

Winter 2009

Volume Eleven

UCLA COLLEGE

R E P O R T

$p\mu + \frac{e}{c} A\mu - mc$

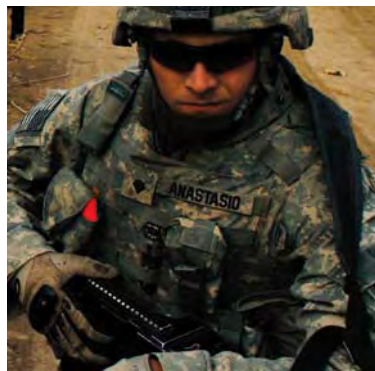


UCLA COLLEGE OF LETTERS AND SCIENCE

6

Shining New Light on the Surge

What does a satellite study of Baghdad neighborhoods reveal about the effectiveness of troop increases in Iraq?



8

So Fascinating to Watch

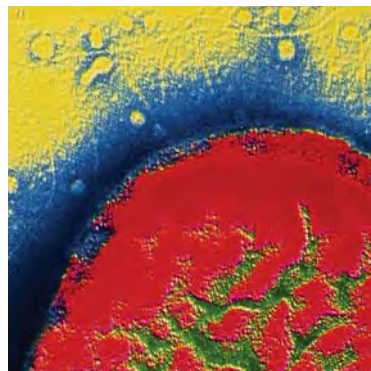
Megha Sundara is studying an age-old mystery of human development: the seemingly-effortless ability of infants to learn how to speak and understand language.



10

Fighting a Relentless Deadly Foe

Microbiologist Jeffery F. Miller has assembled a multidisciplinary team of students and post-doctoral scholars to look for new approaches to understanding how the bacteria that causes whooping cough thrives and evolves.



12

The Capstone

The latest UCLA initiative to enrich the student experience focuses on encouraging seniors to create a "capstone experience" to complete their undergraduate studies.

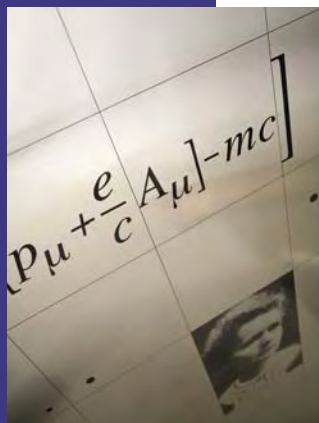


On the cover:

The elevator doors in the College's Physics & Astronomy Building feature an array of images from the history of science, including this portrait of physicist-chemist Marie Curie—the discoverer of radium and polonium, the first woman to receive a Nobel Prize, and the first person to win or share two Nobel Prizes (1903 for physics and 1911 for chemistry).

Also inscribed are breakthrough formulas in science, such as this one for the Dirac Equation of relativistic quantum mechanics.

Photo by Reed Hutchinson



The Mystery of the Magnificent Light Show

What causes the northern lights to suddenly brighten and dance in spectacular bursts of colorful light and movement?

14



Cutting to the Core of Prejudice

Psychologist Phillip Atiba Goff takes a 21st-century approach to exploring the broad social issues that can spur racial prejudice and inequality.

16

Snapshots

College News

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

3

Great Futures for the College

The impact of philanthropy on the College.

28

UCLA COLLEGE

R E P O R T

18 An Energized Sense of Purpose

The McNair Research Fellows Program is fulfilling a national priority by increasing the number of Ph.D.s earned by UCLA students from under-represented segments of society.



20 Viewing Independent Films through the Lens of an Anthropologist

Anthropologist Sherry Ortner explores the scope of public culture—whether among Sherpas of Nepal, high school classmates in New Jersey, or producers in the independent film movement.



22 A Team Strategy to Model Global Climate

Scientists in the College are anchoring a worldwide task force of scholars that is exploring the interplay of weather phenomena that lead to El Niño, global warming, and other extreme climate conditions.



24 Shaking People Up

Alicia Gaspar de Alba, winner of the 2008 Gold Shield Faculty Prize, brings a life of rich experiences at the Mexico-U.S. border into her teaching and research.



26 Bridging the Divide

A thought-provoking book by UCLA historian and political scientist Anthony Pagden explores 2,500 years of division between East and West, and how the conflict of cultures and ideologies can change in a globalized world.

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

Tracie Christensen
Assistant Vice Chancellor

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.

Message from the Deans of the College

Dear friends:

The 2008–09 academic year brings with it many challenges for the College of Letters and Science, as well as an extraordinary range of achievements by our faculty, students, and staff.

In this issue of *College Report*, you'll find a sampling of success stories about the research accomplishments of our talented scholars, dynamic programs for undergraduates, and donors whose commitments to the College support our greatest needs: graduate student fellowships, faculty support, and capital building programs.

Uncertainty about the economy and the state budget is creating challenges for our educational and research missions; the deans of the College, our departments, and our faculty are working to address these challenges. We believe that continuing an open conversation about these issues has never been more important to the College of Letters and Science and its future. We invite you to contact us with your questions and comments, and we look forward to partnering with you to continue the great work of the College.



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



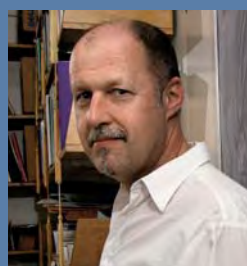
Emil Reisler
dean of life sciences
ereisler@college.ucla.edu



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.

Alumna Kay Ryan Named Poet Laureate of the United States

A two-time graduate of the College receives the nation's highest honor for poetry with "sly wit pointing to subtle wisdom."

By Alison Hewitt

With poetry's lofty reputation, the uninitiated might think that poetry and humor overlap only in limericks. But for UCLA alumna Kay Ryan, named poet laureate of the United States, "much of the best poetry is funny."

Ryan acknowledged that she sometimes plays for laughs at readings, saying that she "needs to know the audience is out there, and the quickest way to feel it is through their laughter."

With Ryan's role of encouraging the country to appreciate poetry, the wit and brevity of her own poems will help make her appealing to a broader public, said UCLA English Professor Stephen Yenser.

"I think she is going to be a poet laureate who can engage and entertain the public," said Yenser, who met Ryan in 2006 when he invited her to appear at a poetry reading at the Hammer Museum.

"She's a charming and accessible poet and people like her a lot."

Ryan received her bachelor's in English from UCLA in 1967, followed by her

Photo: Marin Independent Journal



Kay Ryan, Poet Laureate of the United States: "She's a charming and accessible poet," said English professor Stephen Yenser of the UCLA alumna.

master's in English in 1968, also at UCLA. Ryan has been a part-time remedial English teacher at the College of Marin in Kentfield for three decades, which leaves her time to focus on her poetry. She has written six books of poetry, and her work has appeared regularly in the annual anthology, "The Best American Poetry."

The Laureateship is awarded by the

Library of Congress for "the highest quality of poetry," said Librarian of Congress James Billington.

"Ryan writes easily understandable poems on improbable subjects," Billington said. "Within her compact compositions there are surprises in rhyme and rhythm, and in sly wit pointing to subtle wisdom."

See Ryan's poetry at www.poets.org.



Parents' Weekend 2008

Associate professor of chemistry and biochemistry Heather Maynard discusses the latest developments in nanotechnology during her presentation titled "Tiny Package Big Delivery" at UCLA Parents' Weekend 2008. Maynard was one of several faculty and deans of the College who presented updates on the UCLA academic experience to more than 3,400 parents, family members and students who attended the three-day annual celebration October 17–19.

A “Genius Grant” for a Stellar Scholar

Astronomer Andrea Ghez, who has conducted landmark work to identify new star systems and illuminate the role of supermassive black holes, has received a 2008 MacArthur Fellowship.

Andrea Ghez, a UCLA astronomer who uses novel telescopic techniques to identify new star systems and illuminate the role of supermassive black holes in the evolution of galaxies, has been selected as a 2008 MacArthur Fellow—better known as a “genius grant.”

Ghez will receive \$500,000 in unrestricted support over the next five years.

Ghez uses novel telescopic techniques to identify thousands of new star systems and illuminate the role of supermassive black holes in the evolution of galaxies.

“I am really thrilled,” Ghez said. “I will be able to take more risks with my research than I could before. The current shortage of federal funding for science can lead scientists to take fewer risks, but my selection as a MacArthur Fellow will allow me to pursue new ideas; it says to me that I should be brave and take risks.”

Black holes are collapsed stars so dense that nothing can escape their gravity, not even light. Black holes cannot be seen, but their influence on nearby stars produces a visible signature.

In 1998, Ghez answered one of astronomy’s most important questions, showing that a monstrous black hole resides at the center of our Milky Way galaxy, some 26,000 light-years away, with a mass more than 3 million times that of the sun. The question had been a subject of raging debate among astronomers.

“Our galaxy is rather mild mannered and quiet and was one of the least likely galaxies to have a black hole at its center,” Ghez said at the time.

One reason astronomers had been unable to determine whether a black hole was at the Milky Way’s galactic center is that the Earth’s atmosphere distorts the images of stars. Ghez uses a technique she refined known as speckle interferometry, which involves taking thousands of very quick, high-resolution snapshots that correct for these distortions. She has developed algorithms—computer commands

“I will be able to take more risks with my research than I could before.”



2008 MacArthur Fellow Andrea Ghez: “The current shortage of federal funding for science can lead scientists to take fewer risks, but my selection as a MacArthur Fellow will allow me to pursue new ideas.”

based on sophisticated mathematics—and software for analyzing the data.

“The atmosphere blurs your vision,” Ghez said, “but speckle interferometry clears the picture up; it’s like putting on glasses.”

In 2005, Ghez and her colleagues took the first clear picture of the center of the Milky Way, including the area surrounding the black hole, using laser virtual star technology at the W.M. Keck Observatory in Hawaii.

