

CAMPBELL HALL

Chillion .

UCLA COLLEGE OF LETTERS AND SCIENCE

A showcase of the people and progress in the UCLA College of Letters and Science

6 Exploring a New Era

Political scientist Joel Aberbach is keeping a close watch on the early days of the presidency of Barack Obama—his agenda, his personality, and his use of power.



A Unique Evolution

8

Biologist Robert Wayne and his research team mix old-fashioned detective work and sophisticated technology in their studies of genes in wolves and dogs.



10

A New Voice for the "Old and the Dead"

Egyptologist Kara Cooney combines a scholar's approach to research with zeal for bringing her work to contemporary audiences.



12

A Young Scientist Finds His Future

Undergraduate Ryan Dosumu-Johnson focused his future through the Minority Access to Research Careers (MARC) Program, and his achievements led to a Gilliam Fellowship for Advanced Study.





Calling Cards from Other Worlds

Cosmochemist John Wasson directs the UCLA Collection of Meteorites, one of the largest collections of its kind in the United States, and a boon for researchers looking at the formation of our solar system.

16

Great Futures for the College

The impact of philanthropy on the College.

28

On the cover:

Campbell Hall at UCLA, home to interdisciplinary research centers, the College's Department of Linguistics, and the Academic Advancement Program.

Photo by Reed Hutchinson



Snapshots

College News

Challenging the Concepts of Art

purpose of art.

14

Art historian Miwon Kwon

reexamines the conventional

notions of the definition and

An update of events and progress in the UCLA College of Letters and Science.

3

UCLA COLLEGE R E P O R T

18 The Social Cost of War

A unique study by economists Matthew Kahn and Dora Costa produced a surprising series of findings about heroism, loyalty, and diversity among soldiers who served in the U.S. Civil War.



20 Examining Life in Exquisite Detail

Arnold Berk, named this year to hold the UCLA Presidential Chair in Molecular Cell Biology, has spent three decades pursuing the fundamentals of life.



When a Student Becomes a Teacher

Each year in the spring quarter, 15 undergraduates work with a faculty advisor to create and teach a course of their own design.





A Look Back at King's Dream

A book by American culture scholar Eric Sundquist explores the legacy of the eternal "I have a dream" speech delivered by Martin Luther King Jr.

24



Confronting the Eye of the Storm

Atmospheric scientist Kristen Corbosiero investigates the most formidable weather forces in nature, with a special focus on how the physical structure of hurricanes is related to their intensity.

UCLA College of Letters and Science

Reynaldo F. Macías Acting Dean of Social Sciences

Emil Reisler Dean of Life Sciences

Joseph Rudnick Acting Dean of Physical Sciences

Judith L. Smith Dean and Vice Provost for Undergraduate Education

Tim Stowell Dean of Humanities

College Development

Stephen Jennings Interim Executive Director

Judith Forman Development Communications

College Marketing

Harlan Lebo, Director

Media Relations

Meg Sullivan Stuart Wolpert

Design Robin Weisz/Graphic Design

Please address comments to hlebo@support.ucla.edu

© Regents UC 2009

Unless otherwise indicated, all photos by Reed Hutchinson.

From the Deans of the College

A Time for Celebrating Achievement

Dear Friends:

This is the wonderful time of year when scholars in the College of Letters and Science—both teachers and students—are recognized for their superb achievements.

The honors they earn are as varied as the Rhodes Scholarships earned by two acclaimed scholarathletes from the College *(see page 4)* and the recognition received by two of our faculty who were included among the "Best Brains in Science" by Discover magazine *(page 5)*,

The honors below represent only a sampling of the many tributes earned by UCLA scholars in 2009—in the classroom, in research, and in the community:

We were gratified to learn that Juli Feigon (chemistry and biochemistry) and Shelley Taylor (psychology) have been elected to the National Academy of Sciences "for their distinguished and continuing achievements in original research." Membership in the academy is one of the highest accolades given to scientists in the United States.

Recently we received the news that six professors in the College were elected to the American Academy of Arts and Sciences for their "preeminent contributions to their disciplines and to society at large." Joining one of the nation's most prestigious honorary societies and independent policy research centers are Eric Becklin (physics and astronomy), Rogers Brubaker (sociology), William Gelbart, (chemistry and biochemistry), Stanley Osher (mathematics), Sanjay Subrahmanyam (history), and Terence Tao (mathematics).

Recognition can also be based on community involvement, such as the four UCLA students all from the College—who have been awarded the 2009 Charles E. Young Humanitarian Award for their commitment to public service. This year's winners conduct work that transforms lives: Frank Rodriguez for teaching English and computer skills to day laborers, Wendy Tseng for tutoring the homeless in downtown Los Angeles to pass the high school equivalency exam and gain employment, Jonathan Lee for creating innovative donation drives to purchase food for the homeless, and Laura Petry for mentoring middle-school students in the Bruin Partners project.

To our award-winning faculty and students-congratulations!



Reynaldo F. Macias acting dean of social sciences rmacias@college.ucla.edu



Emil Reisler dean of life sciences ereisler@college.ucla.edu



Joseph Rudnick acting dean of physical sciences jrudnick@college.ucla.edu



Judith L. Smith dean and vice provost for undergraduate education judis@college.ucla.edu



Tim Stowell dean of humanities tstowell@college.ucla.edu

College News

An update of events and progress in the UCLA College of Letters and Science.

The World's a Classroom? Thanks to Technology, It Can Be

Molecular biologist Robert B. Goldberg teaches an honors course on genetic engineering that is being attended in class at UCLA and in real-time through fiber optic connection at UC Davis, 370 miles away.

The UCLA professor called on one of the students in his classroom during a discussion about whether the genes in your chromosomes can be patented. He then called on another student—this one at UC Davis.

Undergraduates from both campuses are participating in a distance-learning honors course on genetic engineering and its implications—a class that uses state-ofthe-science technology, including highquality audio and video over a high-speed fiber optics network. The students can see and hear one another and the professor in each classroom in real time.

The instructor, Robert B. Goldberg, a UCLA distinguished professor of molecular, cell and developmental biology, taught the course with Japan's Kyoto University, separated by a 17-hour time difference, in 2004. He envisions expanding this form of distance learning and encourages other professors to do so as well.



Robert Goldberg's honors course, "Genetic Engineering in Medicine, Agriculture and Law" taught simultaneously at UCLA and UC Davis (on screen in the background).

"We have the potential to connect, in one class, students from the United States, Europe, Asia, and South America—like what's done on television news where someone's in Washington and someone's in Baghdad and someone's in Moscow," said Goldberg, a member of the National Academy of Sciences who has won awards for his teaching. "There is the potential to bring people from different parts of the globe together in a global village of education. What an amazing experience for the students.

"It's seamless; there's no lag with the fiber optics cable," he said. "It's like being in the same classroom. It's a really novel opportunity to see what people at other campuses in different cities, with very different backgrounds, think about issues. This class can be a really good model for interactive higher education teaching."

www.youtube.com/view_play_list?p=3D6BD220BC6AC096



Renee and Meyer Luskin Named College Honorary Fellows

Renee and Meyer Luskin received the 2009 award as Honorary Fellows at the College of Letters and Science awards dinner on April 27. That night the Luskins announced their endowment of the Renee and Meyer Luskin Fund for Civic Engagement.

The College Awards Dinner also marks the annual presentation of the Charles E. and Sue K. Young Undergraduate Awards, and the Young Graduate Awards—honors funded with support from Louis (B.A. '35) and Evelyne Blau.



Stellar Student-Athletes Named Rhodes Scholars

Two students from the College were chosen as winners of prestigious Rhodes Scholarships, the oldest and best known award for international study.

When freshman are asked who their personal heroes are, most would say a parent or older sibling. Yet when Scott Hugo was asked by Greg Kendrick, director of the Freshman Clusters Program, who inspired him the most, he replied without question: King Leonidas of Sparta and Alexander the Great.

The naming of new Rhodes Scholars, both from the College of Letters and Science, marks the first time that two students from UCLA received the honor in the same year.

> A persistent, powerful drive to devour knowledge, from classical to contemporary, has led Hugo, UCLA senior, a Phi Beta Kappa junior member and an avid rugby player on UCLA's club team, to the ultimate undergraduate prize: a Rhodes Scholarship and two to three years of allexpenses-paid study at Oxford.

> The California selection committee for the Rhodes Trust selected Hugo as well as Christopher D. Joseph, a summa cum laude graduate in geography, to receive the prestigious Rhodes Scholarships, arguably the most famous academic award



available to American college graduates.

Naming the winners, both undergraduates in the College of Letters and Science, marks the first time that two students from UCLA received Rhodes Scholarships in the same year. UCLA's last Rhodes winner was presented in 1997.

Joseph, a four-year football player and three-year starter, demonstrated his strength of character to UCLA Athletic Director Dan Guerrero when the studentathlete returned to the sport he loves after suffering two catastrophic knee injuries.

"In UCLA's athletic history, there has been less than a handful of athletes who have summoned the courage, overcome the doubt, and done the work to recover from two such traumas and achieve the post-injury success as was earned by Chris Joseph," wrote Guerrero.

At the same time, Joseph was assembling a near-perfect academic record while focusing his studies on the complex social and scientific causes of deforestation. Joseph was doing ecological and

geographic research on exotic species in the broadleaf forests of Brazil, glaciers in arctic Canada, migration in Morocco and inter-tribal trading in Micronesia.

That both Hugo and Joseph have been academic standouts while also achieving success on the sports field speaks to the unusual combination of brains and brawn that identifies Rhodes Scholars.

"Ever since I can remember, I've always looked at the Rhodes Scholarship as something I wanted to strive for," said Hugo, "because it's given to well-rounded individuals. I always felt if there was a scholarship out there for me to win, this was it."

Distinguished alumni speak at College commencement ceremonies

Prominent alumni topped the list of speakers at the 2009 commencement ceremonies for the College and its academic units, June 12–14.

Chosen as the keynote speaker for the College's main commencement ceremony was **James Franco**—actor, writer, director, and a 2008 graduate of the Department of English. The youngest and most recently-graduated alumnus of UCLA to serve as keynote speaker at the College's commencement ceremony, Franco represents the many students at UCLA whose studies have been interrupted by career, service to their country, or family circumstances, yet they remain motivated to return to their studies.

