.

By Alison Hewitt

The Institute of the Environment and Sustainability (IoES) will receive \$15 million from the multifaceted gift, which will establish up to five faculty chairs, including a \$5 million endowed Pritzker Distinguished Chair in Environment and Sustainability. The donation will also endow a center for urban sustainability that will focus research on the vital challenge of creating more sustainable cities. Finally, the IoES will become home to the \$100,000 Pritzker Sustainability Prize, which will support the creation of new technologies and initiatives that allow humanity and nature to thrive.

The \$20 million gift also provides a \$3 million endowment for grants to UCLA students who are or were in foster care. The endowment will help foster youth focus on their studies by providing funding to cover the kinds of unexpected financial needs that, for other students, are often paid for by parents or family. The gift will provide grants for tutoring, mental health services, summer housing and unforeseen school expenses. If textbooks cost more than expected, or it's important to buy a suit for a job interview, or a year-end school project requires special supplies, the Pritzker Foster Youth Endowment aims to prevent these seemingly simple needs from becoming crises.

The remainder of the transformative donation goes to UCLA's Hammer Museum, where \$2 million will support expanded arts programs for children and families. The gift, the largest for family programming in the Hammer's history, will ensure that the Hammer can offer free programs to families across Los Angeles at a time when



Jeanne and Anthony Pritzker

arts programs in schools are more limited than ever.

Taking aim at significant societal problems

"This wide-ranging gift is a powerful expression of how visionary philanthropy can impact diverse areas of our society," said UCLA Chancellor Gene Block. "The Pritzkers are taking aim at significant societal problems, and UCLA and Los Angeles will benefit enormously from their leadership. We are honored by their generosity and inspired by their trust in UCLA to develop solutions to pressing challenges facing our city, our country and the world."

UCLA has benefited from the support of the Anthony and Jeanne Pritzker Family Foundation for more than a decade.

"We are excited to be associated with the world-class institution that is UCLA and to create endowed faculty chairs to help continue attracting top-tier professors — a top fundraising priority for the university," said Tony Pritzker, who co-chairs the volunteer steering committee planning The Centennial Campaign for UCLA. "These funds will further UCLA's standing as a leader in environmental sustainability and practice, as a university that cares about creating access and academic success for all students, and as a vital community resource for the arts."

The Pritzkers are heavily involved in a wide range of philanthropic activities. Jeanne Pritzker is known for her work with foster youth, both through the family's foundation and the nonprofit organization she founded, Foster Care Counts. Tony Pritzker has long been a champion of UCLA, where he chairs the board of advisors of the IoES and sits on the board of the Hammer Museum. He also serves on the board of the Los Angeles County Museum of Art and actively supports many other community organizations. He is managing partner and co-founder of The Pritzker Group, a private equity firm, and partner of the venture capital firm New World Ventures.

SAL

Enhancing sustainability research

"The Pritzkers' extraordinary leadership will help not only the university but the whole region," said Glen MacDonald, director of the IoES and an internationally renowned authority on climate change and drought. "It will allow us to bring the very best minds to UCLA and really focus on making Los Angeles a world-class sustainable city. The research we do here will ripple around the globe as a model for the rest of the urban world."

The Pritzkers' support will further bolster the institute's existing strengths in business and urban sustainability including energy efficiency and storage, renewable energy, water treatment and water supply. The five endowments established by the gift aim to help the IoES attract the best new faculty and students.

The \$5 million endowment to establish the Pritzker Distinguished Chair in Environment and Sustainability will advance the work of a current IoES professor or help the institute recruit a new faculty member. This is the first distinguished chair created as part of The Centennial Campaign for UCLA, which is expected to formally launch in 2014.

A \$2 million endowment will support up to four Pritzker chairs in sustainability designed to attract promising young investigators and encourage joint appointments between the IoES and other UCLA schools and departments.

Exceptional faculty are key

"A great university needs great people, and exceptional faculty are an absolutely vital part of what makes UCLA one of the finest universities in the world," Tony Pritzker said. "Our goal is to make sure the brightest minds continue to flock to UCLA, helping to ensure its strength into the future."

A \$5 million endowment will support the California Center for Urban Sustainability at UCLA, which will build upon the research done under the center's previous name, the California Center for Sustainable Communities. The donation recognizes that for the first time in history, more than half of the world's population lives in cities, and an estimated 70 percent of people will do so by 2050.

The California Center for Urban Sustainability will allow the IoES to continue its groundbreaking research on maximizing cities' energy and water efficiency, protecting urban biodiversity and improving quality of life. The center's goal will be to create solutions that not only improve Los Angeles but also help the majority of people on the planet.

Completing the Pritzker Foundation's gift to the IoES is \$3 million to create an annual symposium in conjunction with the awarding of the \$100,000 Pritzker Sustainability Prize. A \$1 million endowment will support the symposium, and a \$2 million endowment will create the annual prize. The IoES director, advised by an internationally renowned panel of judges, will review applications from around the world. They will select the invention, policy, economic strategy or other novel solution that demonstrates the greatest impact on environmental sustainability from the previous two years.

The IoES offers a degree in environmental science, one of UCLA's fastest-growing majors, and boasts an interdisciplinary roster of more than 90



Graduate student Jordan Rosencranz, IoES Director Glen MacDonald and Professor Rich Ambrose in the field; the endowment will establish up to five new faculty chairs.

faculty members. The growth of the institute is in part a reflection of the university's commitment to researching environmental sustainability issues.

"When we think about the environment, we think about places like our national parks, but it's also very much the cities we live in," MacDonald said. "The Pritzkers are doing more than just contributing to UCLA. They're creating pathways for UCLA to solve some of this century's greatest challenges."

Making a big impact

"These are issues that Jeanne and I are passionate about and where UCLA's expertise can make a big impact on Los Angeles," Tony Pritzker said. "We believe we're investing in more than UCLA — we're investing in improving the whole region."

For more than a decade, the Anthony and Jeanne Pritzker Family Foundation has been investing in strengthening many of the unique institutions that define Los Angeles. The foundation aims to enrich our community, not just for the present but for generations to come, with a particular focus on medicine, higher education, the environment, the arts and foster care.

Learn more: Watch a video on the Pritzkers' \$20 million gift at http://ucla.in/19Z7gPL



"Rebirth" of Japanese Studies **Reflected in New Scholars, New Directions**

By Meg Sullivan

WILLIAM MAROTTI COULDN'T **BELIEVE HIS GOOD FORTUNE WHEN** HE WAS HIRED IN 2006 BY UCLA'S HISTORY DEPARTMENT.

Scarcely five years out of graduate school, the scholar was joining three of the Japan field's most highly regarded historians, including Herman Ooms, Miriam Silverberg and Fred G. Notehelfer, who had led decades of efforts establishing one of the first

interdisciplinary centers devoted to the field. But a dispiriting wave of attrition soon followed as two of Marotti's colleagues retired and a third died.

By last year, the authority in post-war Japanese politics and avant-garde culture was facing an inconvenient truth: He was all that remained of his department's oncevaunted strength in Japanese history.

"I'm not a field — no matter how much I eat," Marotti recalled with a laugh. And the history department was not

the only place experiencing losses. Since



Associate Professor of History William Marotti is an authority in post-war Japanese politics and avant-garde culture.

2007, the number of faculty affiliated with UCLA's Paul I. and Hisako Terasaki Center for Japanese Studies has dropped by an additional five faculty. The most recent loss: linguist Shoichi Iwasaki, whom the University of Hawaii successfully recruited last spring.

Fortunately, change appears on the horizon. Come this fall, Marotti and his colleagues will return to rising ranks. Not only has a new Japanese specialist joined the history department from Cornell University, but Asian Languages and Cultures has also signed on a new hire whose expertise dovetails with the department's highly regarded Japanese literature faculty.

"We had a moment of peril, and we came out of it much stronger," said Marotti. "We're reconstituting ourselves in a way that's exceedingly promising."