“Everything is much clearer now,” Ghez said. “We used a laser to improve the telescope’s vision—a breakthrough that will help us understand the black hole’s environment and physics. It will revolutionize what we can do in astronomy.”

Ghez’s research is supported by the National Science Foundation and the Packard Foundation.

MacArthur Fellowships are awarded to people who demonstrate “exceptional creativity and promise.”

Other UCLA MacArthur Fellows are mathematician Terence Tao (2006), who holds UCLA’s James and Carol Collins Chair in the College of Letters and Science; Saul Friedlander (1999), who holds UCLA’s 1939 Club Chair in History; Elinor Ochs (1998), professor of anthropology and applied linguistics; Susan McClary (1995), professor of musicology; Rogers Brubaker (1994), profes-

sor of sociology; Sherry Ortner (1990), professor of anthropology (see page 20); Richard Turco (1986), professor of atmospheric and oceanic sciences; Jared Diamond (1985), professor of geography and environmental health sciences; and Peter Sellars (1983), professor of world arts and cultures.

For more about Ghez’s research, visit www.astro.ucla.edu/~ghez.

Congress Makes New Opportunities for Tax-Free Gifts from an IRA

Congress Makes New Opportunities for Tax-Free Gifts from an IRA

The IRA Charitable Rollover created under the Pension Protection Act of 2006 has been extended through the end of 2009. Donors who are 70½ years of age or older may make a tax-free charitable gift from a traditional or Roth Individual Retirement Account (IRA) of up to \$100,000 per year.

To qualify for IRA rollover treatment, the donor must direct the IRA manager to transfer funds directly to The UCLA Foundation. The deadline for gifts in the 2008 tax year is December 31, 2008.

For more information about ways to take advantage of this important giving opportunity, call the UCLA Office of Gift Planning at (800) 737-8252.

How Do Seniors in the College of Letters and Science Feel about Their Undergraduate Experience?

Graduating students in the College of Letters and Science continue to give high marks to the value of their academic careers.

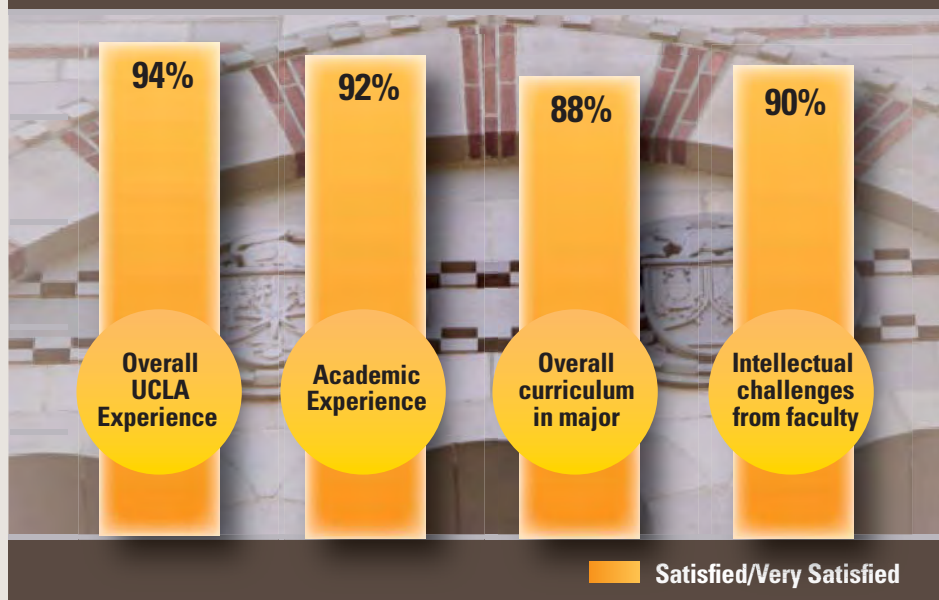
Very large percentages of UCLA seniors in the College report satisfaction with their overall campus experience, the curriculum, and the academic challenges of studying at UCLA, according to the College's fourth annual survey of seniors in the UCLA College of Letters and Science.

Ninety-four percent of seniors in the College said they were satisfied or very satisfied with their overall UCLA experience, while 92 percent expressed satisfaction with the academic experience.

Large percentages of seniors also expressed high levels of satisfaction with curriculum in their major and intellectual challenges from faculty (*see chart*).

All seniors in the UCLA College of Letters and Science are asked to complete a survey on their academic experience at the university, as well as their lives on campus, and their plans after graduating.

Student Views about the Overall UCLA Experience



On other issues in the current survey:

- ♦ Students gave high marks to the capstone experience (*see page 12*); 97 percent agree or strongly agree that an honors thesis or a senior seminar provided strong intellectual challenges.

- ♦ When asked about the value of conducting research as part of the undergraduate experience, 92 percent of seniors said that participating in research helped them better understand concepts

in related courses. And, 87 percent said “my research project contributed to the creation of new knowledge.”

- ♦ Almost all seniors were inspired to expand their lifelong learning: 97 percent said that their UCLA education increased their desire for lifelong learning, and an equal percentage said their undergraduate education gave them new confidence in approaching new areas of learning.

Recognition for a Cornerstone of Undergraduate Education

“Civic Engagement,” said UCLA chancellor Gene Block, “is embedded in our teaching and research mission.” UCLA’s commitment to civic involvement in the undergraduate experience was underscored October 23 when the university created the Helen and Alexander Astin Civic Engagement Scholars Program, which will provide financial support to students who are committed to community participation as part of their education.

Named for visionary UCLA higher education scholars Alexander (“Sandy”) and Helen (“Lena”) Astin, the scholarship program will promote analysis of contemporary social justice issues, the development of social capital in the creation of a civil society, the role of the university as public intellectual, and the importance of research as service.

“Community learning is a cornerstone of undergraduate education,” said Judith L. Smith, dean and vice provost for undergradu-

ate education. “The Astins have challenged faculty to think differently about students’ undergraduate experiences as well as the intentional role that colleges and universities can play in shaping those experiences.”

“The Astin Civic Engagement Scholars Program will provide a financial base for supporting students as they begin to take leadership roles in the community as undergraduates.”

The Astin Scholars Program will be launched in the spring of 2009. The program will be coordinated by the Center for Community Learning, which engages UCLA undergraduates, faculty and community partners in programs that integrate teaching, research and service. (See www.ugeducation.ucla.edu/communitylearning)

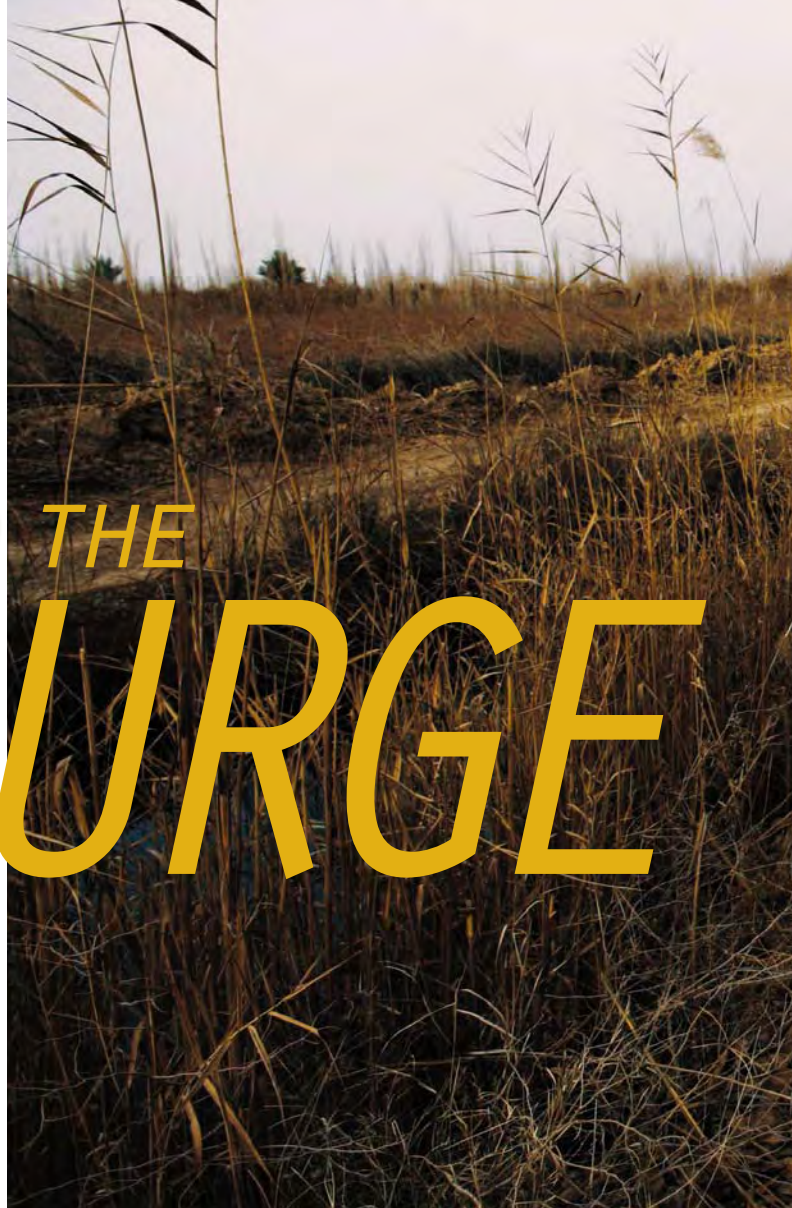
Scholarships will range from \$1,000–5,000, depending on need and merit. Five awards will be given initially, with a goal of growing the program to more than 100 awards per year.

Celebrating civic engagement—Judith L. Smith, Lena Astin, Gene Block, Sandy Astin, and Center for Community Learning director Kathy O’Byrne.



What does a satellite study of Baghdad neighborhoods reveal about the effectiveness of troop increases in Iraq?