Among the other alumni speakers speaking at ceremonies for their academic departments in the College:

Susan Baumgarten (mathematics), former president of Raytheon International

Alan Bergman (economics), president of The Walt Disney Studios

Alec Binnie (English), financial advisor for Ameriprise Financial

Alan Buckelew (history), president of Princess Cruises

Craig Fuller (political science), president of the Aircraft Owners and Pilots Association

Giada De Laurentiis (anthropology), host of five series on the Food Network and NBC

Kehaulani Vaughn (Asian American studies), PLUS counselor for the UCLA Academic Advancement Program

Babette Perry (communication studies), vice president at IMG Broadcasting

Bill Prady (physics and astronomy), executive producer and co-creator of the television series, "The Big Bang Theory"

John Sciarra (sociology), president of National Retirement Services



UCLA's 2009 Rhodes Scholars: Scott Hugo (above left, and playing rugby top right) and Christopher Joseph (above right, and playing football top left).

Two of the "Brightest People Alive"

UCLA mathematics scholars Terence Tao and Joseph Teran named among the "Best Brains in Science" by Discover magazine.

Then the editors of Discover magazine sought the 50 scholars making the most important contributions to American science, two of them were faculty at UCLA.

Discover magazine has named UCLA mathematics professor Terence Tao and assistant professor of mathematics Joseph



UCLA Goes Online at YouTube, Facebook, Twitter, and iTunes

The university is expanding its Web offerings to four of the world's most popular online sites, including Webcasting of class sessions taught in the College.

Take a look at the scope of online offerings at UCLA—the university has launched pages on YouTube, Facebook, Twitter, and iTunes, aimed at helping millions of viewers share high-quality educational content, lectures, Bruin-related social connections, events, and coursesincluding classes from the College.

A broad range of information can now be found on YouTube, the world's most popular video-sharing Web site, at www.youtube.ucla.edu. UCLA has also launched pages on Facebook at www. facebook.ucla.edu and Twitter at www. twitter.ucla.edu. Log in and you can see a list of Happenings on campus, links to the latest from the UCLA Newsroom and a host of UCLA's YouTube videos.

The university's Web initiatives come after UCLA launched a pilot project last Teran on the list of the 50 "Best Brains in Science."

Discovery described Tao and Teran as "young visionaries who are transforming the way we understand the world."

Tao, who holds UCLA's James and Carol Collins Chair in the College of Letters and Science, and Teran are both included in a section highlighting 20 innovators under the age of 40, Tao is praised by Discover as "one of the most prolific and esteemed mathematicians in the nation." Teran, an applied mathematician, was recognized for his work in using mathematical modeling to help make virtual surgery a reality.

Tao won the Fields Medal, often described as the Nobel Prize in mathematics, in 2006 at the International Congress of Mathematicians in Madrid. In the 70 years the prize has been awarded by the International Mathematical Union, only 48 researchers have ever won it. He was named a MacArthur Fellow for 2006.

Teran is using mathematics—including computational geometry, partial differen-



Terence Tao (left) and Joseph Teran (above) as the featured speaker at a UCLA Mathematics Festival for middle and high school students April 23.

tial equations and large-scale computingto enable surgeons to practice on a threedimensional "digital double" of a patient before performing an actual surgery.

To learn about Tao's research, visit www.math.ucla.edu/~tao/index.html. For more on Teran's work, see www. math.ucla.edu/~jteran.



year on iTunes, the digital media player for playing and organizing songs, video, and other media. Called "UCLA on iTunes U" at www.itunes.ucla.edu, the project is part of Apple's collaboration with universities to reach prospective students worldwide.

UCLA has posted more than 600 videos on its YouTube channel, showcasing, education that the university offers.

"We are constantly looking for ways to give students, prospective students, and alumni the information they are looking for about UCLA in the places where they are spending their time," said Lawrence Lokman, assistant vice chancellor of University Communications.

Exploring a New Era

By Robin Heffler

or many Americans, the 2008 campaign and election of Barack Obama as the nation's first African-American president sparked or rekindled their interest in American presidential politics. Joel Aberbach, a UCLA professor of political science and public policy since 1986 and founding director of UCLA's Center for American Politics and Public Policy (see the related story on page seven), is exploring the new President's ambitious and wide-ranging agenda—even in its earliest months.

"One of the interesting things about Obama is that people have been able to read into him whatever they want," said Aberbach, who has written several books related to the American presidency. "On the left they think, 'he's really one of us.' People in the center think he's pretty moderate, very sensible. He's also attractive to a lot of people because of his low-key personality—his calm, and the sense of competence that he exudes."

Along with Mark A. Peterson, UCLA professor of public policy and political science, Aberbach developed and edited *Institutions of American Democracy: The Executive Branch* which examines the historical emergence and contemporary performance of the American presidency and bureaucracy, and the shifting balance of power among the three branches of government. The book won the American Political Science Association's 2006 Neustadt Award for the best reference work on the American presidency.

The Realities of Creating Change

Less than two months after Obama took office, Aberbach offered an early assessment of the new administration to an audience at the Rothermere American Institute at Oxford. Playing on one of Obama's campaign slogans, Aberbach delivered a lecture titled "Change We Can Believe in Meets Reality."

Recounting the lecture, Aberbach first noted the context created by Obama's immediate predecessor.

"Bush's approach to the presidency was one of presidential primacy, as when he famously said 'I'm the decider," explained Aberbach, who contributed a chapter on "The Bush II Administration and the Constitutional System," for *The George W. Bush Presidency: First Appraisals.* "So, one of the hopes for Obama is that he will conduct the presidency in a more open, more inclusive way, listening to a variety of perspectives." Obama signaled his intent to follow a different approach from Bush, Aberbach said, by articulating goals such as high ethical standards, transparency in government, and bipartisanship, as well as fiscal discipline, health care reform, and restoring America's prestige in the world. The professor gave Obama mixed grades for his early efforts.

"He has had notable success in the international sphere, with the administration taking a much less belligerent approach in dealing with countries such as Iran and Syria," Aberbach said. "Positions haven't necessarily changed that much, but the tone is different, more open to dialogue."

At the same time, Aberbach noted trouble with political appointees who appear to have been insufficiently vetted, and the failure to gain bipartisan support for the budget. Yet, he said, "just reaching out to Republicans and appearing conciliatory has had some big public relations benefits. So far, one of his strong suits is that he very successfully communicates to the public that he's trying to do things, as did Franklin Roosevelt during the Depression."

Acquiring and Using Power

But how Obama will ultimately use his power is less clear, Aberbach said.

"From the beginning of the republic, the presidency has emerged as more powerful than the people who designed the system expected," he said. "Nixon, Reagan, and George W. Bush were the most assertive recent presidents in trying to increase their power."

Once a president has asserted power, successors are tempted to hold onto it, Aberbach said. An example he cited was that "George W. Bush used signing statements (official documents in which a president gives his interpretation of a new law for the federal bureaucracy to follow) more often and more assertively than anyone before him. Obama called for a review of Bush's signing statements, but he did *not* say 'I'm not going to use signing statements."

Aberbach, who also explores race relations, is now beginning to research the conservative movement. The new direction stems from "America in the Sixties," a Freshman Cluster course he is co-teaching with other UCLA faculty members.

"Modern American conservatism is a reaction in part to the 1960s," he said. "In preparing to teach the course, I found areas I wanted to know more about." CR

UCLA at the Hub of American Political Life

Marc Pilotin '01 received a taste of combining theory with practice in the UCLA Center for American Politics and Public Policy (CAPPP) in Washington, D.C.

"I'm the kind of person who learns by doing," said Pilotin. In fall 2000, he held an internship with the National Education Association's newsmagazine while attending courses and researching the role of the federal government in education—all sponsored by CAPPP's Quarter in Washington Program.

Pilotin taught in L.A. schools before enrolling in law school, where he is focused on educational policy and the law. He graduates this year from the UC Berkeley School of Law and in September begins a prestigious appointment as clerk for Judge Claudia Wilken in the United States District Court for the Northern District of California.

"I hope to play a role in improving public education in California," he said.

Pilotin was one of 90 UCLA undergraduates who each year spend a quarter in the nation's capital through CAPPP. They are placed in internships with federal agencies, think tanks, advocacy groups, museums, and other organizations. At the same time, students take a seminar to develop individual research projects, and enroll in elective courses on politics and public policy.

"The program demands a lot of work from them, but when they're done, there's a huge sense of accomplishment in producing a paper and having an internship at a place that is doing important work," said Joel Aberbach, director of CAPPP and a UCLA professor of political science and public policy who founded the program in 1990. The CAPPP Quarter in Washington Program is housed in a building that is also the Washington home for other UC Programs. On campus and in Washington, CAPPP serves as a hub for research on American politics by UCLA faculty and graduate students.

www.cappp.ucla.edu

White House Photo by Pete Souza

A UNIQUE EVOLUTION



Biologist Robert Wayne and his research team mix old-fashioned detective work and sophisticated technology in their studies of genes in wolves and dogs.

By Aaron Dalton

For most observers, the black wolves that roam Yellowstone National Park are animals to be admired as symbols of power and beauty, and appreciated for their role in maintaining the natural balance in the environment.

For UCLA evolutionary biology professor Robert Wayne, North American black wolves represent something very different—an unprecedented evolution of a gene in the wild that had originated in domestic animals.

Research by Wayne and his colleagues at the UCLA Conservation Genetics Resource Center indicates that black wolves inherited their dark coats from domesticated dogs, most likely dogs that lived with Native Americans approximately 12,000 years ago.

How did Wayne, a professor in the Department of Ecology and Evolutionary Biology, and his fellow researchers identify the gene that causes the black coat and arrive at the estimate of when the gene crossed from dogs to wolves? The answer to that question involves a mix of old-fashioned detective work and sophisticated technology.

In the field, graduate student Dan Stahler travels across the winter Yellowstone terrain on cross-country skis at -30 degrees, gathering DNA samples from Yellowstone's wolves after they have been tranquilized, fit with temporary radio collars, and then tracked from the air. Back in Wayne's laboratory, graduate student Bridgett vonHoldt scans Stahler's samples using genotyping 'chips'—bits of synthesized DNA that are actually printed onto little squares of plastic called arrays and analyzed for the presence of 127,000 genetic markers.

Information gathered by Wayne's team is shared with researchers worldwide as part of the CanMap project that is mapping all genetic variations in dogs.

Why do canines merit such intensive genetic research?

"When it comes to human genetic diseases, it turns out that dogs have more analogs than any other species," said Wayne. "By mapping genetic variability in dogs, we hope to learn something about the genetic basis of diseases like cancer that may ultimately benefit humans."

Back to the black-coated North American wolves the genetic data paired with a detailed family tree for wolves showed that the black coloration seemed linked to a single dominant gene. If a wolf with the gene for a black coat mated with a wolf that had the grey coat gene, a black coat resulted in a way that should seem familiar to anyone who remembers high school biology and Gregor Mendel's experiments with pea cultivation.