The strategy behind the fledgling rebirth offers an object lesson for other campus powerhouses battered by the recession and retirements. Dwindling state support in recent years has left UCLA Humanities in a position where it is able to fill only one of every three or four vacancies, according to Dean of Humanities David Schaberg.

A new approach to rebuilding

Rather than replacing departing senior faculty with senior faculty who have the same expertise, departments that have lost Japanese studies scholars are backfilling with prominent junior faculty who have expertise that builds on the university's existing strengths.

Departments are also using new faculty hires to redirect UCLA's approach to Japanese studies, which took off after World War II and got a boost in the 1980s with the rocket-like rise of the Japanese economy, which attracted students yearning to examine the country's economy and business culture. Today, students tend to be drawn by anime, manga and other

manifestations of Japanese popular culture. "The field is changing," said Seiji Lippit, professor of Asian languages and cultures and the Terasaki Center's associate director.

"There's a stronger emphasis on the humanities, and that's becoming our core strength."

Donors making a difference

In addition, departments increasingly look to outside funding sources rather than



Seiji Lippit teaches courses on modern Japanese literature and film.

relying exclusively on the state. The two new hires in Japanese Studies, for instance, were enabled by a \$450,000 grant from the Japan Foundation. Resources at the Terasaki Center, which received a \$5 million gift in 2006 from Paul Terasaki, a professor emeritus of surgery and pioneer in organ transplant medicine, also proved a powerful lure, by ensuring that the new hires would have resources for new research initiatives such as conferences and visiting speakers. (The gift also endowed a chair in the study of contemporary Japan that was filled by professor Hitoshi Abe, an internationally recognized architect who serves as the center's director.)

"The recession in California appears to be coming to an end, but the aftereffects are still lingering, and it will be a while before the university is able to backfill the losses," said William Bodiford, chair of the Department of Asian Languages and Cultures. "More and more we're going to be dependent on donors for these positions either in terms of endowed chairs or funds that can support research."

New faculty contribute to "coherent and attractive program"

Joining the history department will be Katsuya Hirano, a specialist in 17th-to-19thcentury Japan who has been on faculty at Cornell since 2006. Born, raised and educated in Japan until graduate school, Hirano studies the connection between politics, culture and the arts during Japan's Edo period.

His forthcoming book The Politics of



Katsuya Hirano is a specialist in the politics, culture and arts of early-modern Japan.

Dialogic Imagination: Power and Popular Culture in Early Modern Japan, 1750–1890, which is due in November from University of Chicago Press, seeks to understand why Edo-period shoguns, with their seemingly unrivaled power, tried so hard to regulate the ostensibly unimportant popular culture of the day, including fashion, leisure activities, prints and theater. His early-modern interests thus complement Marotti's similar investigations of cultural politics in the 20th century. Hirano also is interested in the Japanese colonization of lands originally belonging to the Ainu people, who are indigenous to a string of islands between mainland Japan and Russia. "UCLA's Japan program has established itself as one of the major programs for quite a while," Hirano said. "And what is exciting about it is that its reputation continues to grow and is likely to become one of the premier institutions where students can study any subjects related to Japan in a most

challenging and rewarding way."

Along with Marotti, learning with Hirano is expected to be especially attractive to students interested in Japanese cultural politics during revolutionary periods.

"Together, we're not a giant program, but we're a coherent and attractive program," Marotti said.

Similarly, Michael Emmerich, a new hire in Asian languages and cultures from UC Santa Barbara, is expected to build on existing strengths in UCLA's Japanese literature program.

He is probably best known for his scholarship on the 11th-century literary classic The Tale of Genji. In addition to



Michael Emmerich is a prolific translator of modern and contemporary Japanese fiction.

his expertise on court-centered writing from the period, Emmerich is an authority on Japanese fiction from 1868 onward, including the works of modern and contemporary authors. He also is a prolific translator of contemporary Japanese authors, from Nobel prize winner Yasunari Kawabata to best-selling cult writer Banana Yoshimoto.

Emmerich's specialties bridge those of Lippit as well as Torquil Duthie, an assistant professor of early and classical Japanese literature.

Lippit specializes in the culture and literature of postwar Japan, including mass culture, urban space, minority literature, and representations of decolonization, occupation and the transformation of national consciousness in 20th-century Japan. Duthie specializes in literature from much earlier periods — the seventh to 12th centuries.

"I think the three of us can cover the history of Japanese literature really well," Emmerich said. "I'm really excited by the potential of UCLA's Japanese literature program to be one of the top in the country."

Brain Rewires Itself After Damage or Injury, Life Scientists Discover

WHEN THE BRAIN'S PRIMARY "LEARNING CENTER" IS DAMAGED, COMPLEX NEW NEURAL CIRCUITS ARISE TO COMPENSATE FOR THE LOST FUNCTION, SAY LIFE SCIENTISTS FROM UCLA AND AUSTRALIA WHO HAVE PINPOINTED THE REGIONS OF THE BRAIN INVOLVED IN CREATING THOSE ALTERNATE PATHWAYS — OFTEN FAR FROM THE DAMAGED SITE.

By Alison Heather

The research, conducted by UCLA's Michael Fanselow and Moriel Zelikowsky in collaboration with Bryce Vissel, a group leader of the neuroscience research program at Sydney's Garvan Institute of Medical Research, appeared in May in the journal Proceedings of the National Academy of Sciences.

The researchers found that parts of the prefrontal cortex take over when the hippocampus, the brain's key center of learning and memory formation, is disabled. Their breakthrough discovery, the first demonstration of such neural-circuit plasticity, could potentially help scientists develop new treatments for Alzheimer's disease, stroke and other conditions involving damage to the brain.

For the study, Fanselow and Zelikowsky conducted laboratory experiments with rats showing that the rodents were able to learn new tasks even after damage to the hippocampus. While the rats needed more training than they would have normally, they nonetheless learned from their experiences — a surprising finding.

Training the brain through experience

"I expect that the brain probably has to be trained through experience," said Fanselow, a professor of psychology and member of the UCLA Brain Research Institute who was the study's senior author. "In this case, we gave animals a problem to solve."

After discovering the rats could, in fact, learn to solve problems, Zelikowsky, a graduate student in Fanselow's laboratory, traveled to Australia, where she worked with Vissel to analyze the anatomy of the changes that had taken place in the rats' brains. Their analysis identified significant



Illustration of the human brain, highlighting the hippocampus, the brain's key center of learning and memory formation

functional changes in two specific regions of the prefrontal cortex.

"Interestingly, previous studies had shown that these prefrontal cortex regions also light up in the brains of Alzheimer's patients, suggesting that similar compensatory circuits develop in people," Vissel said. "While it's probable that the brains of Alzheimer's sufferers are already compensating for damage, this discovery has significant potential for extending that compensation and improving the lives of many."

The hippocampus, a seahorse-shaped structure where memories are formed in the brain, plays critical roles in processing, storing and recalling information. The hippocampus is highly susceptible to damage through stroke or lack of oxygen and is critically involved in Alzheimer's disease, Fanselow said.

"Until now, we've been trying to figure out how to stimulate repair within the hippocampus," he said. "Now we can see other structures stepping in and whole new brain circuits coming into being."

Zelikowsky said she found it interesting that sub-regions in the prefrontal cortex compensated in different ways, with one subregion — the infralimbic cortex — silencing its activity and another sub-region — the prelimbic cortex — increasing its activity.

"If we're going to harness this kind of plasticity to help stroke victims or people with Alzheimer's," she said, "we first have to understand exactly how to differentially enhance and silence function, either



3D rendering of neurons

behaviorally or pharmacologically. It's clearly important not to enhance all areas. The brain works by silencing and activating different populations of neurons. To form memories, you have to filter out what's important and what's not."