Shining New Light on **THE SURGE**



By Meg Sullivan

Early in 2007, the Bush Administration ordered the deployment of more than 20,000 soldiers into Iraq, while extending the tour of more than 4,000 U.S. Marines. Known as “the surge,” the plan was designed to help Iraqis in Baghdad and Al Anbar Province to clear and secure neighborhoods and protect the local population.

But did the surge work?

By tracking the amount of light emitted by Baghdad neighborhoods at night, a team of UCLA geographers has uncovered evidence that the surge may not have been as effective at improving security as administration officials have maintained.

Night light in neighborhoods populated primarily by embattled Sunni residents declined dramatically just before the surge and never returned, suggesting that ethnic cleansing by rival Shiites may have been largely responsible for the decrease in violence, the team reported in a new study based on publicly available satellite imagery.

“Our interpretation is that violence has declined in Baghdad because of intercommunal violence that reached a climax as the surge was beginning,” said lead author John Agnew, a UCLA professor of geography and authority on ethnic conflict.

“By the launch of the surge, many of the targets of conflict had either been killed or fled the country, and they turned off the lights when they left.”

The night-light signature in four other large Iraqi cities—Kirkuk, Mosul, Tikrit and Karbala—held steady or increased between the spring of 2006 and the winter of 2007, the UCLA team found. None of these cities were targets of the surge.

Baghdad’s decreases were centered in the southwestern Sunni strongholds of East Rashid and West Rashid, where the light signature dropped 57 percent and 80 percent, respectively, during the same period. *(See the image on the back cover.)*

By contrast, the researchers found that the night-light signature in the Shiite-dominated Sadr City remained constant, as it did in the American-dominated Green Zone. Light actually increased in Shiite-dominated New Baghdad.

Until just before the surge, the night-light signature of Baghdad had been steadily increasing overall.

“If the surge had truly worked, we would expect to see a steady increase in night-light output over time, as electrical infrastructure continued to be repaired and restored, with little discrimination across neighborhoods,” said co-author Thomas



“Our interpretation is that violence has declined in Baghdad because of intercommunal violence that reached a climax as the surge was beginning.”

Gillespie, associate professor in the Department of Geography.

The effectiveness of the surge deployment had already been debated before the UCLA study. In a report to Congress that September, General David Petraeus said “the military objectives of the surge are, in large measure, being met.”

However, a report the same month by an independent military commission headed by retired U.S. General James Jones attributed the decrease in violence to areas being overrun by either Shiites or Sunnis.

Reasoning that an increase in power use would represent an objective measure of stability in the city, Agnew and Gillespie led a team of UCLA undergraduate and graduate students in political science and geography that pored over publicly available night imagery captured by weather satellite F16 of the Defense Meteorological Satellite Program.

“The surge really seems to have been a case of closing the stable door after the horse has bolted,” Agnew said.

In addition to casting doubt on the efficacy of the surge in general, the study calls into question the success of a specific strategy of the surge, namely separating neighborhoods of rival sectarian groups by erecting concrete blast walls between them.

The researchers found that the differences in light signatures had already started to appear by the time American troops began erecting the walls under Gen. Petraeus’ direction.

“The U.S. military was sealing off neighborhoods that were no longer really active ribbons of violence, largely because the Shiites were victorious in killing large numbers of Sunnis or driving them out of the city all together,” Agnew said. “The large portion of the refugees from Iraq who went during this period to Jordan and Syria are from these neighborhoods.”

Previous research has used satellite imagery of night-light saturation to measure changes in the distribution of populations in a given area, but the UCLA project is believed to be the first to study population losses and migration due to sectarian violence. The outgrowth of an undergraduate course in the use of remote sensing technologies in the environment, the UCLA project was inspired by a desire to bring empirical evidence to a long-running debate.

“We had no axe to grind,” said Agnew. “If we had found that the situation was different, we would’ve reported it. Our main goal was to bring objective and unobtrusive measures to a particularly contentious issue.” 

So Fascinating to Watch



By Meg Sullivan

“By studying children who are developing in a typical manner, we can come up with a protocol for kids who are struggling.”

With his eyes wide open in anticipation and his wispy hair standing on end, 2 ½-year-old Luke Dubose Harwell could hardly contain his enthusiasm.

For the curious and energetic toddler on his second visit to UCLA’s Department of Linguistics, the hallowed halls of the university’s highest-ranked department might as well have been the local playground.

“You haven’t said ‘hi’ yet to Princess Megha,” Luke’s mother told the boy as she guided him down a long hall to Megha Sundara, who joined the faculty in 2007.

Luke grabbed his mother’s leg and smiled shyly at Sundara, an assistant professor in linguistics and a rising star in the field of infant language acquisition and perception.

“Do you want to come into the castle,” Sundara leaned over to ask Luke, referring to a small room decorated with brightly colored Styrofoam to resemble a castle with a tower and drawbridge.

Luke responded with a vigorous nod.

And just like that, another study subject bounded into the soundproof booth that Sundara is using to shed light on an age-old mystery that has vexed any adult who has tried to pick up a second or third language.

By the time children are six years old, they know 10,000 words, research has found. By fifth grade, they speak an average of 40,000 words, meaning they learned five and half words a day. And they accomplish this amazing feat without studying.

How do infants and toddlers so effortlessly acquire the ability to speak and understand language? In what order does the process of language acquisition take place?

Megha Sundara is studying an age-old mystery of human development: the seemingly-effortless ability of infants to learn how to speak and understand language.

And what effect does learning two languages simultaneously have on the process?

Aside from the purely scientific benefits, the answers have implications for everything from public policy around bilingual education to improving interventions for those who are speech-impaired and developmentally delayed.

Just eight months after founding UCLA's Language Acquisition Lab, Sundara, whose interest focuses on children under two years of age, is running four studies out of the facility.

"By studying children who are developing in a typical manner, we can come up with a protocol for kids who are struggling," Sundara explained.

Sundara is not alone in these efforts. The lab is helping to sustain the work of two other College faculty involved in infant research: Scott Johnson, a psychology professor who looks at perception in infants up to 15 months old, and Catherine Sandhofer, an assistant psychology professor who looks at language acquisition in children between 15 and 35 months old.

Two UCLA senior linguists also use the facilities: Nina M. Nyams and Susan R. Curtiss, who focus on linguistic development between grade school and high school.

"Professor Sundara is one of the most dynamic new faculty members in the College," said Tim Stowell, dean of humanities. "Her arrival at UCLA has energized the entire experimental research community of faculty and graduate students within the linguistics department, and she has established unprecedented ties with colleagues in the psychology department."

Chad Vicens, a fourth-year graduate student in linguistics, is using the facilities to study how infants and adults distinguish their native language from a foreign language, and what types of phonetic information are used in this task.

"There's little known and therefore there is a lot to discover," Vicens said of the field of infant language acquisition.

If the lab doesn't live up to the promise, it won't be for lack of trying. The ABCs are splashed in large letters all over the room's carpet. Outside, the "castle" is covered with colored Styrofoam patches carved by Vicens, who has a background in theater design, to resemble stone-encrusted walls. Inside, the walls are illustrated with Tigger and other characters from Winnie the Pooh. In such a setting, Luke is in his element.

"For him, this is a fun thing," said Luke's mother, Reem Hanna-Harwell, a longtime UCLA staff member. "It's not like going to the doctor's office. It's, 'I'm going to go play!'"

In the castle, Luke watched a computer screen that showed cartoon characters involved in routine activities, such as a little boy catching a few ZZZs. Luke heard two different kinds of sentences that describe the activity in the cartoon: one placed the verb in the middle of the sentence. An example: "He sleeps now." Another put the verb at the end. Example: "There he sleeps." Sundara coaxed Luke to repeat what he had heard.

"That'll give us a snapshot of his speaking abilities right now," Sundara said.

The younger the child, the less likely he or she is to remember the grammatical form of the verb when it appears in the middle of the sentence, Sundara has found. Before about two years of age, they are able to reliably reproduce the sentence only when the verb appears at the end.

True to the theory, Luke struggled with the first kind of sentence when he first visited the lab at 24 months. On this particular day, however, he was hitting all the marks—faithfully reproducing sentences with verbs in both places.

"What a difference five months makes," Sundara marveled.

In another room, Luke climbs on his mother's lap to watch a TV screen that flashes the same cartoon characters. The same voice repeated similar declarative sentences like "There she eats." But not all of these sentences were grammatically correct. Some are intentionally wrong. An example: "There she eat."

Sundara has found that the infants below two years are more likely to pay attention to the grammatically correct sentences. But as they get older than two, children tend to lose interest in the grammatical versions of these sentences. The more skilled children become at speaking, the more the ungrammatical sentences hold their attention. The transition is what interests her.

"At what point do they realize they have to put an 's' at the end of 'eat' and in what sequence do they learn this?" Sundara asked. "Is it that they wake up one day and know, 'He eats?' Or do they gradually learn it?"

"With these tests, we're trying to understand kids' ability to understand and produce grammatical statements."

Parents like Harwell could not be happier to have a clearer glimpse into the miracle of their children's development.

"You don't realize it when you have children, but watching how they learn and how their brain develops is the most fun part of having kids," said Harwell. "It's just so fascinating to watch." 



Sundara at the "castle" in her lab: "We're trying to understand kids' ability to understand and produce grammatical statements."

Microbiologist Jeffery F. Miller has assembled a multidisciplinary team of students and post-doctoral scholars to look for new approaches to understanding how the bacteria that causes whooping cough thrives and evolves.

Fighting a Relentless Deadly Foe

By Aaron Dalton

“VIRAL, BACTERIAL AND PROTOZOAN PATHOGENS ARE CONTINUALLY EVOLVING. THE QUESTION IS HOW DO PATHOGENS EVOLVE? HOW DO ANIMAL PATHOGENS GET THE ABILITY TO INFECT HUMANS?”