At a conference in Holland, Wayne learned that a gene called "K locus" had just been discovered to control coat

coloration in dogs. What if the gene that gave dogs their black coats was doing the same for North American wolves? Turning to the data, Wayne found that K locus was indeed the answer.

The next question was when K locus began to appear in wolves. To figure out when a particular genetic sequence first enters a genome, researchers look at variability near the gene. In dogs, a fair amount of variability and genetic "rescrambling" near the K locus gene indicated that there had been ample time for the gene to mutate.

In wolves, there was far less variation around the K locus gene, suggesting that the gene had entered the population more recently and then spread rapidly in a phenomenon known as "selective sweep." (The human genetic sequence also has examples of selective sweep. For example, the genetic code for lactose tolerance that allows adults "When it comes to human genetic diseases, it turns out that dogs have more analogs than any other species. By mapping genetic variability in dogs, we hope to learn something about the genetic basis of diseases like cancer that may ultimately benefit humans." to digest milk swept into high frequency among Europeans when they began cultivating dairy herds.)

Looking at the number of differences between the gene that causes black coats and the one that codes for grey coats, Wayne estimates that the black coat gene entered the wolf population through Native American dogs some 12,000 or more years ago.

Meanwhile, the conservation work done at the UCLA Conservation Genetics Resource Center also plays a role in determining public policy. Scientists associated with the Center look into the dynamics of mating, reproduction patterns, and genetic variability among Yellowstone wolves to determine how genes flow among wolf

populations in the national park. Their research shows a lack of "genetic communication" among Yellowstone wolves and other populations in Idaho and Montana. Environmental groups have used these findings in their attempts to stop the removal of the wolf from the Endangered Species list, arguing that numerical recovery should carry less weight in light of limited genetic communication among populations.

Why do populations need genetic diversity?

"In the near term, inbreeding associated with a lack of genetic variability can lead to lower reproductive rates," said Wayne.

In extreme cases, such as with the near-extinct Florida panther, a deficiency of genetic variability meant the population simply could not reproduce on its own. Only the introduction of some mountain lions from Texas provided a fresh genetic infusion that enabled reproduction and saved the population from certain extinction.

> The UCLA Conservation Genetics Resource Center directed by John Pollinger now tackles conservation-related projects involving not just wolves, but also other endangered species like the Palos Verdes butterfly and red abalone.

> "The red abalone has become so endangered that a commercial harvest is now allowed from only one location," said Wayne. "But say that a truckload of red abalone is pulled over. How can you tell if the abalone was taken from a legal zone?

> "Before there was no way of testing where the catch came from, but we have been developing a genetic test that allows you to take an abalone found in the market, in a truck or even the scraping of a shell and figure out whether that abalone is legal or not. That's one example of conservation genetics at work in law enforcement forensics."



A New Voice for the "Old and the Dead

Egyptologist Kara Cooney combines a scholar's approach to research with zeal for bringing her work to contemporary audiences.

By Meg Sullivan

When Kara Cooney was serving as one of three curators of the 2005 exhibition "Tutankhamun and the Golden Age of the Pharaohs" at the Los Angeles County Museum of Art, she gave a guided tour to a guest whose name she didn't recognize.

The following day, Craig Ferguson's producer was on the phone, wondering whether the Egyptologist would appear on his late night talk show. Cooney has since appeared as a guest four times on CBS's "Late, Late Show with Craig Ferguson," most recently to discuss her 2007 scholarly book, *The Cost of Death: The Social and Economic Value of Ancient Egyptian Funerary Art in the Ramesside Period.*

Over the course of the sevenminute interview, Cooney managed to provide a brief history of ancient Egypt, describe the culture's burial traditions and class structure, and give Ferguson a brief lesson in hieroglyphics—an exercise that left the audience in stitches.

For fellow Egyptologists, the incident perfectly illustrates the strengths of this scholar who recently joined the Department of Near Eastern Languages and Cultures and the Cotsen Institute of Archaeology.

Whether it's an appearance on late night television, undergraduate courses in Egyptian art and architecture, special Saturday courses on ancient Egypt at UCLA Extension, or television documentary projects of her own creation (see the related story on page 11), Cooney brings humor and accessibility to the 3000-year history of ancient Egypt, say her colleagues.

"Kara has the rare blend of scholarly knowledge and understanding of how to interpret a complex ancient culture for a contemporary audience," said Nancy Thomas, the deputy director of the Los Angeles County Museum of Art and a 1980 UCLA graduate. "Kara is able to be both engaging and appropriately scholarly."

Said Willeke Wendrich, an associate professor in Egyptology at UCLA, "Kara makes a really complicated subject approachable without dumbing it down."

Cooney's scholarship centers on funerary arts and the anthropology of funerary rituals and beliefs from ancient Egypt's New Kingdom—a period between the 16th and 11th centuries BCE. Her research is expected to bridge the work of Wendrich, an archaeologist who specializes in the empire's first 1000 years, and fellow Egyptologist Jacco Dieleman, a philologist who specializes in literary and religious texts from the empire's final 1000 years.

"This hire is the next step that we needed," Wendrich said.

Fascinated ever since childhood with what she describes as "the old and the dead," Cooney is an authority on Deir el Medina, a 16th-12th century BCE village on the west bank of the Nile River near Luxor. The village—which is the subject of a UCLA graduate seminar that she teaches—was inhabited by artisans who constructed, painted, and decorated the royal tombs in the nearby Valley of the Kings. Cooney studies funerary objects for insights into the life and times of the original users—an approach she has found to be surprisingly revealing.

"The analogy I often use to the ancient Egyptian coffin is an American wedding dress," Cooney said. "It's on display for one day or one evening but every detail is carefully selected because it says so much about your socioeconomic standing in the world."

Able to read hieroglyphics and hieratic—an Egyptian form of cursive writing, Cooney also looks for clues in ostraca—the writings of an ephemeral nature such as messages, notes and receipts in ink on pottery shards and limestone flakes that miraculously survive to this day. In *The Cost of Death*, for instance, she was able to pin down prices paid for specific elements of a traditional burial, demonstrating that the rite would have been within the reach of only the top five percent of society. Previously, many authorities assumed most ancient Egyptians received elaborate burials.

"I'm interested in personal motivations in the ancient world, in the humanity," she said. "I always try to use that as the hook: these are people with motivations just like us."



"Out of Egypt" Comes to the Discovery Channel

A new television series hosted by UCLA scholar Kara Cooney explores the extraordinary—yet logical—similarities between cultures that have never been in contact.

n 2560 BCE, the Ancient Egyptians built the Giza Pyramid. Nearly 2,700 years later, the ancient Aztecs erected a similarly imposing pyramid some 7,697 miles away.

A coincidence? The result of still-unknown contact between the two cultures? Evidence, perhaps, of the intervention of aliens?

The real reason for such similarities is more logical, argues Kara Cooney, a UCLA assistant professor in Near Eastern Languages and Cultures, in a new six-part series scheduled to air in August on the Discovery Channel *(for air dates, visit www.discovery.com)*.

"When faced with the same materials, the same biological matter and laws of physics, and similar societies based on inequality and the need to demonstrate dominance and power, people will come up with very similar strategies independently of one other," Cooney explains in the series, "Out of Egypt."

"Humanity seems to create the same patterns again and again."

Pyramids, for instance, typically are designed to serve as a physical manifestation of a ruler's claims to have the ability to connect heaven and earth, Cooney explains in the series. The form is also the result of limitations on construction technology in civilizations that have yet to discover the wonders of steel.

"If you're building something high that can be seen across the landscape, it doesn't matter if you're in Mesoamerica, Egypt, or Sri Lanka, you need to build wide at the base and narrow at the top because if you don't have steel reinforcement you can't build straight up."

In addition to the theme of the proliferating pyramids, "Out of Egypt" explores similarities in traditions and behavior among cultures with no documented contact. In all, the series traces six themes and variations of traditions across 12 cultures and 10 countries: the birth of the devil, intermixing of religion and violence, disposal of the dead, use of religious relics, and the social repercussions of city life.

The series was created by Cooney and her husband, screenwriter Neil Crawford—their first jointly produced project. In "Out of Egypt," Cooney serves as the host, lead researcher and writer.

Each episode begins in Egypt, cradle of the first documented case of the specific tradition being explored. In Egypt, Cooney, a specialist on the New Kingdom (1550 to 1069 B.C.), serves as the episode's authority. But once Cooney leaves the Nile Valley, she queries 40 authorities, ranging from esteemed academics to humble caretakers at cemeteries.

"I'm not expected to be the expert and that's very liberating," Cooney said. "I love asking stupid questions and I love being surprised. That for me is the joy of learning." Ryan Dosumu-Johnson: "Ryan is really eager to wrap his mind around any problem you throw at him," said Stephanie White, associate professor of physiological sciences.

A YOUNG SCIENTIST FINDS HIS FUTURE

Undergraduate Ryan Dosumu-Johnson focused his future through the Minority Access to Research Careers (MARC) Program, and his achievements led to a prestigious Gilliam Fellowship for Advanced Study.

> Ryan Dosumu-Johnson admits that if someone had told him a few years ago where he would be today, he would have responded with skepticism. A senior majoring in neuroscience who is graduating this year, Dosumu-Johnson is training in UCLA's Minority Access to Research Careers (MARC) Program and has been a key participant in the laboratory of Stephanie A. White, associate professor of physiological science. With his undergraduate career about to conclude, he is deciding among the nation's top combined M.D./Ph.D. programs for his graduate training, having recently received a Gilliam Fellowship for Advanced Study that provides full support for up to five years toward the Ph.D.

> Yet when he was finishing high school, Dosumu-Johnson wasn't even sure if college would be part of his future.

Dosumu-Johnson was working at a retail store in San Diego, and was encouraged by his boss to apply for a managerial position at another store. "It was easy to see at that point that I was headed down a path in which I would make a good income but not feel intellectually challenged," Dosumu-Johnson said. "Realizing that really lit a fire under me, and made me think about my goals."

Dosumu-Johnson knew he wanted something different, but wasn't sure what that might be, so he enrolled at community college in Orange County. When "It was easy to see I was headed down a path in which I would make a good income but not feel intellectually challenged. Realizing that really lit a fire under me, and made me think about my goals."

required to declare a major, he went with what he knew: marketing and sales.