Encouraging new pathways in the brain

Complex behavior always involves multiple parts of the brain communicating with one another, with one region's message affecting how another region will respond, Fanselow noted. These molecular changes produce our memories, feelings and actions.

"The brain is heavily interconnected you can get from any neuron in the brain to any other neuron via about six synaptic connections," he said. "So there are many alternate pathways the brain can use, but it normally doesn't use them unless it's forced to. Once we understand how the brain makes these decisions, then we're in a position to encourage pathways to take over when they need to, especially in the case of brain damage.

"Behavior creates molecular changes in the brain; if we know the molecular changes we want to bring about, then we can try to facilitate those changes to occur through behavior and drug therapy," he added. I think that's the best alternative we have. Future treatments are not going to be all behavioral or all pharmacological, but a combination of both."

Fanselow and Vissel have worked together closely over the last several years.

The research was funded by the National Institute of Mental Health, part of the National Institutes of Health, and by the National Science Foundation. Learn more:

Learn about Fanselow's research at http://fanselowlab.psych.ucla.edu/ Learn about the Garvan Institute of Medical Research at http://www.garvan.org.au/

Mission to Build World's Most Advanced Telescope Reaches Major Milestone

By Stuart Wolpert

WITH THE SIGNING THIS SUMMER OF A "MASTER AGREEMENT" FOR THE THIRTY METER TELESCOPE — DESTINED TO BE THE MOST ADVANCED AND POWERFUL OPTICAL TELESCOPE IN THE WORLD — THE UNIVERSITY OF CALIFORNIA AND UCLA MOVED A STEP CLOSER TO PEERING DEEPER INTO THE COSMOS THAN EVER BEFORE.



Andrea Ghez

The agreement, signed by UC President Mark Yudof and several international partners, formally outlines the telescope project's goals, defines the terms of its construction and establishes its governance structure, design and financing.

Work on the Thirty Meter Telescope (TMT), named for its 30-meter primary mirror — three times the diameter of the largest existing telescopes — is scheduled to begin in April 2014 atop Hawaii's dormant Mauna Kea volcano. The TMT's scientific operations are slated to start in 2022.

UCLA researchers will play a significant role in the development and use of the TMT, which will enable astronomers to study stars and other objects throughout our solar system, the Milky Way and neighboring galaxies, and galaxies forming at the very edge of the observable universe, near the beginning of time.

The project is a collaboration among universities in the U.S. and institutions in Canada, China, India and Japan, with major funding provided by the Gordon and Betty Moore Foundation.

"UCLA is taking a lead role in defining the science for this monumental international project," said Andrea Ghez, a professor of physics and astronomy who holds UCLA's Lauren B. Leichtman and Arthur E. Levine Chair in Astrophysics.

Ghez, who has served on the TMT science advisory committee since its first meeting 13 years ago, described the master agreement as an important milestone for the UC system, UCLA and the field of astronomy.

"One reason why we want to build

TMT is to delve into the most fundamental workings of our universe," she said. "It is truly amazing to think about what TMT will teach us about the universe."

An artist's interpretation of the Thirty Meter Telescope

Creating cutting-edge instruments for the TMT

UCLA Professor of Astronomy James Larkin is one of those excited about the TMT's potential. He is the principal investigator for the Infrared Imaging Spectrograph (IRIS), one of three scientific instruments that will be ready for use with the TMT when the telescope begins operation.

"IRIS is an imaging spectrograph that perhaps can best be described as a sophisticated camera that takes small images at 2,000 different wavelengths simultaneously," Larkin said. "Or it can be thought of as a spectrograph that takes 10,000 adjacent spectra over a rectangular area of the sky."

The instrument will be able to produce images three times sharper than what is currently achievable with the two powerful W.M. Keck telescopes on Mauna Kea and many times sharper than the Hubble Space Telescope, Larkin said. IRIS will image planets that are forming but are often too dim and red to be detected by smaller telescopes, and it will be the only one of the three TMT instruments to magnify images to the theoretical diffraction limit.

"Exploring the universe at this unprecedented resolution and sensitivity means we will be surprised by what we find," he said. "IRIS has a wide range of science objectives, ranging from chemical analysis of the surfaces of solar system moons like Titan and Europa to following the evolution of galaxies over the past 13 billion years to searching for the first stars in the very early universe."

With the most sensitive spectroscopy available anywhere in the near infrared, IRIS will yield the first real understanding of the physical nature of these early galaxies, a key goal of research in cosmology and astrophysics.

IRIS is a joint project involving more than 50 astronomers from the U.S., Canada, Japan and China, and many of the instrument's most crucial components will be designed and built at UCLA's Infrared Laboratory for Astrophysics, founded more than 20 years ago by Ian S. McLean, who is the Iab's director and a UCLA professor of physics and astronomy.

The TMT, McLean said, will enable astronomers to see not only much fainter objects but also to resolve them in much greater detail.

"Both of these attributes are crucial for almost all of the frontier areas of modern astrophysics, from studies of nearby exoplanetary systems to probing the most distant objects in the universe," he said. "The TMT is precisely the right kind of scientific tool to complement national facilities under development, such as the James Webb Space Telescope. We are all very excited that the TMT master agreement is signed."

In 1989, at the beginning of the era of the twin W.M. Keck telescopes — currently the world's largest optical and infrared telescopes — UCLA set up its infrared astrophysics lab to develop state-of-thescience instruments for them. All four of the currently operational infrared cameras and spectrometers on the Keck telescopes were built entirely or in part at UCLA. McLean expects UCLA's infrared lab to play a similar role with the TMT.

The concept of a telescope three times larger and with nine times more lightgathering power than the Keck telescopes was first envisaged nearly 15 years ago, and UCLA has played a major role in defining the type of instruments needed for such a telescope. IRIS, under Larkin's leadership, is one example, McLean said. Another proposed TMT instrument, the Infrared Multi-Slit Spectrometer (IRMS), will be a near replica of the successful MOSFIRE instrument that McLean delivered to the W.M. Keck Observatory in 2012. The twin 10-meter Keck telescopes have "attracted many distinguished faculty, trained students at all levels and served the people of California and the world with inspiring discoveries and technological leadership," said McLean. "The University of California will continue that tradition of leadership and excellence with its participation in the TMT project, and UCLA will play a key role through the development and exploitation of infrared spectroscopy and high-resolution imaging technology."

Solving the mysteries of black holes with the TMT

UCLA's Ghez, who leads the development of the Galactic Center project, said her research will be greatly enhanced by the Thirty Meter Telescope.

Ghez and her colleagues discovered a supermassive black hole at the center of the Milky Way that has a mass approximately four million times that of our sun. Such mysterious and intriguing black holes, which were predicted by Einstein's theory of general relativity, provide remarkable



An artist's rendering of the Thirty Meter Telescope at sunset

laboratories for the study of physics in extreme environments.

The TMT, Ghez said, will identify and map the orbits of fainter stars close to our black hole, extending our knowledge of physics with a fundamental test of Einstein's theory. Because stars in the vicinity of the black hole will be affected by the presence or absence of dark matter, their orbits will significantly constrain our current model of dark matter, which is central to our understanding of galaxy formation.

TMT will also extend our ability to measure accurate masses of black holes in more distant galaxies and in low-mass galaxies, likely revealing when and how black holes are "fed," Ghez said.

In the distant universe, IRIS's ability to image and study the internal workings of early galaxies will represent a major breakthrough in the study of galaxy formation during the known peak period of star formation.

Learn more: Watch a TMT Overview video at http://vimeo.com/8373845

EXPORTING IMPACT

REACHES FAR BEYOND CAMPUS AND SPANS THE GLOBE. HERE ARE JUST A FEW EXAMPLES.

01. YELLOWSTONE NATIONAL PARK

Department of Ecology and

Evolutionary Biology Using 14 years of data on gray wolves, Professor Robert Wayne concluded that cooperative group behavior and a mother's weight are crucial factors for a pack's survival.