Jeffery F. Miller

We tend to think of coughs as small irritations—the person hacking away in the next seat on the airplane, the gentleman clearing his throat at the theater.

But whooping cough is another story. A result of infection by the *Bordetella pertussis* bacteria, whooping cough is a highly contagious disease that lasts for weeks, causes paroxysms of coughing and spasms so strong that they can break ribs.

Whooping cough sounds like a disease from the past, but it thrives today. The *Bordetella pertussis* bacteria that causes whooping cough infects tens of millions of people worldwide each year, leading to hundreds of thousands of deaths.

Most whooping cough infections occur in the developing world. In countries that can afford widespread use of childhood vaccines, outbreaks of whooping cough have drastically declined, but these vaccines offer only temporary immunity. The Centers for Disease Control reported that *pertussis* infections have been on the rise in the United States since the 1980s, and larger epidemics persist here every 3–5 years.

Why has *Bordetella pertussis* continued to thrive? The short answer is simple: evolution. Viruses and bacteria that are pathogens (disease-causing) can evolve to cope with the medicines—that’s why certain antibiotics are no longer effective in treating infections.

“Viral, bacterial and protozoan pathogens are continually evolving,” said Dr. Jeffery F. Miller, chair of the Department of Microbiology, Immunology, & Molecular Genetics. “The question is *how* do pathogens evolve? How do animal pathogens acquire the ability to infect humans? And what are the molecular changes associated with these evolutionary adaptations?”

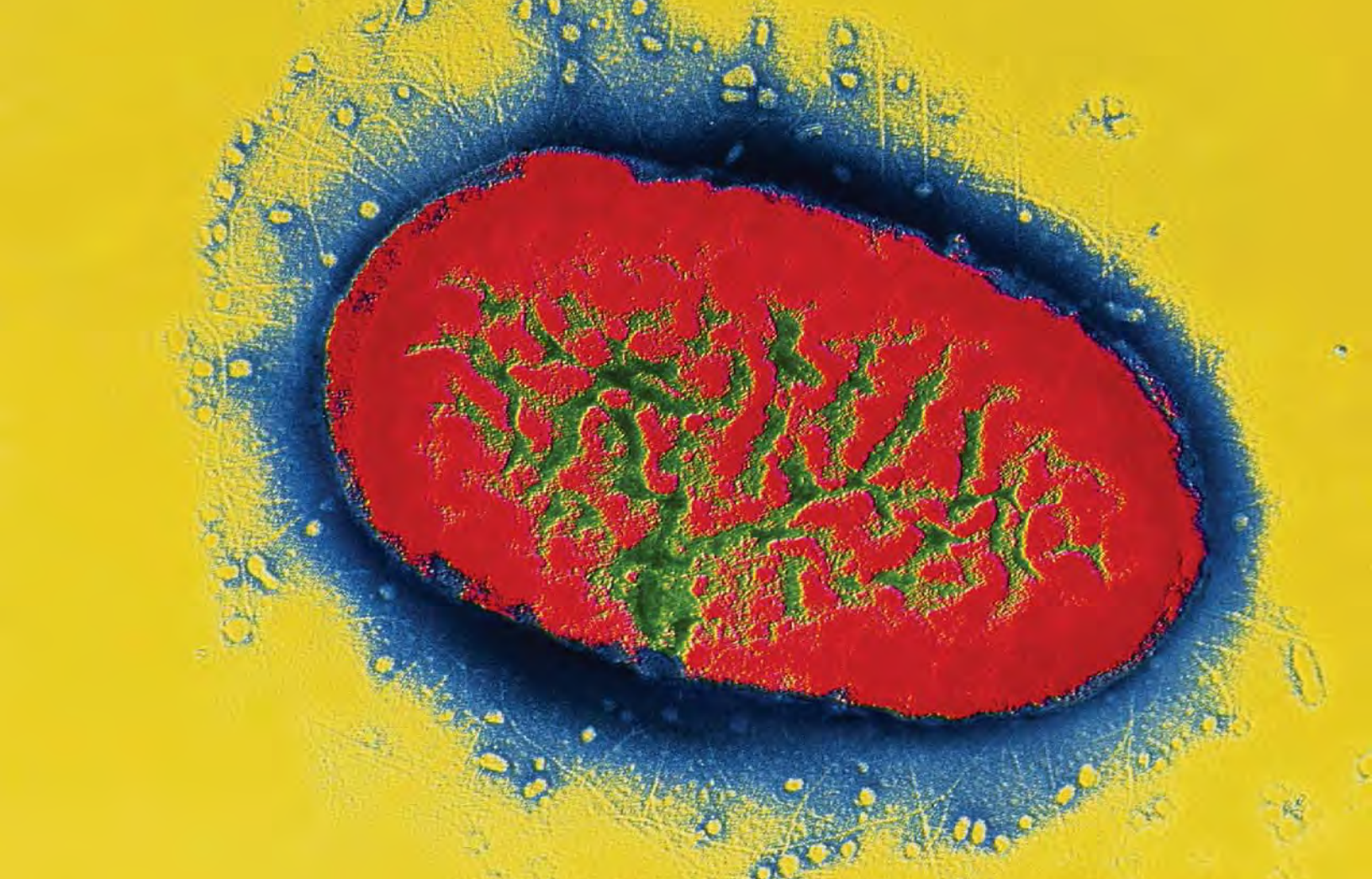
To answer these questions, Miller has assembled a lab filled with talented graduate and post-doctoral students from a variety of complementary disciplines, looking for new approaches to challenging bacterial infections, including *Bordetella pertussis*. In his group are scientists with expertise in bacterial genetics, cell biology, infectious diseases, genomics and bioinformatics, gastroenterology, neonatology, structural biology and other areas.

Miller believes that the study of “microbial pathogenesis”—the development of diseases caused by microorganisms—is inherently multi-disciplinary. By bringing together researchers with different talents, interests and strengths, he sets up a dynamic intellectual environment that has led to some impressive results.

Miller’s first graduate student, Brian Akerley, determined a way to essentially rewire the control circuits that *Bordetella pertussis* uses to orchestrate its interactions with the hosts it infects. The experiments established a paradigm that many investigators have employed in efforts to understand other dangerous pathogens.

Another graduate student, Ming Liu, wanted to study how *Bordetella* regulates its disease-causing abilities. He knew that certain viruses could infect *Bordetella* and genetically manipulate the bacteria. Liu discovered that the new virus that could match a variety of receptors on the surface of bacteria cells.

“Liu’s observations and experiments led to the discovery of an entirely new class of genetic elements,” said Miller. After a residency and fellowships elsewhere,



The Bordetella pertussis bacteria, which causes whooping cough. Studying these bacteria and others, said microbiologist Jeffery F. Miller, “we end up learning a lot about how our own cells and immune system work.”

Liu returned to UCLA as a MD and independent investigator who collaborates with Miller’s group on the research of host-pathogen interactions.

While Miller praises his students and downplays his own role in their discoveries, one cannot help but notice that all of these important discoveries emerge from Miller’s own lab. He creates a laboratory environment conducive to such discoveries while simultaneously working as chair of his department at UCLA, co-directing a center on biodefense and emerging infectious diseases, participating on a national level with the National Institutes of Health (NIH), and serving as chair of the general meeting of the American Society for Microbiology.

In describing both the multidisciplinary nature of his laboratory and his many professional activities, Miller likes to say that focus is not his forte. But on another level, Miller has spent his whole life focused on understanding microbes. As a child, he would peer into the microscope in the office of his pediatrician father and try to identify the bacteria taken from the throat cultures of children with sore throats.

In a post-doctoral fellowship, Miller studied how bacterial pathogens genetically regulate their own virulence.

“It was a wonderful time,” recalled Miller. “I was working with a very talented group of post-docs and graduate students who were all investigating different pathogens—gonorrhea, salmonella, plague, whooping cough and more.”

Miller focused on *Bordetella pertussis*. He determined how to genetically manipulate the bacterium, brought his system to UCLA in 1990, and started his own lab where he continues his quest to understand interactions between pathogen and host.

“Pathogens have evolved to manipulate us,” says Miller. “By studying them, we end up learning a lot about how our own cells and immune system work.”

As Miller’s group strives for ever-greater detail in their understanding of bacteria, the work could lead to better vaccines, diagnostic tools and medicines to treat infections. Recently, two of his students, Bob Medhekar and Ruchi Shrivastava, figured out a way to prevent *Bordetella pertussis* from connecting with respiratory cells in order to inject their toxins. Their approach protected cells in tissue culture and in mice; next will come the search for improved human vaccines.

Miller says that improving technology will soon make it easier and less expensive to conduct pathogen research.

“The first draft of the human genome required billions of dollars and a decade of work,” said Miller. “By 2014, the National Institutes of Health hope to sequence a human genome for \$1,000. When that happens, the scalable cost of sequencing the genome of a bacterial pathogen will cost about a dollar. Everything will change. We will be able to understand the evolutionary dynamics of pathogens in exquisite detail. That’s what the future has in store.” 

THE CAPSTONE

The latest UCLA initiative
to enrich the student experience
focuses on encouraging
seniors to create
a “capstone experience”
to complete their
undergraduate studies.

By Dan Gordon

Laurel Haran didn't expect to be delving this deeply into her field of interest—not as an undergraduate, anyway.

A senior majoring in music history, Haran has embarked on a major research project exploring the influence that the 16th- and 17th-century Italian courtesan had on her male contemporaries. Haran plans to focus on Barbara Strozzi, a still-influential Baroque singer and composer who, like other courtesans of the day, was able to learn and write music only if she was willing to become sexually involved with powerful men.

Haran's work, a “capstone experience” for her undergraduate career under the guidance of her faculty advisor, Susan McClary, will culminate in a lecture recital—part discussion of her findings, part performance of the music she will be exploring in her studies.

A day after she had settled on the ambitious project, Haran knew she had her work cut out for her but could hardly wait to get started.