But when he took a class in molecular biology, Dosumu-Johnson found his calling, and he began enrolling in more science courses. Then, through the Bridges to the Baccalaureate Program at UC Irvine—which provides opportunities for minority community college students interested in pursuing biomedical research careers—he spent a summer working in a neuroscience laboratory, studying the structure of the spinal cord. He was hooked.

Dosumu-Johnson transferred to UCLA in the fall of 2006; he was advised to apply for the MARC program and to speak with White about research opportunities in her lab.

Dosumu-Johnson has spent the last two years working in White's lab, which studies the vocal learning of zebra finches (songbirds) as a way of better understanding human speech communication and pathology. White's group has published papers illuminating the effects on the songbirds of a mutation in the gene FoxP2, the only gene that has been directly linked to speech deficits in humans. The research could have important implications for people with autism, as well as others with language disabilities. (Background, left): a microscopic view of brain tissue, stained blue and red for examination by undergraduate Ryan Dosumu-Johnson for his research on vocal learning and autism.

Dosumu-Johnson has been involved in several of the lab's studies, including one in which the gene in the zebra finches is manipulated to see what effect higher output of the FoxP2 protein will have on their vocalizations.

"Ryan is really eager to wrap his mind around any problem you throw at him," said White. "He has an interest in the human condition, and keeps the big picture in mind—but he is also able to think about how we can investigate questions at a biological level."

For his part, Dosumu-Johnson says the undergraduate research experience has been invaluable.

"It teaches you different ways to think about and approach problems," he said. "Being closely mentored by a faculty member has been especially rewarding.

"Dr. White has been extremely helpful and in my corner, making sure I never rest on my laurels," Dosumu-Johnson said. "She is invested in my success, and has really pushed me to reach for the stars."

He also recognizes the value of the support he has received from MARC, the honors program funded by the National Institutes of Health that is designed to prepare top minority students for graduate programs at the best U.S. universities. In addition to covering tuition and fees, the MARC program provides stipends to help its trainees participate in research projects in UCLA faculty laboratories during the academic year and at other universities during the summer. MARC Scholars attend research conferences and make presentations of their research at local and national meetings.

"Ryan exemplifies what the MARC program does best," said Dwayne Simmons, professor of neuroscience and director of the MARC Program. "MARC provided Ryan with an environment and tools where he could flourish—and he has indeed flourished."

"MARC has allowed me to work in the lab instead of having to find a job," Dosumu-Johnson said. "Presenting my research at conferences has really raised the level of my training, and taking classes with other MARC students, talking about science with them and seeing all of the different things people are doing has been a great experience."

Mindful of the impact that mentoring has made on his trajectory, Dosumu-Johnson has given back by assisting undergraduates who have followed him into White's lab. As part of Project Brainstorm, a UCLA student group sponsored by the Brain Research Institute involved in K-12 science education outreach, he has also gone to inner-city schools to talk with students about neuroscience and how to thrive at a large university.

Dosumu-Johnson describes the turn of events over the last several years as "fortunate," though he does acknowledge that talent and perseverance had something to do with it.

"I've tried really hard and at each point, things have positioned themselves in such a way that I was able to get to the next level," Dosumu-Johnson said. "I am very happy with the way everything is turning out for me."

Challenging the Concepts of Art

Art historian Miwon Kwon reexamines the conventional notions of the definition and purpose of art.

By Robin Heffler

As an art historian, Miwon Kwon doesn't focus on the paintings, sculptures, and other mainstays of traditional art. Instead, she is immersed in the study of forms of modern art that challenge both our ideas of what art is and how it should be managed.

"I'm interested in art that refuses to be a static object, whether it's landscapes that are used to make artwork that the climate then destroys, or art designed for specific locations that can never be moved, or purely conceptual art," said Kwon, a UCLA professor of art history. "I look at art as a living thing. I don't like thinking of it as just treasures to be stored away."

Kwon—who helped to curate several exhibitions at the Whitney Museum of American Art while enrolled in that museum's program in curatorial studies—is currently preparing a historical exhibition for the Geffen Contemporary at MOCA (Museum of Contemporary Art) facility in downtown Los Angeles.

The show will feature land art, the 1960s to 1970s movement of artists who used the natural environment of remote and often physically daunting landscapes to create their artwork. Among the most prominent of these artists are Michael Heizer, best known for "Double Negative," a huge trench carved out of the Nevada desert, and Robert Smithson, who created a monumental spiral jetty in the Great Salt Lake.

Together with Philipp Kaiser, a MOCA curator, Kwon is co-curating the exhibition, which should open in 2012. Kaiser said Kwon was invited to work on the project because of her background in landscape and architecture, as well as her book, *One Place after Another: Site-Specific Art and Locational Identity*, an examination of art that is made for and inseparable from its location.

Questions about Art Stewardship

By its nature, Kwon said, land art raises questions about who is responsible for it and how it should be handled.

"For example, Heizer's 'Double Negative' (a 1500-foot trench cut into the side of a mesa in the Nevada desert), which was made to escape the museum system, is in fact in the collection of MOCA," she said. "Should the museum let the work deteriorate from weathering or conserve and preserve it? Should the museum make it more accessible to visitors,



AP Photo © The Felix Gonzalez-Torres Foundation Courtesy of Andrea Rosen Gallery, New York

and if so, how do you do that? What effects do these kinds of artworks have on what we think is art and what a museum's role is?"

Through a graduate seminar that Kwon is co-teaching with Kaiser, UCLA students in art history, art, and architecture are conducting research on the pieces to include in the show. The course is part of UCLA's largest and most popular graduate studies sub-field in art history—modern and contemporary art—which Kwon runs along with George Baker, associate professor of art history.

An Architect's Sensibility

"Because she was trained in architecture before becoming an art historian, Miwon brings an unusual perspective, as demonstrated by her book on site-specific art," said Dell Upton, professor and chair of the Department of Art History. "She is able to understand the nature of places and sites in a way that most art historians don't. Nationally, she's one of the stars in modern, contemporary art history."

Kwon came to her current field of study after first exploring others. Born in South Korea, at age 10 she joined her family in Washington D.C., where her father was a foreign correspondent for a Korean newspaper. After receiving a bachelor's degree in architecture from UC Berkeley, she returned in 1983 to her home town of Seoul, which was undergoing intense modernization in preparation for the 1988 Olympic games. Shocked by the demolition of old, poor neighborhoods and their replacement by high-rise apartment complexes, Kwon said she felt "a profound loss of something Korean, something culturally authentic."

She used a camera to document what remained of the old life for her master's thesis in photography. When an exhibition of those photos was presented, Kwon received a second shock from the reaction of her fellow Korean students at UC Berkeley.

"They were appalled at what they thought was showing dirty laundry to the Westerners—that I was portraying Korea as backward," she said.

That debate spurred her interest in the relationship between cultural identity and place, and later in art that defines and is defined by the place it occupies. She went on to complete a Ph.D. in architectural history and theory at Princeton University in 1998, and joined the UCLA faculty to teach contemporary art history the same year.

Artists and the Public Interact

For her next book, Kwon is researching the give and take between artists and the viewing public that has been set in motion by the artwork of post-1965 artists who have veered away from making objects.

An example is the work of the late Felix Gonzalez-Torres, a Cuban conceptual artist whose art encourages viewers to touch and take pieces of it with them. In one artwork, Gonzalez-Torres created a pile of Baci brand chocolates to which viewers could help themselves.

"So this is art that you can consume, that can become part of your body, making the viewer part of the method of dispersing the art," Kwon said.

This kind of art also raises questions about how it is collected and authenticated, she pointed out.

"How does the art world make up rules to distinguish the chocolate in a museum collection from the ones that I can buy?" Kwon asked. "The contract between the artist and the collector or museum becomes a fundamental part of the work because it is very important in determining what can be called authentic art and what is not.

"I will be using Felix's work as a case study to look at current practices by museums and collectors, seeing how nonobject based art moves through the marketplace, enters the institution, and then challenges museum procedures."

Miwon Kwon (below) studies artists who use the natural environment to create their work, such as Robert Smithson and his "Spiral Jetty" in the Great Salt Lake (below), as well as conceptual artists like Felix Gonzalez-Torres, who created projects that connect with viewers by encouraging them to touch it or take pieces (left).



Calling Cards from Other Worlds

By Robin Heffler

Cosmochemist John Wasson directs the UCLA Collection of Meteorites, one of the largest collections of its kind in the United States, and a boon for researchers looking at the formation of our solar system. very week, Alan Rubin, a researcher in the Institute of Geophysics and Planetary Physics (IGPP), receives several envelopes filled with rocks, sent by excited members of the public who think their discoveries might be valuable meteorites—pieces of stony or metallic rocks that have travelled through outer space and landed on Earth.

"People often send what we call 'meteor wrongs' rather than meteorites," said Rubin, who analyzes the contents and determines if they should go into the UCLA Collection of Meteorites, housed in the Institute. "Only about 1 in 500 actually is a meteorite. The rest can be anything, ranging from debris from the bottom of furnaces to all manner of rocks from Earth."

A Calling Card from Mars

In December 1997, a man who regularly combs the Mojave Desert for meteorites came to Rubin with two big stones. Rubin recognized one as a common form of material from outer space called a chondrite, a primitive rock derived from an unmelted asteroid. Rubin thought the other stone was a basalt, the most common type of volcanic rock found on Earth.

Because he didn't think it was anything special, Rubin waited a week to look at the second specimen under the microscope. When he did, Rubin was in for a big surprise.

"The minerals in the second one looked like they had been shocked, that they had suffered significant impact and damage which meant that it *was* a meteorite," Rubin said, describing the rock as having a black crust with a gray interior marked by millimeter-sized crystals. "I called over Paul Warren (a fellow researcher in the Institute) and we recognized that it had the distinct mineralogical characteristics and textures of rare rocks from Mars that had formed about 170 million years ago."

Because the finder didn't remember the exact discovery location, the prized piece was named for the location of the finder's home—the Los Angeles meteorite.

Today, the specimen is among more than 1,300 in the UCLA Collection of Meteorites, which is the largest assemblage of its kind on the West Coast, the second largest at a university, and the fifth largest at any institution in the United States. The collection has blossomed from the original 192 specimens that were purchased in the early 1960s from the family of Professor Frederick Leonard, who founded the UCLA Department of Astronomy.

Meaningful Samples

Director of the UCLA Collection of Meteorites is John Wasson, a professor who holds appointments in the IGPP, and in the Departments of Earth and Space Sciences, and Chemistry and Biochemistry.

"The collection is important for UCLA because researchers can get samples very quickly and look at significant pieces they can hold in their hands," he said. "It's very different than writing to a museum and asking for a small sample. With a hand specimen, you can see the shadings and textures that can tell you something about the differences in the detailed process of formation."