Department of Linguistics

Professor Pamela Munro focuses on the study and preservation of endangered indigenous American languages, including Chickasaw, spoken today by fewer than 200 people, primarily in Oklahoma.

03. WASHINGTON, D.C.

Center for American Politics and Public Policy (CAPPP) Every year, 90 undergraduates complete research projects and internships through CAPPP's Quarter in Washington program.

.... 11 04. ARCTIC OCEAN

Department of Geography

Professor Laurence C. Smith conducted the first thorough assessment of trans-Arctic shipping potential, finding that melting sea ice will make Arctic shipping lanes much more accessible by mid-century.



Cotsen Institute of Archaeology at UCLA

A research team led by Professor Charles Stanish continues excavation of a flat-topped adobe pyramid at Cerro del Gentil, built sometime between 600 B.C. and 50 B.C.

06. GENEVA, SWITZERLAND

Department of Physics & Astronomy

Professor Robert Cousins has been a key member of one of two international research teams searching for the Higgs Boson (the so-called God particle), using CERN's Large Hadron Collider.



Department of Near Eastern Languages and Cultures

Since 2007, the Jaffa Cultural Heritage Project, co-directed by Professor Aaron A. Burke, has coordinated efforts to preserve Jaffa's remaining monuments and its archaeological remains.

OUR FACULTY, OUR STUDENTS, OUR RESEARCH ... THE IMPACT OF THE COLLEGE OF LETTERS AND SCIENCE



08. UGANDA

UCLA Global Citizens Fellowship

In this competitive summer fellowship, undergraduates pursue self-directed public service projects overseas. David Joseph '15 led installation of the Rural Emergency Communication System in Uganda to serve as a hotline to a local health clinic.



09. HIMALAYAS

Department of Earth and Space Sciences

Professor An Yin researches plate tectonics and how mountain ranges form, including studying the structural development and resulting landscape evolution of the Himalayas.



10. CORAL TRIANGLE: INDONESIA, MALAYSIA, PHILIPPINES

Department of Ecology and Evolutionary Biology

Professor Paul Barber's lab studies factors that contribute to the evolution of biodiversity in the Coral Triangle, waters containing the highest number of marine species in the world.



New Book by **UCLA Historian Traces Role of** Gender in 1992 Los Angeles **Riots**



Brenda E. Stevenson, UCLA professor of history and African-American studies

By Meg Sullivan

WHITE POLICEMEN PULLING A BLACK MAN FROM A CAR AND VICIOUSLY **BEATING HIM. BLACK MALE RIOTERS ERUPTING AFTER THE OFFICERS ARE** ACQUITTED OF ASSAULT AND EXCESSIVE FORCE CHARGES. BLACK MALE **RIOTERS PULLING A WHITE MAN FROM HIS TRUCK AND VICIOUSLY BEATING** HIM. MEN OF COLOR LOOTING STORES. GUN-TOTING MALE SHOPKEEPERS POISED ON ROOFTOPS TO PROTECT THEIR BUSINESSES.

So many of the indelible images of the 1992 Los Angeles riots feature men, especially black and white men. But there was also a women's story behind the so-called Rodney King riots, and it is considerably more important and ethnically nuanced than the one that lingers in the public imagination, a UCLA historian argues in a new book.

"Most people believe that the LAPD beating of Rodney King sparked the

Los Angeles riots of 1992," says Brenda Stevenson, author of The Contested Murder of Latasha Harlins: Justice, Gender and the Origins of the LA Riots. "But this riot was boiling forth from the moment Latasha Harlins was shot."

Setting the stage for unrest

Published in July, the book presents the definitive history of the Harlins case, which

resulted in a felony manslaughter conviction but no jail time for the middle-aged female Korean shopkeeper who on March 16, 1991, shot the 15-year-old Harlins in the back of the head after a scuffle. Harlins died with \$2 in her hand — the cost of the bottle of juice shopkeeper Soon Ja Du believed the teenager was trying to shoplift.

Following the April 29, 1992, acquittal of four police officers in the videotaped beating of King, the L.A. riots raged for days.

"For many who actively participated in the protest, looting and destruction, and for the thousands who stayed at home, but understood all too well why others had gone, Rodney King was not the symbol of injustice that was being protested; Latasha

Harlins was," writes Stevenson.

The professor of history and African-American studies substantiates her argument by tracing the black community's responses to the Harlins case and the sentencing of Du in late 1991, during the months prior to the riots, and by linking the case to the root causes of 17 other U.S. race riots since 1917. She concludes that the relationship between the Harlins case and the 1992 conflagration fits a distinct pattern.

One of the most consistent contributing factors to black social unrest proves to be "brutal or unjust treatment of a vulnerable or innocent member of the community, particularly a young person or a female," Stevenson writes. "Such events undermined community patriarchies, challenging the vitality and legitimacy of black manhood and the citizenship rights associated with that manhood. How, indeed, could men be men if they could not protect their women and youth?"

In a Los Angeles Times interview, Stevenson outlined similarities between the Latasha Harlins case and the Trayvon Martin case from the summer of 2013. "The community has responded with a sense of injustice in both cases. And women are very important — all six jurors [in the Martin case], the judge, his friend who was on the phone. [In the Harlins case], the defendant, the victim, the judge, the prosecutor. Women play important roles in the cases as well as the way the larger society has looked at the cases."

Haunting parallels

Stevenson was drawn to the Harlins case by a haunting parallel. At the time shopkeeper Soon Ja Du killed Harlins, Stevenson was a Westchester High School freshman being raised by her aunt and grandmother because her own mother had been murdered six years earlier. The sentence in that shooting was so light that her mother's killer — a woman who was romantically involved with Latasha's father — had already served her time by the time Latasha was killed.

Stevenson is a recognized authority on Southern history, slavery and women. Her award-winning book *Life in Black* and White: Family and Community in the Slave South has been lauded for its balanced perspectives on the lives of

in America.

Generations of struggle

Beyond laying out the details of the case, Stevenson's new book explores the personal and group histories of three women whose class and racial/ethnic status differed significantly but whose fates intertwined in the Harlins case — the African-American high school girl, the Korean-American shopkeeper and the Jewish-American judge, Joyce Karlin, who handed down the controversial sentence that would haunt her career

Stevenson traces Harlins' family back The author describes a "mini-war"

to slave times and also lays out the political and economic hardships in South Korea that motivated the Du family to immigrate to the United States. The author goes back three generations to the arrival of Karlin's Jewish ancestors from Russia at a time of pogroms and legalized persecution of Jews. Poignantly, Stevenson shows how Harlins' and Karlin's ancestors and Asian immigrants like Du have faced many of the same racerelated hardships in American society. that erupted between Korean-American owners of liquor and convenience stores in South L.A. and their African-American clients in the wake of Harlins' shooting. And she shows how the 1992 riots eventually moved from Korean-owned stores in South Central to L.A.'s Koreatown neighborhood, which tends to be remembered as the site of Korean-black conflict.

Gender roles at play

In addition to teasing apart the case's ethnic strands, Stevenson explores the role of gender. She shows how Karlin, as a newly appointed female judge, may have felt pressure to overreach her abilities by taking on the "hot potato" case that her senior colleagues deftly avoided.

Stevenson enumerates the strict gender roles in Korean culture that drove an ill-prepared Du to take over for her

slaves, plantation owners and freed slaves. Stevenson also received acclaim for her role in editing the journals of Charlotte Forten Grimké, a 19th-century free black woman from Philadelphia, as well as her co-editorship and contributions to the three-volume encyclopedia Black Women

husband and son at their South-Central liquor store on the fateful morning of the shooting. She also details the social science behind race and victimhood, suggesting that even an armed Asian-American woman is likely to be perceived in American culture as more feminine, and therefore more vulnerable and deserving of compassion, than a poor, motherless black child with no criminal record and an honor-roll background.