“This gives me an opportunity as an undergraduate to get a sense of what a dissertation is going to feel like,” Haran said.

As UCLA continues to create new programs to enrich the undergraduate experience by challenging students to achieve at the highest



Raymond Knapp, a professor and chair of musicology, and chair of the work group that planned the capstone model for UCLA: “The idea is to bring together the strands of a student’s education, allowing the student to take more ownership of a body of knowledge and do something with it.”

levels, the latest in a series of initiatives focuses on making capstone experiences available to more students.

Faculty-guided capstones enable seniors to pose a question of importance to them and demonstrate their ability to master it, drawing on the knowledge and critical thinking skills they have gained during their time at UCLA. The capstone can take many forms—a seminar paper, independent research project, team project, internship, or something more creative, such as Haran's lecture recital. Some students can even go so far as to create their own major or minor.

“The capstone experience is a way to make the undergraduate experience more meaningful,” said Judith L. Smith, dean and vice provost for undergraduate education.

“The capstone is something usually associated with a small liberal arts school, but if we are attracting the best students in California, we should also be providing them with these same kinds of opportunities.” Smith appointed a faculty workgroup to develop a capstone model that could be implemented at UCLA. The group has been defining the capstone and taking inventory of departments and schools on campus that have already adopted the concept.

The capstone is in sync with many of the larger goals held by UCLA and the University of California Office

“After three years of being trained to think critically and have a scholar’s mind as an undergraduate, you get to use those tools to study something that you’re passionate about, and then express your results.”



Senior Laurel Haran: “This gives me an opportunity as an undergraduate,” Haran said of the capstone experience, “to get a sense of what a dissertation is going to feel like.”

of the President, which have sought to increase inquiry-based learning for undergraduates, enhance their interactions with faculty and more closely link undergraduate education with the research mission of the university.

“The idea is to bring together the strands of a student’s education, allowing the student to take more ownership of a body of knowledge and do something with it,” said Raymond Knapp, professor and chair of musicology, who chaired the faculty workgroup.

In surveying the existing capstone experiences at UCLA, Knapp’s group found a broad spectrum, from year-long sequences of courses or tutorials to a single seminar; and from honors theses to comprehensive seminar projects or internship papers. Approximately 40 campus programs have been identified that offer or require capstones. Nearly 20 of the departments in the College thus far have capstone-like experiences, including two of the largest departments, English and history.

Once Knapp’s group has finished certifying departments on campus that currently have what it defines as a capstone requirement, the group will begin working with departments interested in adopting the model. The simplest approach, Knapp notes, would be an extended research paper connected with a single course. Where possible, though, programs will be encouraged to allow their students to think more outside the box.

In defining how the capstone might look at a large research university such as UCLA, the faculty workgroup stipulated that it should serve as a project-based culmination to a curriculum, bringing key elements together in a coherent way. Among the hallmarks of the experience:

- ◆ The student engages in a creative, inquiry-based learning experience that deepens the student’s knowledge and integration of the discipline;
- ◆ The project may be completed by a group of peers, provided that each student’s contribution is significant, identifiable, and graded;
- ◆ The project ends in a tangible product that can be archived

for at least three years by the department or program;

- ◆ The project is part of an upper-division course of at least four units, usually within the curriculum established for the student’s major or minor; and,
- ◆ Opportunities are provided for capstones to be shared within a broader community, such as presenting a paper at a student or professional meeting.

The challenges involved in more widely implementing capstones are significant. They include the sense that faculty lack the resources or aren’t able to spend as much time with undergraduates as would be required—or that the undergraduates themselves don’t necessarily want to be pushed. While there is no plan to institute a capstone requirement, Smith said the goal is to change the culture on campus such that all students who want a meaningful capstone experience can have one as part of their major or minor. That would make UCLA the first major research university to successfully integrate capstones for its undergraduates.

Smith points out that seniors who have completed a capstone-like project have expressed high levels of satisfaction in surveys.

“Students are extremely supportive of this process, because it gives them the opportunity to have an experience you don’t typically get at a research university,” he said.

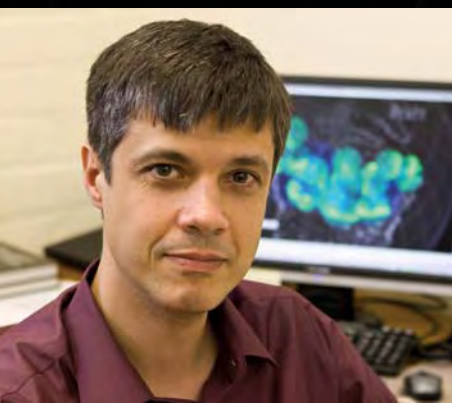
Bo kyung Blenda Im is sold on the concept. A music history and communications major, Im worked with the music history department last year on an ethnographic study of contemporary Christian music. She acquired data through interviews with church members and conducted background research using methods she had learned in musicology.

“It really was a capstone to my undergraduate experience,” says Im, who graduated in June and is now applying to graduate schools. “After three years of being trained to think critically and have a scholar’s mind as an undergraduate, you get to use those tools to study something that you’re passionate about, and then express your results.” 

The Mystery of the Magnificent Light

What causes the northern lights to suddenly brighten and dance in spectacular bursts of colorful light and movement?

When prospectors in 1890s Alaska looked into the northern sky and saw the aurora borealis—more commonly known as the northern lights—many sourdoughs believed the shimmering, ghostly glow was the mother lode of all gold. Centuries earlier, Latvian folklore portrayed the aurora as the fighting souls of dead warriors, while Scandinavian legend held that the lights were reflections in the sky of swarms of herring in the ocean below.



Vassilis Angelopoulos

Ten centuries of folklore described the luminous beauty of the aurora borealis as it shimmers and swirls through the skies. But no legend could explain the physical cause of the northern lights—a mystery that has confounded scholars from Galileo to Benjamin Franklin to 21st-century space scientists.

Now, UCLA researchers and colleagues have identified the mechanism that triggers substorms in space; wreaks havoc on satellites, power grids, and communications; and leads to the explosive release of energy that causes the spectacular brightening of the aurora borealis.

For 30 years, two competing theories have attempted to

explain the onset of these substorms, which are energy releases in the Earth's magnetosphere. One theory proposes that the trigger happens relatively close to Earth, about one-sixth of the distance to the moon's orbit, with large currents building up in the space environment, which is composed of charged ions and electrons, or "plasma," that are suddenly released.

A second theory suggests that the trigger is farther from Earth—about one-third of the distance to the moon's orbit—and involves a different process: when two magnetic field lines come close together due to the storage of energy from the sun, a critical limit is reached and the magnetic field lines reconnect. The "reconnection" causes magnetic energy to be transformed into kinetic energy and heat. Energy is released, and the plasma is accelerated, producing accelerated electrons.

Which theory is right?

"Our data show clearly and for the first time that magnetic reconnection is the trigger," said Vassilis Angelopoulos, a UCLA professor of earth and space sciences. "Reconnection results in a slingshot acceleration of waves and plasma along magnetic field lines, lighting up the aurora underneath even before the near-Earth space has had a chance to respond. We are providing the evidence that this is happening."

Previous studies of the Earth's space weather have been unable to pinpoint the origin of substorms, which are large magnetic disturbances. Ionized gas emitted from the sun's surface speeds up as it moves away from the sun, reaching speeds of one million miles per hour and interacting with the Earth's upper atmosphere, which is also ionized.



Show

“We are not only putting to rest age-old questions about the origin of the spectacular auroral eruptions, but we will also be able to provide statistics on substorm evolution and model its effects on space weather.”

“We need to understand this environment and eventually be able to predict when these large energy releases will happen so astronauts can go inside their spacecraft and we can turn off critical systems on satellites so they will not be damaged,” said Angelopoulos, principal investigator of the NASA-funded space mission known as THEMIS (Time History of Events and Macroscale Interactions during Substorms), a constellation of satellites and ground stations that study energy releases from the Earth’s magnetosphere.

“This has been exceedingly difficult in the past because previous missions, which measured the plasma at one location, were unable to determine the origin of the large space storms,” said Angelopoulos. “To resolve this question properly requires correlations and signal-timing at multiple locations. This is precisely what was missing until now.”

At high northern latitudes in the northern U.S. and Canada, the shimmering bands of the aurora borealis stretch across the sky from the east to the west. During the geomagnetically disturbed periods known as substorms, these bands of light brighten. These multicolored light shows are generated when showers of high-speed electrons descend along magnetic field lines to strike the Earth’s upper atmosphere.

The THEMIS mission is establishing for the first time when and where substorms begin, determining how the individual components of substorms interact, and discovering how substorms power the aurora borealis.

Said Joseph Rudnick, acting dean of physical sciences, “The research by Professor Angelopoulos and his team is shap-

ing our understanding of a phenomenon that has delighted and fascinated people for time immemorial. UCLA has a long and distinguished history in the investigation of fundamental processes in space physics, and Professor Angelopoulos is a central figure in the preservation of that tradition.”

THEMIS mission co-investigators include: Christopher T. Russell, UCLA professor of geophysics and space physics and a co-author of the findings; Margaret G. Kivelson, professor of space physics in the UCLA Department of Earth and Space Sciences; Krishan Khurana, a researcher in the UCLA Department of Earth and Space Sciences; and scientists from UC Berkeley, Germany, Austria, France, Russia, Japan, Canada and the U.S. THEMIS is managed by the Explorers Program Office at Goddard Space Flight Center in Maryland.

Launched in February 2007, THEMIS has five satellites—with electric, magnetic, ion and electron detectors—in orbits around the Earth, along with an array of 20 ground observatories with automated, all-sky cameras in the northern U.S. and Canada that catch substorms as they happen.

As the satellites measure the magnetic and electric fields of the plasma above the Earth’s atmosphere once every four days, the ground-based observatories are imaging the auroral lights and the electrical currents from space that generate them.