Wasson has been researching meteorites since 1963. Although his work has taken several directions, Wasson's greatest

interest has been in the properties and evolution of chondrules, the oldest and most plentiful material within primitive chondrite rocks.

> "Chondrules are millimeter-sized grains that fused together when clusters of dust floating in the Solar System got zapped during some event," Wasson said. "Previous research had shown that chondrules formed by melting at a temperature of about 2,800

"This collection is important because researchers can get samples very quickly and look at significant pieces they can hold in their hands. You can see the shadings and textures that can tell you something about the differences in the detailed process of their formation." degrees Fahrenheit, followed by rapid solidification. Graduate student Jeff Grossman and I showed that they had to cool quickly enough to avoid losing the volatile elements that they contain, such as potassium and zinc."

Updating Data on Specimen Age, Evolution

Since that work in the 1980s, Wasson has been studying the age and evolution of chondrules. Using a sophisticated instrument called an ion microprobe, which is housed in the Keck Center of the Department of Earth and Space Sciences, he and his colleagues estimate that chondrules formed 4.55 billion years ago.

Wasson also has used the ion microprobe to examine the isotopes, or atoms, of oxygen in the chondrules. He said the diversity in oxygen-isotope content implies "that the solar nebula—the cloud of gas and dust from which the sun and the rest of the bodies in the Solar System formed—differed from location to location, which helps us choose among models of how chondrules formed."

He explained that the two most common theories of chondrule formation in the solar nebula are that either lightening caused chondrules to melt together, or that they were heated by very energetic sound waves. "My interpretation of our evidence and that of other research teams is that it was a very rapid process, and that lightning is the more plausible model," Wasson said.

Sharing Samples Here and Abroad

The UCLA Collection of Meteorites provides material not only for the research of Wasson, Rubin, and others at UCLA, but often also for investigators at other American universities, including Cal Tech, the University of New Mexico, Washington University in St. Louis, and the University of Chicago. Internationally, the collection has given samples to researchers at the British Museum in London, and to others in Germany, Japan, Australia, and France.

Wasson said the collection is also used for teaching astronomy and astrophysics, as well as earth and space sciences courses at UCLA.

A major goal is to provide proper housing for the collection, which is now contained in 10 large steel cabinets in a research lab.

"We make about 15 loans to about six different courses each year," he said. "And sometimes, for special occasions such as open houses, Alan and I get some of our biggest and most interesting meteorites out on a table and lecture about them."

On these pages: examples of the more than 1,300 meteorites housed in the UCLA Collection of Meteorites, directed by cosmochemist John Wasson (center).

The Social Cost of War

when economists Matthew Kahn and Dora L. Costa began to explore the issues that motivate individuals to acts of heroism, they set out to mine an unusual and unique resource: the personal backgrounds and military records of thousands of soldiers who served in the U.S. Civil War.

While other studies have explored more current-day issues involving loyalty, community, and diversity, the research by Costa and Kahn brings to light the extremes of human behavior that were influenced by the experiences of men in 1861 to 1865 involved in the bloodiest conflict in U.S. history.

Kahn and Costa focused their study on 41,000 soldiers whose backgrounds are recorded in the Union Army Dataset, a trove of information about personal behavior that vividly illustrates not only how soldiers responded to others but how they perceived themselves.

They found that diversity among Civil War soldiers was a double-edged sword, making individuals less likely to be altruistic than they might be in other settings, but also inspiring them to new intellectual heights and to explore new horizons.

"Soldiers, whether in prison camps or in the field, were the most loyal to men who looked like themselves—of the same ethnicity and occupation, from the same state or hometown, or of the same age, or related by blood," said Costa, co-author with Kahn of the book, *Heroes and Cowards: The Social Face of War*, and a member of the Center for Economic History at UCLA.

Funded by the National Institutes of Health, the Union Army Dataset merges official military records with now-public census data between 1840 and 1910, providing a virtual cradleto-the-grave look at the soldiers. Details include a soldier's degree of literacy, hometown, military record (including whether he deserted or ended up in a prisoner of war camp and how he fared there), residence, livelihood, and economic status.

The researchers subjected these variables to the same sort of statistical analysis that social scientists who conduct research on living subjects use in real-life experiments. The results, said Costa and Kahn, are just as valid as glimpses into behavior gleaned from lab studies—and possibly even more reliable.

"Unlike university laboratory researchers, we examined people involved in life-or-death choices," Costa said. "We would never orchestrate an experimental exercise with such high stakes. These are decisions that really mattered to people. As a result, they paid a lot of attention to their decisions, and those decisions reflect profound truths."

Costa and Kahn found that the soldiers who served in military units with men who shared similar characteristics—a common religion, race, ethnic group, socioeconomic status, hometown or even a plantation—behaved much differently from their counterparts in more diverse companies.

For instance, these soldiers had much lower desertion rates than the norm of one desertion for every 10 Union soldiers. Union soldiers who served with men from the same occupations deserted at one-third the rate of counterparts in more diverse companies, as did former slaves who served with former slaves from the same plantation.



A unique study by economists Matthew Kahn and Dora Costa produced a surprising series of findings about heroism, loyalty, and diversity among soldiers who served in the U.S. Civil War.

And the absence of diversity actually outranked other potential sources of loyalty. Costa and Kahn expected to find that company morale or commitment to the cause played as big if not a bigger role in keeping a soldier on the battlefield. Yet they found that companies with the lowest amount of diversity—such as companies in which friends, relatives or neighbors served together—had the lowest desertion rates.

"The Civil War was one of the most ideological wars in U.S. history," Costa said. "If we find that serving with similar people or buddies matters the most here, then we know the effect is big, and in fact, that's what we found. Even when the ideological stakes are huge, it's serving alongside comrades that keeps you in the war—not commitment to the cause."

In addition to inspiring enlistees to persevere, fellow soldiers also proved important to surviving such grim prisoner of war camps as Andersonville, a Confederate death trap that claimed the lives of close to 40 percent of its captives. Survival rates for Union soldiers born in Ireland, for instance, improved only from 60 percent to 64 percent if they were incarcerated with 15 comrades from their original company, Costa and Kahn found. But the soldiers' survival rates shot up to 90 percent when those 15 comrades were not only from the same company but were also fellow Irish immigrants.

"In P.O.W. camps," Kahn said, "diversity actually turned out to be a bad thing. It hindered survival rates."

But diversity was not without its benefits. Costa and Kahn

focused on three separate kinds of African American military companies: units that consisted primarily of freed slaves, units that consisted primarily of freemen (African Americans who were not born into slavery), and units that mixed both kinds of African American enlistees.

While companies with both former slaves and freemen had higher desertion rates than units that consisted primarily of one group or the other, former slaves in the diverse companies learned to write at higher rates than their counterparts in more homogenous units, Costa and Kahn found. In companies composed almost exclusively of former slaves, only 16 percent of soldiers learned to write during their tour of duty. That number nearly doubled in companies in which former slaves mixed with freemen.

"For former slaves who had been prevented from learning to read and write in slavery, diverse companies were almost like a job training program, preparing them for improved economic opportunities down the line," Kahn said.

Heroes and Cowards represents the most extensive use to date of Civil War data amassed by the University of Chicago and Brigham Young University under the direction of Nobel laureate economist Robert Fogel. For the past decade, Costa has been second-in-command of the project.

"This material is really a treasure trove," Costa said. "The records provide an awesome laboratory for studying human behavior that doesn't exist anywhere else."

www.econ.ucla.edu



Examining Life in Exquisite Detail

Arnold Berk, named this year to hold the UCLA Presidential Chair in Molecular Cell Biology, has spent three decades pursuing the fundamentals of life.

A rnold J. Berk has devoted his career to studying life at the most basic level—how cells, the building blocks of all living things, grow and divide. But for Berk, named this year to the UCLA Presidential Chair in Molecular Cell Biology, the more than three decades spent in his scientific pursuits haven't diminished his ability to step away from the microscope and become philosophical about what it all means.

"Humans give the universe significance by being able to appreciate it," Berk said when asked to assess the progress he and his colleagues have made in grasping how cells work. "When it comes to cell function, we have gone from the equivalent of being able to see the surface of the Earth from a satellite to being able to go down, walk around on the surface, take things apart and put them back together in new ways to look at what the consequences of that are.

"My appreciation of the beauty of the universe," said Berk, "has grown tremendously through seeing this expansion of our understanding of life on Earth."

Berk has played an important role in that expansion, having used a simple parasite of the human cell nucleus, the adenovirus, to develop significant contributions to the understanding of how the nucleus controls cellular function, including growth and division. Berk has explored the same fundamental questions—although in far more exquisite detail—since the mid-1970s when, as a postdoctoral fellow in the MIT laboratory of Phillip Sharp, he invented a method that simplified the study of messenger RNA, the nucleic acid that carries DNA instructions to the cell.

The technique contributed to discoveries that led Sharp to receive the Nobel Prize in Medicine and Physiology. More recently, as the relevance of Berk's studies to human disease —specifically cancer—has become apparent, he has been applying newly acquired knowledge about viruses to the development of an experimental gene therapy with potential for use in the treatment of human disease.

Berk, a professor in the Department of Microbiology, Immunology and Molecular Genetics and former director of UCLA's Molecular Biology Institute, was also named the university's Professor June Lascelles Scholar.

"Dr. Berk is one of UCLA's stars in research and teaching," said Emil Reisler, professor of chemistry and biochemistry and



dean of the College's Division of Life Sciences. "He has made some of the most important contributions to the fields of molecular biology, virology, and regulation of gene transcription, and continues to be at the forefront of research in these fields. The appointment recognizes and celebrates his outstanding contributions to research, teaching, and service."

Control of gene expression—Berk's primary interest is among the most complex biological phenomena, but also the most fundamental, responsible for the growth of all living things. Berk started at a time when scientists were using the easily grown and rarely pathogenic adenovirus as a model system for understanding the cell nucleus and how it receives and interprets genetic messages. Many of his colleagues have since moved on to study other aspects of cell-cycle control, but Berk has stayed with what he sees as a remarkably fertile model.

"There are many additional secrets for it to reveal to us as we explore in greater depth," he said. "When it comes to cell function, we have gone from the equivalent of being able to see the surface of the Earth from a satellite to being able to go down, walk around on the surface, take things apart and put them back together in new ways to look at what the consequences of that are."



Arnold Berk: "There are a lot of very specific problems that are of great interest to us that we're working on right now, and I'm impatiently waiting for results."