"Culturally, Latasha was brushed with the same paint as the gangbangers who sometimes frequented the Empire Liquor Market," Stevenson writes.

Stevenson looks at judicial history in the U.S. and argues that Karlin's sentence was consistent with an established pattern of legal rulings by female judges, who tend to look more frequently at the community stature of women involved in conflict than at the severity of their crimes.

"Typically, they'll look at the role that a woman has in her family and community and determine a sentence by comparing the aggressor's stature to that of the other woman," Stevenson says. "Karlin saw Du as being a model citizen and a mother who was taking care of her family by minding the store. She saw Harlins as just the opposite."



Prof. Stevenson's new book, published by Oxford University Press

15 UCLA COLLEGE REPORT

ucla's Undergraduate Researchers: "We're going to have an impact on the future"



Amy Stuyvesant works with soil samples to learn how hurricane activity is impacting the forests of Puerto Rico.

By Rebecca Kendall

SERENA LEE '13 ASPIRES TO INCREASE OUR UNDERSTANDING OF PEOPLE LIVING WITH "INVISIBLE DISABILITIES." AMY STUYVESANT '13 WANTS TO FIGURE OUT HOW CHANGES IN HURRICANE ACTIVITY ARE HELPING OR HINDERING THE FORESTS OF PUERTO RICO.

Although the subjects of their research are unrelated, these Bruins share a key distinction. Thanks to the Wasserman Undergraduate Scholars Program, they pursued high-level research as undergraduates that they expect to have an impact far beyond UCLA.

One of several programs that fuel undergraduate research at UCLA, the Wasserman Foundation Scholarships have provided nearly \$2.5 million for 528 student projects since 1999. Created by generous support from Lew Wasserman, the longtime chairman of MCA, and his wife, Edie, the awards allow students to devote time and energy to senior thesis projects or to participate in faculty research. Awards are typically about \$5,000 per year and are given to students completing a senior thesis or an equivalent project in their field.

Among their many contributions to UCLA, the Wassermans donated \$10 million to establish an endowment to fund scholarships for undergraduate students. (Lew Wasserman passed away in 2002; Edie in 2011.) The endowment was inspired by letters they had received over the years from UCLA students who said they could not have attended college without financial assistance from the couple's earlier donations.

For her senior thesis, Lee studied people living with so-called invisible

disabilities — health issues that are not immediately apparent to others, such as vision and hearing impairments; chronic conditions such as fibromyalgia, arthritis and diabetes; and mental illnesses.

Her research was inspired by the aftermath of a car accident during her sophomore year that left Lee with a concussion and, later, post-concussion syndrome. Although she withdrew from school for a year to focus on her health, Lee has suffered bouts of depression and the injury still affects her: At times, she has difficulty being among large crowds and she no longer is able to learn the way she did before the accident.

"Before the accident I could read a book

once and easily retain the information, and I didn't have to spend as much time studying as I do now," she said. "I have changed the way I memorize things, and I have to take short breaks while studying and take exams in a different room. So there have been a lot of adjustments."

Lee confided in Paul von Blum, a senior lecturer in African-American studies and communication studies, who encouraged her to use her experience as a springboard for scholarly pursuits and guided her to the Wasserman program.

"Through my research I'm trying to change the way disability is viewed," said Lee, who has interviewed a dozen people with hidden disabilities in Los Angeles and, via Skype, in locations like Australia and England. She said she wants to raise public awareness about the scope of invisible disabilities and help people better understand that they are just as significant as other disabilities.

Invaluable experience

At an on-campus reception, Lee had the opportunity to learn more about the



Serena Lee interviews third-year student Benjamin Gelbart about his invisible disability, a brain injury suffered as a result of a schoolyard assault. Gelbart is one of nearly a dozen people Lee is interviewing as part of her Wasserman Scholarship-supported research.

Wasserman Foundation and meet Lew and Edie's grandson Casey, a UCLA alumnus who now serves as the foundation's president and chief executive officer. She also met other Wasserman Scholars whose research topics include cancer, soil pollution and climate change.

Among her Wasserman Scholar peers was Amy Stuyvesant, who researched the effects of increased hurricane activity in the forests of Puerto Rico.

Rising sea surface temperatures near Puerto Rico have led to more intense hurricanes, which have blown unusually large amounts of leaves to the forest floor. This, in turn, has altered the levels of nutrients making their way into the soil, which Stuyvesant found may have implications for certain organisms living in the forest.

"Normally when the leaves hit the ground, the nutrients have already been taken out of them," Stuyvesant said. "Now we're finding that the nutrients are remaining in the leaves, and once they're shaken off the trees by wind and rain, these nutrients are being incorporated into the soil, and they're changing microbial communities and possibly plant growth. The whole process is being affected by this influx of green vegetation." Continued studies will be needed in order to determine whether the impact is positive or negative, she said.

Her Wasserman experience has encouraged her to think seriously about a career in academia. "It has made me more interested in pursuing a Ph.D., maybe becoming a professor or maybe just continuing to be involved with research," she said.

Invisible disabilities and Puerto Rican forests are just two of the myriad topics in which students are making their marks. And programs like Wasserman Scholars have made undergraduate research a much more attainable pursuit, said Patricia Turner, dean and vice provost for undergraduate education.

Investing in the future

Turner said the benefits of undergraduate research are many: It makes students stronger candidates for internships, employment and graduate programs; provides networking opportunities with people in specialized fields; allows students to help create new knowledge; and may even enhance the rest of their academic experience.

"Often when they have a research experience, and get to see what they're doing three-dimensionally, their classroom performance improves," she said.

The generosity of donors like the Wasserman family has become even more important recently given plummeting state funding for higher education.

Perhaps more importantly, undergraduate scholarships have become critical "investments in the future," Turner said. Donors increasingly understand that they will realize a return on their investments because of how students' discoveries will improve lives around the world for years to come.

That's a notion echoed by Serena Lee. "I've been so lucky to be part of this group of scholars," she said. "We might not know how, yet, but we're going to have an impact on the future."

A Meeting of Two Extraordinary Minds: **Ron and Anne Mellor**

Distinguished Faculty Pledge \$1 Million to English and History Departments



Ron and Anne Mellor

By Margaret MacDonald

TWO PROMINENT FACULTY MEMBERS IN THE COLLEGE OF LETTERS AND SCIENCE CEMENTED **THEIR COMBINED 65-YEAR LEGACY OF DISTINCTION AT UCLA BY MAKING** A JOINT TESTAMENTARY PLEDGE OF \$1 MILLION, TO BE DIVIDED BETWEEN THE ENGLISH AND HISTORY **DEPARTMENTS.**

Anne Mellor, distinguished research professor of English, and her husband, Ronald Mellor, distinguished professor emeritus and former chair of the history department, recently established endowments for graduate student fellowships in their home departments as well as the Ronald and Anne Mellor Endowed Educational Fund, which will provide resources for visiting lecturers, summer travel-study opportunities and new acquisitions for UCLA's special library collections.

"We are immensely grateful for this generous gift from Ron and Anne Mellor, two of our most beloved and accomplished faculty," said Executive Vice Chancellor and Provost Scott Waugh. "It demonstrates their confidence in the institution where they have already invested so much professionally and personally, and shows a clear understanding of UCLA's need for philanthropic support."

Anne Mellor is credited with creating and shaping the scholarly field of 18th- and 19th-century British women's literature; she is also an eminent scholar of feminist theory and the visual arts. She received her B.A. in philosophy from Brown University and her master's and doctoral degrees in English and comparative literature from Columbia University.

She joined the UCLA English faculty in 1985 and played a pivotal role in establishing women's studies as an academic discipline at the university. In 1996, she developed the first anthology of British Romantic-era writing that contained as much work by

women as by men. This canon-transforming work has since become the basis of many of the courses taught in America in this field.