“Armed with this knowledge,” said Angelopoulos, “we are not only putting to rest age-old questions about the origin of the spectacular auroral eruptions, but we will also be able to provide statistics on substorm evolution and model its effects on space weather.” 

Cutting to the Core of Prejudice

Psychologist Phillip Atiba Goff takes a 21st-century approach to exploring the broad social issues that can spur racial prejudice and inequality.

By Robin Heffler

As an African-American growing up in suburban Philadelphia, Phillip Atiba Goff had many friends who were white, and race wasn't a problem for most of his youth. But that changed unexpectedly in high school. When Goff had to miss sessions of his Advanced Placement English course because of a serious illness, his teacher reacted with displays of racial bigotry.

"I always thought racism happened in other places, perpetrated by people I never met," said the UCLA assistant professor of social psychology. "I thought it happened in the South, and that racists were dumb. The instructor who gave me a hard time was a white guy who was smart, and it turned out he didn't like me or the other black students in the class. I not only saw him being prejudiced, I had confrontations with him."

Equally disturbing was the reaction of his white classmates.

"I was hurt and felt betrayed when they weren't able to see what I saw in the confrontations," Goff said. "So, the racism I experienced didn't look the way it was described in books—snarling, uneducated, hateful people. It looked like modern, well-dressed, well-educated, intellectual people whom I thought would always be on my side."

Thoughts vs. Reality of Prejudice

The experience fueled Goff's interest in entering academia and exploring issues of racism and other identity-related manifestations of prejudice. A Mellon Minority Fellow as an undergraduate, and later a Ford Foundation Predoctoral Fellow, he is currently compiling his research findings while a visiting scholar at the Russell Sage Foundation.

"I've been most interested in studying the disconnect between the way we think about prejudice in relation to not only race, but also gender, class, and sexual orientation, and the way prejudices actually function to produce inequality and injustice," Goff said.

Rather than focusing on the racial attitudes of individuals, as studies of prejudice often do, Goff examines the role of environmental factors. His investigations continue the research he pursued on the faculty at Pennsylvania



Phillip Atiba Goff: "Behavior might be attributed to racial prejudice, or it might be because someone is afraid of being seen as prejudiced, and the fear ends up inadvertently triggering that very behavior."

State University for the last four years. Some of his studies are connected to his work as a consultant to police departments on equity issues.

“Phillip Atiba Goff is an outstanding young scholar who is already highly-respected for exploring issues that are important to better understanding the perceptions and prejudices that influence societal relations,” said Emil Reisler, dean of life sciences.

Said Goff, “Most people look at shootings or the videotaped beating of Rodney King and assume that if police are racist, it must be because individual police officers are racially biased.” But he has found that if more force is used on African-Americans, individual bias may not be the principal factor, and certainly not the only factor.

“For example, a police officer who feels a need to demonstrate his masculinity may be more likely to use force in general, but particularly against people who threaten his self concept as a masculine person. If African-Americans are stereotyped as being hyper-masculine, then they will be more threatening to him.”

Helping Police Departments Reduce Bias

Currently, Goff is consulting with the Denver Police Department, which has given him full access to conduct research in order to help recruit officers who are likely to engage in unbiased policing, and also to help the department be race and gender proportional.

“When something happens—such as a female recruit has dropped out and there are concerns that she might have felt the department wasn’t a welcoming environment—they would ask me to check the underlying issues to make sure it doesn’t happen again,” he said. “I also look at police-community engagements that increase trust on both sides.”

Goff acknowledged the research contributions of Matthew Christian Jackson, a UCLA graduate student who is a Cota Robles Fellow, whom he praised for his “dedication, technological savvy, and humanistic understanding.” Jackson coordinates data collection at the Denver Police Department’s internal affairs division.

“It has been so exciting to be the point person for the research team in Dr. Goff’s absence,” Jackson said. “I’ve also had the opportunity to help build relationships with police officers who may have initially assumed that our intention was to make them look bad. We were quickly able to show that is not the case, and have been able to build a partnership to answer important research questions.”

Impact of Dehumanizing Depictions

Jackson has taken part in other types of research Goff conducts. He co-wrote papers on the persistence of mental



Goff consults with the Denver Police Department (shown here deployed during the 2008 Democratic National Convention), to help the department be race and gender proportional, and to identify unbiased recruits.

associations with dehumanizing historical depictions of blacks as ape-like and the impact of those associations on the criminal justice system, and on how race and gender intersect in people’s perceptions of others.

In the intersection research, Goff showed predominantly white undergraduates photos and videos of black women. He found that “many students thought the women were men when they were moving in the video. It showed that blackness has so strong an association with masculinity that it interferes with their ability to see black women as women.”

Another strong research interest for Goff is dominant group identity. Examples he cited are a Caucasian who usually is comfortable in his own skin acting uncomfortable around African-Americans, or one who is usually a patient person but is quick to anger or blame an African-American colleague.

“This behavior might be attributed to racial prejudice, or it might be because someone is afraid of being *seen* as prejudiced, and the fear ends up inadvertently triggering that very behavior.”

Goff also closely followed the 2008 Presidential campaign, and was a frequent commentator in U.S. and international media on the presence of race and gender issues in the election.

“I am glad to see that issues of racial and gender inequality have been in the foreground,” he said. “I hope we can have substantial conversations about them, because we need them.”

“I’ve been most interested in studying the disconnect between the way we think about prejudice in relation to not only race but also gender, class, and sexual orientation, and the way prejudices actually function to produce inequality and injustice.”

The McNair Research Fellows Program is fulfilling a national priority by increasing the number of Ph.D.s earned by UCLA students from underrepresented segments of society.

By Dan Gordon

Having grown up in a low-income community in Fresno as a member of a family in which no one had previously attended college, Rosa Manzo knows she beat the odds by making it to UCLA. Ever since, Manzo has made it a priority to be a mentor to the high school students following in her footsteps—showing them that they too can achieve the dream of a university education and degree.

When Manzo learned early in her UCLA career about the Ronald E. McNair Research Scholars Program, she found an energized sense of purpose. Under the guidance of faculty and graduate-student advisors from UCLA's Graduate School of Education and Information Studies, she has spent much of the

last year working on a research project focusing on how rural Latinas' perspectives of their teachers' expectations influence their post-high school academic and occupational plans.

The guidance Manzo has received from the McNair program has been invaluable, not just in facilitating the project itself, but in helping her to involve the community in the study and the findings.

Manzo, a senior psychology major and education minor, spent the summer after her freshman year counseling high school students on their studies and their college applications. At the end of her sophomore year, she and two friends established a mentoring program, Westside Initiative for Leadership;

An ENERGIZED



last summer, the program received funding from the Jimmy and Rosalynn Carter Partnership Foundation and Harvard.

“Bringing my work back to the community is a priority, and that’s one of the reasons I continue to mentor kids at my high school,” Manzo said.

The experience convinced her to pursue a career in academia within the field of education. With more guidance from the McNair program, Manzo has been applying to graduate programs in education with the intention of getting her Ph.D.

The Ronald E. McNair Scholars Program was established nationally in 1989, and there are now more than 150 such programs at universities across the country, federally funded by the U.S. Department of Education. Named after the astronaut who was among those who died aboard the Space Shuttle Challenger in 1986, the program aims to diversify the academic ranks by increasing the number of Ph.D.s attained by students from underrepresented segments of society.

At UCLA, the McNair program maintains a group of 26 juniors and seniors each year, chosen from groups that have been historically underrepresented in higher education. UCLA McNair Research Scholars are selected from disciplines in the social sciences and humanities.

“It’s critical for UCLA to take a leadership role in diversifying the ranks of American faculty,” said Judith L. Smith, dean

UCLA undergraduate Rosa Manzo: “Bringing my work back to the community is a priority.”



La'Tonya Rease Miles, with student: "Through my research, the guidance of the graduate mentors, the McNair staff, and my faculty mentors," Rease Miles said, "I have become a better mentor."

"It's critical for UCLA to take a leadership role in diversifying the ranks of American faculty. We have a large and growing population of students in the social sciences and humanities who are from underrepresented communities; they are good candidates to be the professors of the future."

Sense of Purpose

and vice provost for undergraduate education. "We have a large and growing population of students in the social sciences and humanities who are from underrepresented communities; they are good candidates to be the professors of the future."

McNair Scholars complete a rigorous two-year academic program under the supervision of the program's leadership and at least two graduate mentors. In their junior year, they attend a weekly seminar about race theory, the experiences of marginalized communities in academia, and the importance of using scholarship as a means to achieve social justice. They also learn about research methods and begin to plan their own research project, with guidance from faculty and graduate mentors.

In the summer after their junior year, McNair Scholars participate in the Summer Research Institute, an intensive six-week residential program that includes workshops and seminars on academic career opportunities, standardized test preparation, writing and research skills, writing a statement of purpose, obtaining letters of recommendation, and completing graduate school applications. Students begin their research projects and present findings at a research symposium.

Since the UCLA program was established in 2003, 84 percent of McNair alumni have gone on to graduate school, and 48 percent are in Ph.D. programs, said La'Tonya Rease Miles, the program's director. Without the McNair program, Rease Miles noted, most of the students would not have considered a Ph.D.

"This program helps them to become more confident and more competitive in the application process," she said.

Rease Miles has firsthand experience with the value of such a program. As a college student at Howard University in 1991, she learned about a McNair program offered to Howard students at American University; it was that experience that convinced her to pursue a Ph.D. in English at UCLA.

"The McNair program changed my life," said Rease Miles. "I feel honored to be able to give back in a concrete way."

By following a cohort model, in which 10–15 students are admitted at the same time and go through the program together, McNair fosters close relationships among the students that tend to endure through graduate school and beyond.

"It's very helpful to have those relationships," said Rease Miles, "because if they are struggling or feeling lonely as graduate students, they can stay in touch with each other and provide mutual support."