His most closely watched current project is a genomiclevel study with the UCLA laboratories of Siavash Kurdistani, a biological chemist, and Matteo Pelligrini, a specialist in mapping biological information, that is providing insight into the processes that control cell replication, and what goes wrong with these processes in cancer cells. The research is focused on how a small viral protein, e1a, forces previously quiescent cells to begin replicating.

Although Berk, like most basic scientists, was originally driven by a desire to learn about fundamental processes without necessarily knowing if or how his findings might be applied, he has long been interested in the applications of molecular biology to medicine. He was one of the co-founders of the Thousand Oaks, Calif.-based biotech company Amgen, and he now has a section of his lab devoted to testing a potentially exciting clinical application to his work.

Jordan Moberg-Parker, a fourth-year doctoral student, and Sean Gallaher and Jose Gil, postdoctoral scholars, are part of a group that is using a hybrid adenovirus and Epstein-Barr virus to test a gene therapy that targets hematopoietic stem cells the cells that comprise all of the components of the blood. The project, which various members of Berk's lab have worked on for more than a decade, has begun to produce tantalizing results in mouse models.

"Dr. Berk is a great mentor," Moberg-Parker said. "I am constantly amazed by the depth and breadth of his knowledge. Whenever a question comes up, he knows the history of the research. He will always try to lead you to the correct answer, without making you feel inferior for not knowing something."

Moberg-Parker describes the lab as "highly collaborative everyone works together to help people answer their problems." It's a spirit of cooperation that Berk believes is critical to scientific success—and why UCLA, where these exchanges take place not only within laboratories and departments but also across disparate disciplines, is an ideal research environment.

Among other things, Berk is part of an "affinity group" consisting of faculty from many departments within the College and the David Geffen School of Medicine who have an interest in gene expression.

"We meet all the time and hear about each other's research and new advances," said Berk. "These meetings stimulate a lot of new ideas, conversations, and collaborations that wouldn't otherwise occur."

As he details the myriad opportunities for exchanging scientific ideas with people from other parts of the campus, it is clear that Berk relishes the interactions—and that, as an appreciator of the universe and life on Earth, he has what every top scientist needs: an almost insatiable desire to learn more.

"There are a lot of very specific problems that are of great interest to us that we're working on right now, and I'm impatiently waiting for results," he said. "You come up with many ideas in biology, then it takes much longer to do the experiments. But getting the results of those experiments and discovering something new is very exciting." Each year in the spring quarter, 15 undergraduates work with a faculty advisor to create and teach a class of their own design.

When a STUDENT Becomes a TEACHER

By Alison Hewitt

Senior Pallavi Reddy, 22, sits at the head of the classroom, facing about a dozen other UCLA students.

Her students, taking her class.

"So, did you all get a chance to watch the video clips of Anthony Bourdain and Rachel Ray?" Reddy asks, referring to the celebrity chefs and their cooking shows. On the surface, some of the topics seem deliberately flighty, but don't be fooled. This isn't just any class at UCLA—this is one of 15 rigorously developed student-led classes.

The Undergraduate Student-Initiated Education (USIE) program began in 2005, when students proposed the program to vice provost Judi Smith.

"Our most accomplished UCLA seniors have an opportunity to lead small seminars in niche subjects not currently taught on campus," said Smith. "They work closely with faculty mentors and often develop topics related to their own research project or honors thesis."

The student-driven classes range from studies of pop culture to current-events-focused scientific inquiries. This year is no different, from Reddy's class on how varying cultures and upbringings create different perspectives on food, to undergrad Shadi Lalezari's neurobiology class, "Brain Basics: From Alzheimer's to Zoloft."

Upperclassmen apply in fall to create and teach a class, and the 15 students chosen from the competitive field spend the winter quarter working with a faculty advisor and taking a pedagogy class. In spring, the student "facilitators"—they're not officially teachers—lead a one-hour-per-week class of undergraduates who earn one credit for the seminar.

In Reddy's food class, Bourdain and Ray are symbols of a larger divide. On the first day of class, her students launched into a spirited discussion as she probed them to explore the differences between the pair's target audiences, their training (Bourdain attended cooking school, Ray learned from her mother), and their focus on local culture. Reddy elevated the conversation with tidbits about the rise of the Food Network, the slow-food movement, and the new White House "victory" garden to show how attitudes toward food are evolving and to help her classmate-students determine their own "food identity."

As students learned about the USIE program, applications to become a facilitator have risen and enrollment has soared, said Kumiko Haas, who teaches the facilitators' annual pedagogy class and is associate director of Instructional Improvement Programs in the Office of Instructional Development.

"There was some concern originally from the faculty that the topics needed to have enough academic rigor," Haas recalled. "That's why we have the pedagogy class to train them, and a full quarter with a faculty advisor helping the facilitators flesh out the seminar. In our faculty reviews, they've been universally happy with the quality of the classes."

Senior Roberta Wolfson, a 21-year-old English major who facilitated "Taking Bestsellers Seriously" last year, heard similar comments. Wolfson guided her class through books such as the



"A lot of my friends are science majors, and I want to share this topic with people who are interested in the subject. Facilitating a seminar like this is an opportunity I don't think I'll get again. Everyone wants to teach at UCLA."

—Devna Shukla

Undergraduate Rene Tiongquico, Jr., teaches the class he developed: "Hail to the Southland: History of UCLA."

first Harry Potter novel, the sci-fi classic "Ender's Game," and "The Da Vinci Code."

"There's a snobbery in the field about what is pure literature and what isn't," said Wolfson, who plans to be an English professor. "I'm passionate about popular literature, and wanted to design a class that made literary value the point.

"Several of my students told me, 'I love your class. I'm excited to come to it. I think of it as my fun class.' That made me feel really good."

For Wolfson, who began tutoring peers as a freshman and founded an organization to teach creative writing at a local middle school, teaching her peers was one more way to develop her professorial muscles.

"It was nerve-wracking," she said. "Sometimes I responded more like a student than a professor—I've had professors who articulate everything with such poetic beauty, whereas I'd catch myself saying, 'Wow, that's an awesome idea!' I got a lot out of it. It was a great preview of what I'll be doing someday."

About half of the facilitators plan to become teachers, said English Professor Rob Watson, associate vice provost for educational innovation and chair of the USIE Student-Faculty Advisory Committee, which chooses facilitators from the pool of applicants and approves the classes. The other half, said Watson, teach because they are passionate about a subject and want to share with their peers.

When Watson's committee reviews a USIE class syllabus to ensure it meets UCLA's stringent standards for academic

quality, one of the most common problems, ironically, is that the committee has to *reduce* the amount of reading assigned.

"The facilitators want to make sure the class is sufficiently rigorous," Watson said. "We've never run into a problem with the class quality. It's highly-accomplished students delving into topics we've yet to offer as part of the regular curriculum."

The key may be the program's meticulous selection process and mentoring requirements, Watson said.

"The classes at UCLA may not be conventionally taught, but they aren't strange or wacky," Haas said. "They're niche classes and often very timely. We've had classes on Darfur, on micro-financing, as well as on the history of science-fiction."

Devna Shukla, 21, a political science major who graduates in June, combines both the timeliness of election '08 and the allure of movie stars in her class, "The Role of Celebrities in Contemporary American Politics."

Shukla's students are looking at the overlap between politicians and celebrities. She noted that Michelle Obama and Sarah Palin have dominated the covers of gossipy magazines like People and US Weekly; and she'll have a guest lecture by a UCLA researcher. The one-hour class gives non-poli-sci majors an opportunity to explore a new subject, she said.

"A lot of my friends are science majors, and I want to share this topic with people who are interested in the subject, but don't have time to take a full class," Shukla said. "And facilitating a seminar like this is an opportunity I don't think I'll get again. Everyone wants to teach at UCLA."

A Look Back at King's Dream

When Martin Luther King Jr. delivered his "I have a dream" speech from the steps of the Lincoln Memorial in 1963, it was a pivotal moment in the Civil Rights movement. The ideals expressed in that speech by the Nobel Peace Prize winner still reverberate around the world—and are explored in "King's Dream," an insightful book about the speech by Eric J. Sundquist, UCLA Foundation Professor of Literature in the Department of English. Sundquist spoke to Ajay Singh about King's legacy and the relevance of his words that endures today.

Would you say the importance of Martin Luther King Jr. has increased after Barack Obama's presidential campaign and election?

Yes, it's true. Many people, rightly or not, saw Obama's election as, in some ways, a vindication of King's dream—that in the United States, race is no longer the impediment to achievement it once was.

Equally important, perhaps, is that Obama sometimes directly, and more often subtly, has styled himself as the heir of Abraham Lincoln as well as King, both in his speeches and some of the way he addresses policy issues.

Lincoln with a twist—a younger, different Lincoln?

A different Lincoln, certainly, because of the circumstances in which Obama was elected. Part of his motive was political—the fact that Obama is from Illinois and announced his presidency in Springfield, where he called upon the legacy of Lincoln, in particular the sentiments of the Gettysburg Address. And Obama sees himself coming into office at a moment of extraordinary crisis, when both the nation and the nation's position in the world are in need of restoration.

Obama comes to Lincoln through the spirit of Martin Luther King, and through both of them traces his own origins to the founding fathers. One of Obama's favorite campaign themes, which I think will be a theme in his early presidency, is the theme of a more perfect Union, which derives from the preamble of the Constitution but was something to which Lincoln devoted his presidency—saving the Union but also realizing that the dream articulated in the Declaration of Independence and the preamble needed to be perfected.

Obama sees himself in that tradition—as someone who can reconcile opposing views and make friends of enemies, which were two things Lincoln aspired to do.

And Martin Luther King himself was inspired by Lincoln, wasn't he?

He certainly was. King's most famous 'dream' speech was given in the centennial year of Lincoln's Emancipation Proclamation. And King saw Lincoln, for all of his possible flaws and conflicted racial views, as someone as devoted to equality as any great American of the 19th century, and one who had done more within the constraints of his constitutional power to end slavery than any of his predecessors.

You write that the challenge for Americans is to "recapture King's dream" by understanding how perfectly it "told the story of African American freedom and with it the story of the nation." To what extent do you think Obama's election signifies the fruition of that dream?

King's dream has become pervasive in American culture —but often as a cliché or a sound bite. We recognize the most famous phrases of his speech but don't always understand the context in which those phrases appeared.

One thing I wanted to do in my book—and one thing that Obama's success and presidency will make people do—is look back at King's career in general, and more particularly at his most famous speeches, and ask what he was actually saying, what were the historical sources of his inspiration.