Anne said, "I feel blessed to have had a career in which I've been paid to do what I love: read novels, poems and plays; look at art; listen to classical music; travel around the world; and share my enthusiasm with others."

David Schaberg, dean of the Division of Humanities, said, "The gift is a testament to Anne Mellor's dedication to her students, to her faith in the university and to her extraordinary intellect."

Ali Behdad, professor of English and comparative literature and chair of the English department, said, "Anne has always shown an unwavering commitment to teaching and mentoring, so I was not at all surprised that she decided to support graduate students. We are all very grateful that Anne has chosen to give back in this way."

The other half of this brilliant duo, Ron



Anne and Ron Mellor on their wedding day in 1969

Mellor, is regarded as one of the world's foremost experts on ancient religion and Roman historiography. He was the first in his family to graduate from high school, and later studied classics and philosophy at the University of Louvain in Belgium and Fordham University. He earned his doctorate in classics from Princeton University and began teaching at UCLA in 1976.

For many years he led UCLA student travel-study courses in Rome, and he continues to lead alumni tours to destinations worldwide, including Slovenia, Sicily, Turkey, France and the Western Mediterranean. As chair of the history department in the 1990s, Ron was among the first faculty leaders to initiate extramural fundraising efforts, recognizing that private support was increasingly vital to UCLA's continued excellence. He noted that the department needed to increase financial support to graduate students in particular: "Graduate students are central to the whole research enterprise. If you don't have good graduate students, you cannot keep good faculty. They are what make a real research university tick."

Alessandro Duranti, dean of the Division of Social Sciences, said, "Ron Mellor's remarkable gift caps a career of visionary academic leadership, exceptional scholarship and teaching that have helped make UCLA's history department one of the best in the country."

David N. Myers, professor and chair of the history department, said, "A gift such as this is so profoundly affirming of what we do. Ron and Anne have given six and a half decades of their combined lives to UCLA. At the point of retirement, rather than bid us farewell, they give even more of themselves back to this institution: a remarkable example that we should all emulate."

Ron and Anne met on a blind date while both were teaching at Stanford. A photo taken on their wedding day depicts a scene straight out of the "swinging sixties," with Anne in a mini-dress she sewed for the occasion, and Ron in a velvet jacket made by Mick Jagger's tailor. Although

Career Highlights

RON MELLOR Chair of UCLA Department of History (1992 - 97)Visiting Fellow/Scholar at: University College London Humanities Research Centre of the Australian National University American Academy in Rome Princeton Institute of Advanced Studies Recipient of fellowships from the National Endowment for the Humanities and the American Council of Learned Societies Co-director, UCLA History-Geography Project (initiative bringing faculty and

Select Publications: THEA ROME: The Goddess Roma in the Greek World (1975) From Augustus to Nero: The First Dynasty of Imperial Rome (ed. 1990) Tacitus (1993) Tacitus: The Classical Heritage (1995) The Historians of Ancient Rome (ed. 1997; 2nd ed. 2004) The Roman Historians (1999) Text and Tradition: Studies in Greek History and Historiography in Honor of Mortimer Chambers (co-ed. 1999) Augustus and the Creation of the Roman Empire (Bedford/St. Martin's, 2005) Tacitus "Annals" (Oxford University Press, 2011)

their shared passion for teaching and research first brought them together, they continue to discover areas where their scholarly interests intersect. Ron said, "Many 18th- and 19th-century British writers were greatly influenced by Roman architecture and sculpture as a result of their European travels," said Ron. Anne added, "Even now when we travel abroad, we are always excited to show each other sites of historical and literary importance."

Ron retired from full-time teaching in February, followed by Anne in June. Fortunately for UCLA students, they will both continue to teach part-time. And

- K–12 teachers together)

ANNE MELLOR

- Keats-Shelley Association Distinguished Scholar Award Two Guggenheim Fellowships Three NEH Summer Seminar for College Teachers Directorships Recipient of fellowships from: American Council of Learned Societies National Endowment for the Humanities Rockefeller Foundation Australian National University Honorary fellow of the English Association (2004)
- UCLA Distinguished Teaching Award (2002) Former director of the UCLA Women's
- Studies Program (1986–87) Fulbright Scholar
- Select Publications:
- Mothers of the Nation Women's Political Writing in England, 1780–1820 (2000)
- British Literature, 1780–1830 (Edited, with Richard Matlak, 1996)
- Romanticism and Gender (1993)
- Mary Shelley: Her Life, Her Fiction, Her Monsters (1988)
- Romanticism and Feminism, edited (1988), the first collection of feminist essays on Romantic writing
- English Romantic Irony (1980)
- Blake's Human Form Divine (1974)

retirement does not mean they will be content to rest on their scholarly laurels. Ron has ambitious plans to write a book on the entire history of Rome, and Anne has a long list of novels waiting to be explored and analyzed. She says she might even take up painting. They are also looking forward to traveling and spending more time with their grandchildren, ages 2 and 4.

OUR ALUMNI

The Enduring Legacy of Sady and Ludwig Kahn

Trust Establishes the Sady and Ludwig Kahn Chair in the Study of Jewish History

By Margaret MacDonald

THE STORY OF SADY AND LUDWIG **KAHN HAS BEEN WOVEN INDELIBLY INTO THE FABRIC OF UCLA THROUGH MAJOR GIFTS DISTRIBUTED BY** THE SADY KAHN TRUST SINCE HER DEATH IN 2009 — THE MOST RECENT, A \$2 MILLION ENDOWMENT TO **ESTABLISH THE SADY AND LUDWIG KAHN CHAIR IN JEWISH HISTORY IN** THE UCLA DEPARTMENT OF HISTORY.

Sady and Ludwig were among thousands of German-Jewish refugees who fled Germany in the late 1930s when the Nazis rose to

of the couple said that Sady and Ludwig never lost their sense of humor or their deep love and respect for each other. Ludwig showered her with gifts, and in many photographs, the camera has caught him gazing adoringly at his wife. After Ludwig's death in 1999, one friend recalled a bereft Sady saying, "There was only one man in my

> life — and he was the love of my life." At Sady's request, long time family friend Jim Keir helped her identify beneficiary charities, one of which was UCLA. According to Keir, the university was a perfect fit with

> > her values and

interests. "Having

had no children of

her own, Sady was

delighted to know

that young people would benefit from

her trust long after

she was gone," he

The Sady

Kahn Chair will

provide funds for

the chairholder's

student support,

public seminars

David N. Myers,

chair of the history

department, said,

"This gift ensures that the poignant

and symposia.

professor and

and annual

research, graduate

said.

hours, scrimped and saved, and ultimately established a thriving hat-making business.

Despite their early struggles, friends

Sady and Ludwig Kahn

power, with little more than the clothes on their backs. The Kahns forged a new life for themselves in Los Angeles, and Sady's parents came to live with them soon after, having escaped on one of the last trains out of Germany. Sady and Ludwig worked all

and powerful story of Sady and Ludwig Kahn — and of so many other Jews from the near and distant past — will be taught to generations of students at UCLA. It affirms UCLA's place as a major center for the study of Jewish history in the United States and



Jim and Lori Keir

the world. We are delighted and honored to have the Kahn name grace our department."

Keir began distributing the trust's assets after Sady's death in 2009, beginning with a transformative \$2 million gift to establish the Sady and Ludwig Kahn Directorship of the UCLA Center for Jewish Studies. "With every distribution, I have applied two guiding principles: the gift must honor Sady's memory and benefit other people," he said.

Friendship with Sady Kahn, and the subsequent asset distribution, has added a new dimension to the lives of Keir and his wife, Lori, both Bruins whose two daughters also graduated from UCLA. Keir said, "Although Sady's gifts have provided muchneeded funds to UCLA, she has also given Lori and me something of great personal value. Through her we have reconnected with the campus, taken classes in Jewish history, and met the most amazing students and faculty."