Every one of UCLA's McNair alumni have persisted through their graduate education, Rease Miles noted. Beyond that, many have sought roles in which they could help new generations of undergraduates face their challenges.

As Manzo applies to graduate schools with confidence in her future place in the academia, she also feels better equipped to pursue her goal of making higher education more accessible to students in under-resourced communities.

"Through my research, the guidance of the graduate mentors, the McNair staff, and my faculty mentors," she said, "I have become a better mentor." 

Viewing Independent Films through the Lens of an Anthropologist

Anthropologist Sherry Ortner explores the scope of public culture—whether among Sherpas of Nepal, high school classmates in New Jersey, or producers in the independent film movement.

By Robin Heffler

It's 8,000 miles from the remote mountains of Nepal to the studios of Hollywood, and Sherry Ortner has bridged that distance—both geographically and culturally.

Ortner, a renowned anthropologist widely known for her work in social, cultural, and feminist theory, has spent many years studying the religion, politics, and mountaineering practices of Nepal's Sherpa people. Today, she is working on a book about the relationship between independent films, Hollywood studio movies, and American culture.

How did she make that transition?

A Shift to Examine American Society

"I had written three books on the Sherpas and felt it was time to start using my skills to think about American society," said Ortner, who received the J.I. Staley prize for the best anthropology book of 2004, *Life and Death on Mt. Everest*. "I was interested in the way social class operates in America without people talking about it."

After attending her 30-year reunion from Weequahic High School in Newark, Ortner decided her first venture into the anthropological aspects of America would be studying her former classmates.

"The great thing was that they would talk to me," said Ortner. "I traveled all over the country to study their enormous upward mobility, from the post-World War II middle class to the professional/managerial class." The research became a 2003 book, *New Jersey Dreaming: Capital, Culture, and the Class of '58*.

Arriving at UCLA in 2004, Ortner—who received a Guggenheim Fellowship in 1982, was awarded a MacArthur Fellowship

in 1990, and was elected a fellow of the American Academy of Arts and Sciences in 1992—turned her attention to studying Hollywood.

"I was always interested in what anthropologists have called 'public culture,' the contexts in which important cultural norms and values are represented—or



One aspect of Sherry Ortner's current research focuses on exploring the independent film movement from an anthropologist's perspective, including the work of filmmakers such as Jonathan Dayton (left center) and Valerie Faris (second from right), directors of *Little Miss Sunshine*; and Steven Soderbergh (above), director and producer of many independent and mainstream films, including *Sex, Lies, and Videotape*.



contested—in dramatic ways in a public arena,” said Ortner. “Among the Sherpas, I studied rituals, which is one of those kinds of contexts. In the U.S. it seemed to me that, in a different way, movies are among the most important sites in which this happens.”

Initially, Ortner planned to conduct follow-up research to *Hollywood: The Dream Factory*, the landmark anthropological study of the Hollywood studio system in the 1940s written by Hortense Powdermaker. But she spent a year without success trying to get the type of access to studio insiders she needed to conduct relevant research.

In the process, however, Ortner recognized that while the major studio system has changed dramatically in the 60 years since Powdermaker’s study, the large Hollywood filmmaking companies are still interested primarily in producing entertainment for the masses; creating new artistic directions is not the industry’s strong suit. For trendsetting in moviemaking, Ortner realized, the independent film scene was the area to study.

“The emergence of the independent film movement, which started in the late 1980s, is what’s been new in the industry,” Ortner said.

Understanding the Creative Team of Independent Filmmaking

So, through contacts from the UCLA School of Theater, Film, and Television, Ortner connected with key people working on independent films.

“I wanted to understand how independent filmmakers operate and think differently from the mainstream Hollywood mindset,” she said. “I wanted to know about the ‘ideas people.’”

Of special interest to Ortner were producers of independent films.

“Many of the producers are highly educated, some are Ph.D.s and lawyers, and they’re very articulate, thoughtful, and artistically interesting,” she said. “With independent films, the producers are more a part of the creative team than in mainstream Hollywood. The independent producers are more likely to share a vision with the director, or bring the director into an idea that they’ve already been developing.”

Examining the independent film industry through an anthropologist’s lens, Ortner said, requires tools beyond “participant observation” that is central to traditional anthropology.

“I needed a much broader range of methods than I did when I went to a village in Nepal. Besides observing productions, it required extensive interviewing, tracking film industry publications, and viewing hundreds of films.”

Using New Anthropological Tools

Ortner interviewed some 60 people, including producers, directors, and writers, and spent time on the sets for three movies. Independent films she examined ranged from hits of the 1990s like *Sex, Lies, and Videotape* and *Pulp Fiction* to the more recent *Little Miss Sunshine* and *Little Children*.

She also went to many screenings and showcases, including the L.A. Film Festival and Sundance. She also attended Slamdance, which she described as featuring “weirder” films that have been rejected by Sundance.



“I wanted to understand how independent filmmakers operate and think differently from the mainstream Hollywood mindset. I wanted to know about the ‘ideas people.’”

Sherry Ortner: “I was interested in the way social class operates in America without people talking about it.”

The result of her research will be a book that she is in the process of writing. Among those helping her with this undertaking was Adam Fish, a graduate student in anthropology who has a master’s degree in cinema and media studies.

Fish noted that the study of media and media production in anthropology is a rapidly-growing area. It also dovetails with his own research interests, which makes the work with Ortner particularly valuable to him.

“I’ve learned a lot from watching one of the most distinguished ethnographers adapt methodologies for a project on Hollywood,” Fish said. “I have been able to step off the trail she has blazed in methodology and new subject matter for anthropologists. In my dissertation, I’m now looking at a culture of citizen journalists working at the convergence of new media and television.”

Besides working with graduate students on research, Ortner also enjoys the learning that takes place in the classroom. She teaches an upper division undergraduate course in anthropology and social and cultural theory, and an advanced graduate course in anthropology and media theory.

“Sherry Ortner’s work in the classroom and in the field spans an extraordinary range of anthropological issues—the media, feminist theory, and global capitalism, among many subjects,” said Reynaldo F. Macías, acting dean of social sciences. “Now she is exploring new issues, including one of the most dynamic aspects of popular culture: the independent filmmaker.” 

A Team Strategy to Model Global

Scientists in the College are anchoring a worldwide task force of scholars that is exploring the interplay of weather phenomena that lead to El Niño, global warming, and other extreme climate conditions.

By Stuart Wolpert

“The good news,” said Nobel Peace Laureate Al Gore about responding to global environmental challenges, “is that we know what to do. We have everything we need now to respond.”

UCLA is playing a major role in that response, confronting the complex issues of environmental change through leadership of a global program of 150 scientists from 40 universities in nine countries who participate in research to gain new understanding of the Earth’s climate and the interconnected systems of oceans, the atmosphere and land.

The program, called VOCALS (the VAMOS Ocean-Cloud-Atmosphere-Land Study), explores the southeastern Pacific, the marine area off South America’s west coast that is critical to El Niño development. Here the interplay among low clouds, strong low-level winds, coastal ocean currents, surfacing of deep water, the Andes Mountains, aerosols and other factors shape regional climate and affect global weather in ways that are poorly understood.

“Our research should produce a better understanding of the southeast Pacific Ocean system and improve our global computer climate models, which would lead to more confidence in climate forecasts, including predictions about global warming,” said C. Roberto Mechoso, a UCLA professor of atmospheric and oceanic sciences and chair of VOCALS.

“Models currently used for climate change studies have systematic errors concerning the southeastern Pacific Ocean,” said Mechoso. “We hope our research will get rid of, or at least greatly decrease, these uncertainties.”

The “El Niño-Southern Oscillation,” better known simply as El Niño, is a warming of the ocean current off the South American coast that is associated with weather extremes in locations around the world, including such contrasting outcomes as flooding in California and scorching drought in Tanzania. These devastating effects, and the irregularity of the phenomenon, makes predicting El Niño of prime interest to atmospheric scientists.

Although global warming is not directly responsible for El Niños, recent studies suggest that higher ocean surface temperatures can enhance the El Niño phenomenon. Whether El Niño occurrence changes with climate change is a major research question.

C. Roberto Mechoso



Climate

Variations in the southeast Pacific climate affect rainfall and temperature worldwide, directly or indirectly, Mechoso believes, but how the system works is not well understood and therefore cannot be modeled or predicted accurately.

“Despite the great importance of the ocean-cloud-atmosphere-land system to the Earth’s climate, this system in the southeast Pacific has been sparsely observed,” Mechoso said. “With VOCALS, that is changing drastically.”

Will VOCALS increase our understanding of how much global warming will occur, and over what period of time?

“Absolutely,” said Mechoso, an expert on El Niño who studies the coasts of Ecuador, Peru and Chile. “We may also produce a better understanding of the dynamics of El Niño. The relation between the eastern Pacific and El Niño is strong. El Niño develops in the eastern Pacific, so when the eastern Pacific is not well represented in climate models, El Niño is not well represented in the models either.”

VOCALS has a scientific modeling program, headed by Mechoso, which seeks to improve model simulations of key climate processes, and an experimental field component, headed by Robert Wood, assistant professor of atmospheric sciences at the University of Washington. This intensive experimental field program is measuring—using five aircraft and two research ships containing scientific instruments—how thick and deep the clouds are, where and why they open, and a variety of other elements to answer key scientific questions related to the climate system of the southeast Pacific region.

“There is tremendous analysis and modeling work that will go along with the field project,” Mechoso said.

Other UCLA faculty participating in the research along with Mechoso include James C. McWilliams, UCLA’s Louis B. Slichter Professor of Earth Sciences; Alex Hall, assistant professor of atmospheric and oceanic sciences; and Bjorn Stevens, professor of atmospheric and oceanic sciences.