And because Obama is our first African American president, he's a symbol of what King dreamed would be possible one day. But just as importantly, he will become a lens through which we re-investigate and re-imagine the story of America from a more complex multiracial perspective. That might be the greatest realization of King's dream.

Many African Americans, including academics, do not think Obama's presidential victory represents the realization of King's dream, not least because Obama has a vision of a

common future for all Americans in which some key issues for African Americans, most notably regarding racial equality, may appear to get sidelined.

That's a reasonable apprehension. The fact of one man's election doesn't change the nature of the reality for many African Americans who live in conditions of disadvantage and poverty.

It's interesting that during the campaign, some conservatives argued that the way to express one's belief in the colorblind ideal would be not to vote for Obama but indeed to vote against him—the point being that if we were truly colorblind, we wouldn't rush to elect an African American because he's African American simply to accomplish an idealistic goal.

Obama himself has had relatively little to say about questions of affirmative action. But the fact that he's been elected won't make the arguments for affirmative action—or arguments over what policies are necessary to improve the economic disadvantage of so many African Americans—go away.

Now that we have an African American president, how do you think Americans can best give meaning to King's famous refrain, "I have a dream."

First, by not making the assumption that the election of Barack Obama has solved the nation's problems with economic and racial disadvantage. I hope people return to the speech



Eric Sundquist, author of King's Dream: "many people saw Obama's election as a vindication of King's dream—that in the United States, race is no longer the impediment to achievement it once was."

to see that it was more complex than its most famous phrase. And I hope they return to King's life and to all of his speeches to understand that his vision of racial justice was more complex than could be contained in any single speech, certainly in a cliché such as "I have a dream."

But I wouldn't want to dismiss that phrase either because King used the idea of the dream and typically spoke of it as the American dream. He truly did believe that the dream was something foundational in American history that began with the Declaration of Independence and the Constitution. The fact that the ideal that he held out is very difficult to realize doesn't mean it's a false ideal. What he expressed as the great promise of America is, I think, implicit in every expression of hope that Obama spoke to during his candidacy—and I assume will continue to speak to as president.

> "King's dream has become pervasive in American culture. I hope people return to the speech to see that it was more complex than its most famous phrase...to understand that King's vision of racial justice was more complex than could be contained in any single speech."

CONFRONTING THE EYE OF THE STORM

By Dan Gordon

The day Kristen Corbosiero started her postdoctoral training at the National Center for Atmospheric Research in Colorado, Hurricane Katrina hit New Orleans.

While the tragedy that ensued heightened awareness about the dangers of hurricanes and the importance of the science behind forecasting them, Corbosiero was already on the case, having studied weather systems—especially tropical cyclones, or hurricanes—as a graduate student.

"As one of my advisors once told me, 'If it's in the atmosphere and it's rotating, I'm interested in it,' " she said.

Corbosiero, who grew up outside of Boston, traces her fascination in weather back to middle school, when she joined a "weather club" directed by a geography teacher.

"We met before school every morning to draw weather maps and discuss what was going on," Corbosiero said, "and we got to deliver forecasts in the morning announcements."

As an assistant professor in the Department of Atmospheric and Oceanic Sciences at UCLA, Corbosiero continues to analyze weather patterns, although these days at a much more sophisticated level. She studies a variety of phenomena, including tracking and forecasting of lightning and thunderstorms, but her primary focus is on hurricanes—and in particular, how the physical structure of these massive storms is related to changes in their strength.

"One of the biggest questions concerning hurricanes is how they intensify," Corbosiero said. "I'm interested in what we can learn about intensity from the shape of the eye wall."

To get those answers, Corbosiero uses data taken from actual observations of hurricanes as well as numerical modeling that simulates their structure. The observations come from radar and satellite monitoring when hurricanes venture close enough to the U.S. coast, and from a fleet of Air Force and government planes that fly into hurricanes over the open seas and use special equipment to measure their properties.

Armed with that information, Corbosiero looks to document the hurricane's structure at each point of its intensity. Among her questions: Does the hurricane have a clear eye? What is the shape of the eye wall—the ring of intense thunderstorms and winds that surround the eye?

"The hurricane eye wall can be circular, but it can also take on interesting shapes," Corbosiero said. "We want to know the physical phenomena that cause the hurricane eye wall to take on these unusual forms, and how these forms are related to the storm intensity."

In her effort to address that issue, Corbosiero also studies the activities of rain bands—the thunderstorms that form outside the eye wall.

"All of the energy for the storm comes from air flowing into



the center. You can imagine that if a rain band is outside the eye wall, it might take some of the energy from it. Understanding how the rain bands affect the eye wall and what causes them to be where they are can give us additional insights."

But sending an airplane through a hurricane has its limitations, most notably the inability to obtain data at all points of the storm simultaneously. So Corbosiero also uses numerical modeling to simulate the form taken by all of the hurricane's quadrants at all times as a way of gleaning a clearer picture of the continuous evolution of the storm.

For her doctoral research, Corbosiero capitalized on some of the most complete radar and aircraft reconnaissance data sets ever recorded of a tropical cyclone in her analysis of peculiar Atmospheric scientist Kristen Corbosiero investigates the most formidable weather forces in nature, with a special focus on how the physical structure of hurricanes is related to their intensity.



aspects of Hurricane Elena in 1985—a storm that took an unusual, looping path through the Gulf of Mexico before hitting the U.S. Gulf Coast. From these observations, she was able to document what the numerical models had suggested: that rain bands outside the core of tropical cyclones have the properties of a type of wave.

Corbosiero also uses the observational data to improve numerical models. In her simulations of Hurricane Katrina, Corbosiero found a triangular eye wall—something that isn't seen in observations of Katrina or other hurricanes; eye walls are typically squares or ellipses.

"That told us that even though we have this powerful, stateof-the-art model, it needs to be improved," she said. "We're



Kristen Corbosiero: "If it's in the atmosphere and it's rotating, I'm interested in it."

not matching the structure with what we see in nature."

While there were major shortcomings in the preparedness for Hurricane Katrina and the response that followed, the forecast for the storm was quite accurate. Not so for Hurricane Rita, which made it to the Gulf Coast less than a month later. After predictions that Rita would hit Houston led to widespread evacuation, the storm completely missed the city, landing significantly further east.

Last year, Hurricane Dolly rapidly intensified to Category 2 status on July 23—something none of the models had predicted only hours before it occurred—before hitting southern Texas. These and other examples illustrate that there is still work to do when it comes to forecasting the path and intensity of hurricanes.

Corbosiero is looking at how to better track hurricanes as well, but her primary interest, predicting intensity, is even more challenging.

"The direction of the storm is dictated by larger-scale features in the environment, whereas the intensity is controlled by more subtle, smaller-scale features," she said.

In the wake of the publicity surrounding Katrina and Rita, Corbosiero has more company in endeavors, with many new researchers joining the field. She remains as intrigued by weather patterns as she was in her middle school weather club—but, given the persistent threats to the public from hurricanes, her scientific curiosity is also based on a sense of higher purpose.

"By identifying the causes of intensity changes, we hope to be able to make more accurate forecasts so that we can get people out of harm's way," Corbosiero said. "It gives me great satisfaction to be able to use this basic research toward a practical end."

Kevin Albert: Helping Projects Take on a Life of Their Own

The chair of the Board of Visitors for the Department of Economics talks about his involvement as both a donor and a volunteer.

UCLA alumnus Kevin Albert earned his B.A. in economics in 1974, and his M.B.A. from the Anderson School in 1978. Albert is managing director of investor relations at Elevation Partners, a private equity firm that uses its technology expertise in modern communications and the internet to invest in media, entertainment, and consumer-related businesses.

Albert is a dedicated and generous supporter of the Economics Department (see related story) and chair of the Economics Board of Visitors. We spoke to him about his ongoing involvement with the department.

What was your experience at UCLA in the 1970s?

Albert: I transferred to UCLA after my freshman year at the University of Wisconsin. My undergraduate experience at UCLA really helped me grow up. The diversity and high quality of the classes I took helped me figure out what I was good at, what I wasn't good at, what I liked, and what I didn't like.

I was exposed to a lot of different things—sociology, English, psychology classes, all the requirements. I loved UCLA. I went to a lot of the sporting events, I had a lot of friends. It was my life for those three years. I really missed it when I left, so it was fun to get back involved many years later.

Why did you join the Economics Board of Visitors?

After I received my M.B.A., I worked for a short time, and then, about 1979, I moved to New York and got a job with Merrill Lynch. In New York it was hard to stay connected to UCLA. I sent a little money to the Chancellor's campaign, but it wasn't really a meaningful involvement.

Then, in the late 1990s, Scott Waugh, who was dean of social sciences (now executive vice chancellor and provost of UCLA), started coming to New York and calling on people and ultimately asked us for support. He came to my office and told me what was going on at UCLA, and I ended up making a gift to the Economics Department.

Toward the end of my pledge, the department began to think about setting up a Board of Visitors. By that time, around 2004, I wanted to become more involved with UCLA beyond giving money. It's good to give money, but for me it's more satisfying to give both money and expertise. So I signed on to the Economics Board of Visitors—about a dozen of us signed on. About 2 years ago they asked me if I would chair the Board.

I sat down with the department chair, Gary Hansen, and



a couple of professors, and we went over some of the potential projects the Board could work on, like upgrading the Web site to give the department a stronger identity, enhancing the accounting curriculum, and creating an internship program which became the Sharpe Fellowships.

Then I called everyone on the Board and talked to them about the sort of expertise we were looking for. About a third of them felt as I did—they wanted to give more of themselves, their expertise, back to UCLA. This was the summer before last, and it's gone really well.

A Diligent Participant

How did the Sharpe Fellowships come about?

UCLA is a research university, not a vocational school. The professors do their own research and nurture students who will become researchers themselves.

One of the professors, Andy Atkeson (director of the Business-Economics Program), proposed a fellowship to provide summer internships for juniors and seniors in all majors. Andy suggested that we create something like that for our economics students, targeted toward business.

So in the fall quarter, juniors in economics are invited to apply for the Sharpe Fellowship, which is named in honor of William Sharpe, an economics department alumnus with three degrees from UCLA who won the Nobel Prize in 1990. In the last two years, about 70 students have applied. After an initial selection by the department, board members and other alumni interview the remaining students, and in cooperation with faculty, we pick those we think are exceptional. Those students get first choice of internships we've lined up with high-profile employers.

This year, 14 students got the fellowship. We're expecting the program will grow substantially.

Some of the students aren't well prepared for the interview, so afterward we give them a 10-minute critique. They really appreciate it, and it makes a significant impact on their preparation, their careers. We hope, if we can maintain these relationships, we'll be able to turn them into supporters of UCLA and the department early in their careers. Kevin Albert is one of those devoted Bruins who not only donate their financial resources but also their time and expertise in support of their alma mater.