Lori Keir added, "Being on the UCLA campus is wonderful. The energy and the diversity are just incredible, and the students' enthusiasm and focus are infectious. Sady would have loved it here."

Sady used to tell Lori Keir of her concern that she would be forgotten after she was gone. There is no danger of that now: the endowments bearing the Kahn name ensure that Sady and Ludwig's legacy at UCLA will live on in perpetuity.

Jeffrey Cunard '77

WHEN JEFFREY CUNARD ARRIVED AT UCLA AS A FRESHMAN IN THE FALL OF 1973, HE WAS UNAWARE THAT, JUST FOUR YEARS EARLIER IN A COMPUTER LAB **ON CAMPUS, THE VERY FIRST INTERNET MESSAGE HAD BEEN TRANSMITTED. NOR DID HE KNOW THAT HE** WOULD HAVE A LAW CAREER. AND THAT IT WOULD **BE SIGNIFICANTLY SHAPED BY THIS PHENOMENAL EVENT AND THE TECHNOLOGICAL REVOLUTION THAT** FOLLOWED.



Cunard '77 is widely recognized as one of the world's leading experts in Internet law. For much of his three-decade career, he has successfully navigated complex and often uncharted territory at the intersection of media, technology and the law.

As managing partner of the Washington, D.C., office of the international law firm of Debevoise & Plimpton LLP, Cunard leads the firm's corporate intellectual property and information

technology practices and has broad experience in both cuttingedge copyright litigation and transactions. He has worked on numerous projects involving novel models of cooperation among media, content and technology companies — both to encourage technological innovation and to protect content owners' intellectual property rights.

Alongside his law practice and his commitment to community and not-for-profit activities, Cunard is an active writer and public Cunard has litigated cases involving the Internet, helped speaker. He is co-author of two seminal books on international develop the legal framework for content protection technologies communications law, From Telecommunications to Electronic Services and The Telecom Mosaic. He also co-authors a leading onethat allow for the introduction of new digital technologies, assisted governments in developing legal frameworks for their media and volume treatise on copyright law, Copyright Law: A Practitioner's telecommunications sectors and, in the landmark Google Books Guide. For several years Cunard taught a seminar on Internet-related legal issues at Harvard Law School, and served as co-director of the

litigation, represented major book publishers who were asserting that Google had infringed their copyrights. "Early in my career, I became fascinated by the relationship clinical program at the Berkman Center for Internet & Society at between technological innovation and the law," said Cunard. "What Harvard University. In 2008, he was awarded the Berkman Award for prepared me best for this pathway was what I learned at UCLA pro bono service as a lawyer and educator. how to think critically, write clearly and argue persuasively."

Cunard delivered the 2011 commencement speech to UCLA's Division of Humanities undergraduates. Then, he spoke eloquently and with passion about the inherent value of a humanities education, saying it develops "openness to the world at large, a critical engagement with texts and complex ideas, and mental agility."

As an undergraduate, Cunard immersed himself in a broad range of courses, including early English literature, 17th-century European intellectual history, Icelandic sagas, astronomy and American constitutional law. He recalls being deeply influenced by several of his professors, including David Rodes, Robert Kinsman and James Phillips. He also took Latin, which resulted in his being cast as a lecherous slave in Plautus' play Rudens, which was performed in Latin to full houses.

An accomplished student, Cunard was selected as a U.C. President's Undergraduate Fellow. He was awarded the Department of English Senior Prize and the Franklin P. Rolfe Phi Beta Kappa Prize. He also received the Barbara Ladd Gates Award for Intellectual Accomplishment, which is reserved for the best honors undergraduates. With his nominal award money, he bought dozens of paperback books in Westwood Village, the nascent core of his literature library.

As for extracurricular activities, Cunard served as vice chair of the Communications Board, a student organization that oversees the Daily Bruin, the university's radio station, the special interest publications and the UCLA Yearbook. While at UCLA, he was an avid sports fan, never missing a single home basketball or football game. After graduating summa cum laude with departmental honors in English and political science, he earned his J.D. from the Yale Law School, where he was an editor of the Yale Law Journal.

Cunard credits his wide-ranging UCLA liberal arts education with cementing his lifelong commitment to self-enrichment, citing his ongoing passion for literature, theater, music, opera, dance, the visual arts and world culture. He has served on the boards of various theater and arts institutions. He currently is vice chair of the board of trustees of the Freer Gallery of Art/Arthur M. Sackler Gallery at the Smithsonian Institution, which he formerly chaired; is on the board of the Friends of Khmer Culture, which he helped found; and he has long served as counsel to the College Art Association.

OUR STUDENTS

OUR ALUMNI

Susan E. Baumgarten BA '73,

MS '76, MBA '79

THREE-TIME UCLA ALUMNA SUSAN E. BAUMGARTEN HAS BROKEN A FEW GLASS CEILINGS IN HER TIME. AT UCLA IN THE 1970s, SHE WAS THE LONE FEMALE IN HER ENGINEERING GRADUATE CLASSES. AND SHE WAS ONE OF THE FIRST WOMEN TO FORGE A SUCCESSFUL CAREER IN THE AEROSPACE AND DEFENSE INDUSTRY, INITIALLY AS AN ENGINEER AND ULTIMATELY AS A CORPORATE LEADER.

Renowned for her visionary leadership, business acumen and systems engineering expertise, Baumgarten became a Raytheon corporate vice president. She served as president of Raytheon International, where she oversaw the integration, growth and operations of companies in 76 countries, and was on the board of directors of Raytheon Systems Ltd., UK, Raytheon Canada Ltd., and Raytheon Australia. Early in her career, she had the thrill of flying in an F-15 fighter jet, an especially satisfying experience because of her involvement in designing its airborne radar systems.

Baumgarten earned all three of her degrees at UCLA: a bachelor's in mathematics and biochemistry, a master's in electrical engineering and an MBA from the Anderson School. She says that



her education served her well. "Being part of the College of Letters and Science meant that I could round out my 'techy' focus on math and science with wonderful classes in ancient history, geography and literature. Later when I traveled the world as a corporate executive, my knowledge of the history and culture of other countries helped me develop strong business relationships."

She is currently UCLA Anderson's Executive in Residence for Technology and Leadership and president of UCLA's Women and Philanthropy group. She is also a member of the board of advisors for the Division of Physical Sciences in the College of Letters and Science.

"I am fortunate I'm now at a point where I can give back to UCLA for all it has given me," said Baumgarten. "About four years ago, after a difficult personal loss, UCLA offered me a nurturing community of friends and intellectual stimulus that I embrace today. My leadership roles here are rewarding and inspiring; they allow me to keep up with the exciting scientific research advances on campus and interact with amazing students and faculty."

Peter H. Raven PhD '60

MORE THAN FIVE DECADES AFTER EARNING HIS DOCTORATE FROM UCLA, WORLD-RENOWNED BOTANIST PETER H. RAVEN SHOWS NO SIGN OF SCALING BACK HIS HERCULEAN EFFORTS TO ADVOCATE FOR GLOBAL CONSERVATION RESEARCH AND ENVIRONMENTAL SUSTAINABILITY.

Lauded by *Time* magazine as a "hero for the planet," he is the George Engelmann Professor of Botany Emeritus at Washington University in St. Louis. For nearly 40 years he served as president of the Missouri Botanical Garden, shaping it into a world-class center

for botanical research and education. In 2000, UCLA honored him with the Alumni Association Award in Professional Achievement.

Raven is leading a major new initiative on global climate change and is the chairman of the Center for Plant Conservation, which is dedicated to conserving and restoring the endangered native plants of the United States. He also serves as chairman of the National Geographic

Society's Committee for Research and Exploration.

Two years ago, on the occasion of his daughter's graduation from the UCLA School of Law, Raven found himself back at UCLA's Dickson Court, the site of his doctoral hooding ceremony in 1960. Back then, the Botany building was brand new, and he had just achieved a near-impossible feat: completing his doctorate in plant science in just three years. The unusually lush spring of 1958 was partly responsible, producing a huge number of specimens for his research. "I checked out a university vehicle and drove for miles through the Mojave and Colorado deserts collecting samples," he recalled.

Raven has fond memories of his fellow graduate students and his faculty mentors, including Harlan Lewis, a pioneer in plant genetics, and the legendary botanist Mildred Mathias — for whom UCLA's botanical garden is named. "UCLA helped me to make the transition from a kid who was mad-keen on the plants of California to a proper botanist," he said.

Raven received the National Medal of Science and has held Guggenheim and MacArthur Foundation fellowships. He served for 12 years as home secretary of the National Academy of Sciences and is a member of the academies of science in 17 countries. He is the author of more than 400 articles and 16 books, and co-author of two best-selling textbooks. He also co-edited *Flora of China*, a 49-volume work that took 25 years to complete.

HUMANITIES Jessica Kianmahd



Sometimes, it's a minor — not a major — that has the greatest impact on a student's future.

For Jessica Kianmahd, it was the nascent Disability Studies minor that helped her decide that helping communities understand people's differences was the right career for h

"As a society, I think there are many times when you're trained to s people as not having abilities," said Kianmahd, a Los Angeles native. "We have to change the culture so that

people understand that we all have certain limitations."

Recently, Kianmahd was one of two recipients of the Samuel Oschin Endowed Scholarship, which supports students in the Disabilities Studies minor. Last year, even though she was still a junior, she was awarded the Jessie Alpaugh Senior Prize in Disabilit Studies, which traditionally recognizes graduating seniors who have developed outstanding projects that contribute to emerging scholarship in the field.

Kianmahd, a fourth-year student majoring in psychology, pla to use her minor to pursue a master's degree and eventually beco

LIFE SCIENCES Peter Clayson



When Peter Clayson was an undergraduate student at Brigham Young University majoring in psychology and Russian, he did scholarly research on the brain science behind cognitive and emotional processing — work that included participating in two published studies. Today, Clayson is working toward his Ph.D. at UCLA as a clinical psychology graduate student minoring in behavioral neuroscience. "I selected UCLA," Clayson

said, "based on the professor I wanted to work with, Dr. Cindy Yee-Bradbury," a world-renowned expert on schizophrenia who conducts research on the psychophysiological correlates of emotional processing in the disorder.

As a member of Yee-Bradbury's research team in the

~t	a genetic counselor — a profession that helps patients and their families understand the meaning of a disability diagnosis. She says
	her laser-focused goal is due to the experiences and lessons she
	learned through the community-based internship requirement of
	the minor
	Through a core course, carefully selected electives, a required
	two-quarter internship or research apprenticeship, and a senior
ner.	capstone project, students in the Disabilities Studies minor obtain
	both breadth and depth in their understanding of the conceptual
ee	and practical implications of disability. Those requirements, although
	rigorous to some, came naturally to the 21-year-old Kianmahd.
9	For her project, Kianmahd, who is Jewish of Iranian descent,
	decided to return to her childhood temple and develop a curriculum
	aimed at facilitating ways to involve children with developmental
	disabilities in the life of the faith community, as well as educating
	students who attend the temple's day school on what it means to
	build an inclusive environment.
ty	"I'm going back to my own community and finding proactive
	ways to educate students on how to deal with differing abilities," she
3	said.
-	Her goal is to expand her program to Jewish day schools across
ans	Los Angeles, and eventually find ways to introduce her curriculum to
me	the wider Iranian-American community.
	,

Laboratory of Clinical Affective Psychophysiology, Clayson is investigating the effects of stress on working memory processes across the course of schizophrenia, seeking to better understand how patients with schizophrenia react to different kinds of stress in various phases of the illness. Among the core features of schizophrenia, memory deficits, attentional impairment and disrupted emotional processing are prominent.

"I am researching the extent to which emotional processing may remain intact in patients with schizophrenia," Clayson said. "I am particularly interested in what is working correctly rather than going awry in schizophrenia."

Among the research methods Clayson and his fellow researchers are using are interviews and behavioral measures of clinical symptoms, life stress and coping, as well as measures of brainwave activity and heart rate activity.

By identifying the processes that seem to remain intact during schizophrenia, treatment plans can be created that capitalize on these "islands of intact functioning," Clayson said.



Nothing will stop Brandon Matthews, if his mother has anything to say about it. "My mother has made a lot of sacrifices to make sure that we receive the best education possible," he said. Originally from Los Angeles, Matthews's mother decided to move her family to San Bernardino when her children were young, hoping that life

their education. Matthews, who is the first in his family to attend college, is now a

there would keep them focused on

fourth-year chemistry major and a model student for the university's efforts to promote research at the undergraduate level.

This month, he will be representing the University of California Louis Stokes Alliance for Minority Participation (CAMP) by presenting his research at the 2013 Louis Stokes Midwest Center of Excellence Conference in Indianapolis. Serving underrepresented students in Science, Technology, Engineering and Math since 1991, CAMP is one of 42 alliances across the country funded by the National Science Foundation. In November, Matthews will also be presenting his research at the 2013 Annual Biomedical Research Conference for Minority Students (ABRCMS) in Nashville.

UCLA has several programs to encourage underrepresented students to succeed in math and science. These include the Program for Excellence in Education and Research in the Sciences (PEERS), which welcomed Brandon to UCLA as a new freshman and encouraged his entry into research. PEERS students share career planning seminars and attend collaborative learning workshops to better connect to their science and math courses. Matthews also participated in the CARE Fellows & Scholars programs, which provides scholarships for students participating in research and interested in earning a Ph.D.

Matthews is currently applying to graduate programs to pursue his doctoral degree. But beyond the impact he hopes to make in his field, there is a greater lesson he'd like those who read this story to take away.

"There aren't a lot of students who look like me in my chemistry classes," he said. "I know that can be hard sometimes for students interested in science when they can't relate to those around them, but my advice for them is to stick with it and not give up."

SOCIAL SCIENCES Joseph Asunka



Good intentions can sometimes only go so far when it comes to delivering international aid to the poorest children in Africa. Joseph Asunka discovered that the hard way in his native country of Ghana when he worked for the humanitarian organization World Vision eight years ago.

Then a new graduate from the University of Ghana, Asunka worked with a team to provide educational and welfare support to the poorest

schoolchildren in the most resource-starved northern region. Once identified, children could be sponsored by World Vision donors and be given textbooks, school supplies, clothing and sometimes bikes to get to school.

"We designed programs and projects to implement on the

ground to improve basic education," recalled Asunka, 42, now a Ph.D. candidate in political science in the UCLA College of Letters and Science. "But then going into the field and talking to local leaders and politicians in these communities, you realize they sometimes have different incentives ... They would either want the programs implemented where they always get their votes or take it to a community where they had their own people."

Today, in his research on the politics of development and his work with organizations like the World Bank, Asunka is trying to understand the conditions under which politicians choose to implement good development policies.

"The basic question is: How can you shift the incentives of politicians so that they are willing to implement good policies and programs and still meet their own objectives?" Asunka said. "The bottom line is that politicians want to get reelected. If you have a well-designed program that will benefit the poor and still benefit politicians electorally, they might welcome that program."



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"A GREAT UNIVERSITY NEEDS GREAT PEOPLE, AND EXCEPTIONAL FACULTY ARE AN ABSOLUTELY VITAL PART OF WHAT MAKES UCLA ONE OF THE FINEST UNIVERSITIES IN THE WORLD. OUR GOAL IS TO MAKE SURE THE BRIGHTEST MINDS CONTINUE TO FLOCK TO UCLA, HELPING TO ENSURE ITS STRENGTH INTO THE FUTURE." — Anthony Pritzker, Co-chair of The Centennial Campaign for UCLA Volunteer Steering Committee

> UCLA COLLEGE OF LETTERS AND SCIENCE