In 2004 he created the Albert Family Research Fund in Microeconomics in the Department of Economics. He also is an enthusiastic member and dynamic chair of the Economics Board of Visitors, offering financial knowledge and leadership to the department where he earned his undergraduate degree in 1974.

Albert has worked to build a strong partnership between the Board of Visitors and the department, helping to secure funding to enhance education and research in economics, and advance the department's standing.

Albert's assistance has been an invaluable contribution to the growth of the department in the last few years, according to Gary Hansen, chair of the economics department.

"The Board of Visitors has been really transformative for us," said Hansen. "We're now facing huge budget problems, but the fact that we have the Board of Visitors and that we have substantial support makes me optimistic that we're going to get through this difficult time pretty well. And Kevin is always there for us. He's a gung-ho member of the board—he sees things that the board can do for us that we never imagined."

Professor Andy Atkeson, who has been actively involved with the Board of Visitors, added, "Kevin brings

Why do you do all this?

I got my education for about \$400 a year, so when I moved to New York, that was kind of a raw deal for the state of California. I resolved that someday, if I could, I'd pay it back. Also, these projects are interesting to me, and I know they'll grow and take on a life of their own. Ultimately they'll contribute many times what I could ever give financially.

Jennifer Lo, who served as a Sharpe Fellow at Ernst and Young BRS, with Edward McDevitt, visiting assistant professor in the Department of Economics.



both tremendous energy and a clear vision to the task of working with us to deal intelligently with the challenges that we face in the Economics Department. It gives me great personal satisfaction and hope for the future here at UCLA to know that we have Kevin Albert and alumni like him to help us build a stronger department and university."

To learn more about the UCLA Department of Economics and its Board of Visitors, see www. economics.ucla.edu

The Legacy of a Passion for Education

Author Jean Stone capped five decades of giving to UCLA with a \$7 million legacy for the College that will fund graduate fellowships and endowed chairs in four departments.



Jean Stone: "The basis of our support to UCLA is gratitude."

By Robin Heffler

hen creating his best-selling biographical novels, author Irving Stone had a hard-working collaborator. His wife, Jean, served as his primary researcher and editor during their nearly 55-year partnership. Together they produced profiles of Vincent Van Gogh in *Lust for Life*, Michelangelo in *The Agony and the Ecstasy*, and many others.

It turns out that there was another important, though silent contributor to the Stones' work as well: UCLA.

While working with her husband to research their subjects, Jean often used the UCLA Library, which was close to their Beverly Hills home. She capitalized on campus resources to study Renaissance culture and the Italian language for the Michelangelo book, learn Greek for *The Henry Schliemann Greek Treasure*, the tale about a couple who searched for the legendary city of Troy, and study German for the Sigmund Freud work, *The Passions of the Mind*.

"Who knows more about the importance of research than we do?" Jean remarked to UCLA Magazine in 1994, five years after Irving had died and after she established the

Jean and Irving Stone Endowed Student Research Fund in the College Honors Program at UCLA. "The basis of our support to UCLA is gratitude." In fact, Irving and Jean had begun a research collaboration with UCLA's College Honors program several years earlier: as UC Regents' Lecturers, they taught a course in Biographical Research in the Honors Collegium and began funding Summer Research Stipends for College Honors undergraduates. It is a tradition which continues today because of their endowment.

Now it is the College of Letters and Sciences' turn to be grateful. Jean, who passed away in 2004, left more than \$7-million to the College, which recently received the bequest from her estate. The gift is designated for faculty chairs in the Departments of English, Linguistics, Chemistry, and a yet-tobe-determined department in the Life Sciences, as well as for graduate fellowships in the Center for the Study of Women. *(See related story on this page.)*

"Having that many endowed chairs and graduate fellowships can transform our ability to recruit and retain the best faculty and graduate students," said Judith L. Smith, dean and vice provost for undergraduate education. "It makes us competitive with the Ivy League colleges."

Irving Stone began the family tradition of donating to UCLA with a gift to the Frederick S. Wight Art Gallery in 1957. As a couple, the Stones regularly gave to UCLA, including the UCLA Library, the UCLA Fund, the Anderson School of Management, the Dean's Discretionary Fund in Humanities, the Dean's Scholars Fund in the Graduate School of Education, and the Scholarship Fund for Undergraduate Education.

Jean had a long history with UCLA and the College on her own as well. In addition to financial support, she volunteered with the UCLA Foundation Board of Trustees, the Board of Directors for what is now the UCLA Dashew Center for International Students and Scholars, the Provost's College Council, and Friends of English. Smith said her strongest connections were with the English Department and the Center for the Study of Women.

"During her lifetime, Jean Stone was a tremendous friend of UCLA," said Smith. "Her contribution will serve as the legacy of her passion for education and advanced research."

"Having that many endowed chairs and graduate fellowships can transform our ability to recruit and retain the best faculty and graduate students."

A Boost for Graduate Study

One of the principal benefits of the legacy from the estate of Jean Stone is a \$2-million gift to fund graduate fellowships that support study of women's gender and sexuality.

ne researcher is studying how 21st century conservative organizations like the Minutemen Project are appropriating names, dress, and behavior of heroic groups in U.S. history, and claiming that it is their role to protect the vulnerable moral foundation of the country. Another is examining partnerships on small, independent American films between Latino men, who are the directors, and their wives, who are equally involved creatively but never receive credit.

Both researchers are graduate students and among the candidates for four dissertation-year fellowships that will be awarded by the Center for the Study of Women (CSW) through the generosity of a \$2-million

gift from the estate of Jean Stone. The CSW/Graduate Division Irving and Jean Stone Dissertation Year Fellowship Program also will provide complete funding for one graduate student's initial year in women's studies, and grants to assist the research of three ongoing graduate students at the Center.

"The Stone Fellowships will be the centerpiece of the many different awards and grants we have available for graduate students."

Internationally recognized for work on women, gender, and sexuality, the CSW was established in 1984 as the first organized research unit of its kind in the

UC system. It primarily focuses on promoting and disseminating the research of faculty and graduate students, and draws on the expertise of 245 faculty members from 34 departments and 10 professional schools at UCLA.

"The Stone Fellowships will be the centerpiece of the many different awards and grants we have available for graduate students," said Kathleen McHugh, UCLA professor of English and director of the CSW, which is housed in the Public Affairs building in the north campus.

"The endowment allows CSW to support research in our mission area for graduate students campuswide, including the College and the professional schools, the physical and life sciences, as well as the humanities and social sciences."

Previously Stone established the Jean Stone Dissertation Research Fellowship in 1995 and the Paula Stone Dissertation Research Fellowship in 1997, in honor of her late daughter. McHugh said that Jean also was active in CSW events.

McHugh noted that both men and women who are undertaking research projects on women, gender, and sexuality are encouraged to apply for funding through the Center. CR

For information about supporting the UCLA College of Letters and Science, call Stephen Jennings, interim executive director of development, at (310)825-2558.

In Closing

Eighty Years in Westwood



Eighty years ago this spring, it was a class in the College of Letters and Science that opened the doors to the new UCLA campus—six months earlier than expected. When a building at UCLA's campus on Vermont Avenue had to be closed early, the new Chemistry Building (now Haines Hall, shown above left as it looks today), was pressed into early service while construction for the new campus continued. So on March 18, 1929, students in the Chemistry 1A class taught by Hosmer W. Stone were literally in a class by themselves, as they met in the first course at UCLA in Westwood.

Pass it on.

"I'm a Bruin to an extreme degree. I feel this interconnection - past, present and future -asense of being part of something great.

"That's the way the UCLA Legacy works. At

The UCLA Legacy is the performance-based. non-transferable invitation to attend this very public university.

first, it's just an opportunity, a chance open to everyone. It's not passed down from generation to generation.

It's awarded to those who work the hardest.

those who want it the most.

"Then there's the experience. From the first day, I had an amazing variety of studies. Not just the subjects I wanted to master but things I never would have known about if I hadn't pursued a liberal arts education. The magic really happened when there from several L.A. area high schools attend UCLA.

one class and coming across it in another or, better yet, seeing it out in the real world. Those

was an overlap—studying something in

"High school students working toward going to UCLA may go to another college, but the fact that they're even oriented in that direction is a home run."

multiple connections really stick.

"Just being exposed to the diversity on campus made the world more

interesting. 'Hey, we're going to go hear this kind

of music tonight.' Something I hadn't been exposed to. That was just as important as the academic stuff.

"My four years at UCLA were a cram course in cultural and intellectual possibility. They set me up to be successful at what I do; they helped make me an adult.

"So, I graduated, and pursued a career that allows me to travel all over the world and

> explore whatever I'm curious about. Thanks, UCLA. We're done, right?

"Not quite. There's one more piece of the Legacy, especially for those of us whose success has been hugely influenced by our education.

"What if someone never heard of the

Legacy? Or, worse yet, what if they were told that UCLA was too big a dream, not for them, out of their reach?

"I'm in a unique position to give back and very grateful to be able to do so. It turns out there's a Law of the Universe involved: you get more than you give."

"That's where you come in. Tell them about this place of infinite possibility. Tell them it's theirs for the taking. Pass it on."

Brad Delson, UCLA Unabashed



Brad Delson, lead quitarist for the Grammy® winning multi-platinum rock band Linkin Park, graduated summa cum laude from UCLA in 1999. The Delson Scholarship Fund helps graduates



Images of interactions between proteins in nuclei of human cells, as studied by post-doctoral researcher Mario Pennella in the laboratory of Arnold Berk, who was appointed this year to hold the UCLA Presidential Chair in Molecular Cell Biology. Pennella is working in Berk's lab to study cellular mechanisms that control cell division, using adenovirus to better understand how a normal human cell becomes a cancer cell.

Each image, about 20 microns wide, was stained for identification and shows a different feature in the human cell: blue (lower left) is DNA in the nucleus of the cell; yellow (top right) is the p53 protein, which regulates cell functions and plays a key role in the prevention of tumors; red (top center) is the PML protein, which forms nuclear bodies in the cell; green (top left) is adenovirus E1B, a viral protein that can de-activate the function of the p53 protein, one step in the process that causes the cell to become cancerous. Lower center shows all of the images, stacked one on top of the other.

For more on Berk and his lab's research program, see page 20.



2300 Murphy Hall 405 Hilgard Avenue Los Angeles, California 90095 Non-Profit Org. U.S. Postage PAID U.C.I.A

UCLA