“Despite the great importance of the ocean-cloud-atmosphere-land system to the Earth’s climate, this system in the southeast Pacific has been sparsely observed. That will change drastically.”

Mechoso’s own research project within VOCALS, in collaboration with the National Center for Environmental Prediction, aims to improve the model that is used by the United States for seasonal climate prediction. The “V” in VOCALS represents an acronym: VAMOS, or Variability of the American Monsoon Systems. Mechoso was the first chair of this panel of the World Climate Research Program, which identified the eastern Pacific as an area where improvement in climate models is essential.

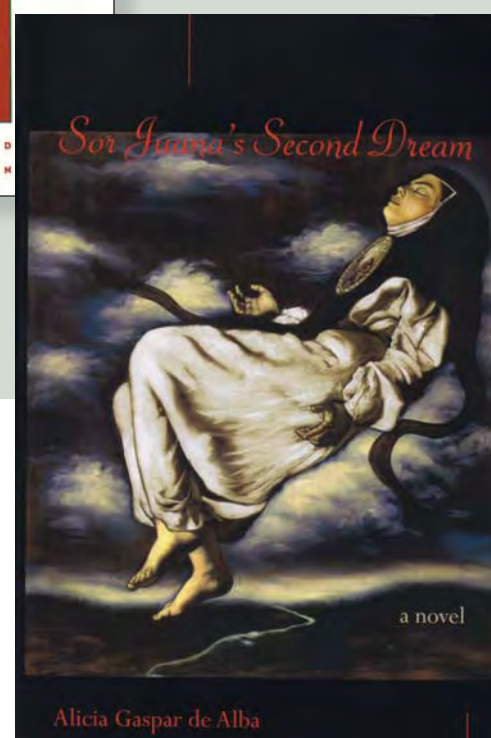
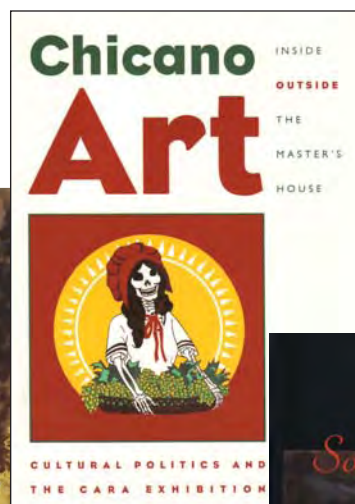
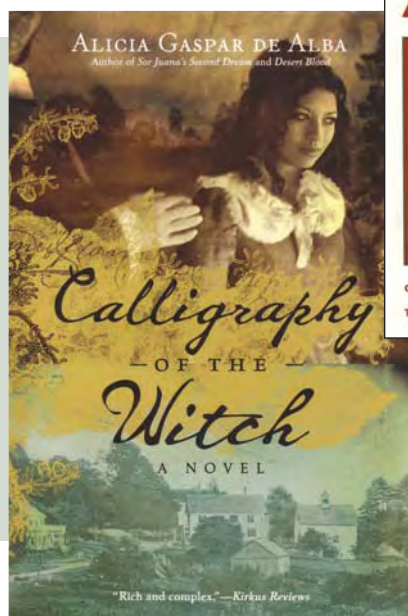
The scientists in VOCALS are also trying to learn more about the role of aerosol in cloud behavior and climate. Particles in the atmosphere can directly influence radiation from the sun but can also have indirect influences on solar radiation by affecting cloud formation. The United Nations’ Intergovernmental Panel on Climate Change (which shared the 2007 Nobel Peace Prize with former Vice President Al Gore) has emphasized the need to reduce the overall uncertainty in the calculation of climate-forcing by aerosol.

“The role of aerosol in climate is very complex and we are working hard to capture aerosol effects in climate models,” Mechoso said.

VOCALS is supported primarily by federal funding from the National Science Foundation and the National Atmospheric and Oceanic Administrations. Additional support comes from the U.S. Department of Energy and the Office of Naval Research, as well as Chile, Peru and the U.K. Meteorological Office, which provided a research aircraft.

“I believe we have the right questions and the right hypotheses to guide our work,” Mechoso said. “We will learn how the southeastern Pacific Ocean system works and find out ways to improve the performance of our climate models.” 

Alicia Gaspar de Alba, winner of the 2008 Gold Shield Faculty Prize, brings a life of rich experiences at the Mexico-U.S. border into her teaching and research.



A border girl, through and through.”

That’s how Alicia Gaspar de Alba, professor and chair of the UCLA César E. Chávez Department of Chicana & Chicano Studies, describes herself. And it’s just one of many aspects of her life that have provided her with countless rich experiences that she uses in her teaching, research, and writing in a distinctive range of field issues—from poetry to historical novels to national conferences on unsolved murders.

That, in turn, has won Gaspar de Alba the prestigious 2008 Faculty Prize from Gold Shield Alumnae of UCLA—a \$30,000 award given annually to a mid-career faculty member who has achieved excellence in teaching, research and community service.

“Alicia Gaspar de Alba’s undergraduate teaching career is exemplary, and her unique style of writing caught our eye,” said Harriette Williams, chair of Gold Shield’s 2008 faculty prize committee. “She wrote about poor women in Mexico and brought that experience to campus by organizing a conference unlike anything UCLA had seen before. It shook some people up.”

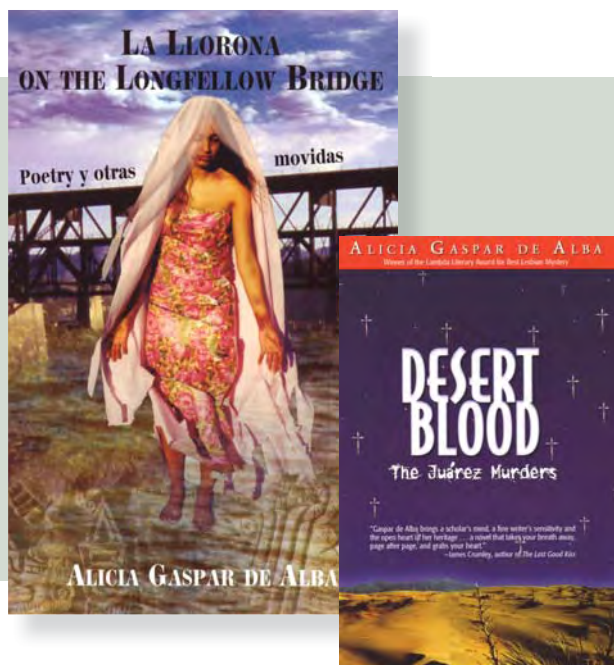
Gaspar de Alba’s 2003 conference, “The Maquiladora Murders, or, Who is Killing the Women of Juárez,” focused attention on the unsolved murders of more than 300 women

“She taught me what it meant to do quality research—how to combine passion with substance, academic rhetoric with fearless personality.”

in Ciudad Juárez, Mexico. It also prompted her 2005 book, “Desert Blood: The Juárez Murders.”

One of the students involved in that conference was Heather Masterton, now executive director of South Valley Sanctuary, a domestic violence shelter in West Jordan, Utah.

“She was very respectful in her work of bringing together academics, activists and family members of victims to dialogue on this issue and raise more awareness of femicide at the U.S.-Mexican border,” Masterton said. “Her work was driven to benefit the community.”



For Gaspar de Alba, who also holds an appointment in the Department of English, her path into academia is as unique as the range of her achievements. A native of the El Paso/Juárez border who received her master's degree at the University of Texas at El Paso, she moved to San Miguel de Allende for six months to live “the writer's life.” Instead, she learned to make paper and weave rugs. Later she went to Boston and became a Braille transcriber at National Braille Press, and also taught English Composition and ESL courses.

Investing in a used typewriter, she resolved to “be a writer no matter what.” She worked at that typewriter every morning for 4 years.

The discipline paid off. Between 1986–1990, she had her first collection of poetry published, wrote *The Mystery of Survival and Other Stories*; researched the life and work of Sor Juana, the Salem witch trials and Puritan life; and wrote the first drafts of her historical novel *Sor Juana's Second Dream*.

In 1990, Gaspar de Alba moved to Albuquerque to start anew on her Ph.D., which she completed in 1994 when she joined the UCLA faculty as one of the first six faculty hired into what was then the César Chávez Center for Interdisciplinary Instruction in Chicana and Chicano Studies. When the center was finally depart-

mentalized in 2005, “it was huge,” she said.

The author of eight books, Gaspar de Alba's border spirit comes through in her most recent work, *Calligraphy of the Witch*, a novel about a Mexican slave in colonial New England who becomes embroiled in the witchcraft trials when her nine-year-old daughter accuses her of speaking “the devil's verse”—a poem written by Sor Juana Inés de la Cruz, the 17th-century Mexican nun and poet considered by many to be the first feminist of the Americas.

Widely lauded for her work in the classroom, Gaspar de Alba has taught more than a dozen different courses at UCLA, ranging from large lectures to small undergraduate seminars. Gaspar de Alba was cited by UCLA student Elvira Rodriguez as the inspiration for creating her own course on the military recruitment of Chicana/o youth, which Rodriguez taught as part of the College of Letters and Science's Undergraduate Student Initiated Education program. Gaspar de Alba served as faculty adviser for the course, which eventually became Rodriguez's honors thesis.

“She taught me what it meant to do quality research—how to combine passion with substance, academic rhetoric with fearless personality,” said Rodriguez, who entered the doctoral program in the Graduate School of Education & Information Studies this year.

Gaspar de Alba confessed that she practically jumped out of her chair when she heard she had won the award.

“It's a fabulous opportunity to recognize faculty for their teaching, especially in a research university,” she said. “And it also helps to open up the visibility of Chicana and Chicano studies. People who don't even know that it exists as a field realize that, hey, it does exist, and people are doing a lot of good work there.”



Alicia Gaspar de Alba: a writer-scholar on subjects from poetry to historical novels to national conferences on unsolved murders.

A thought-provoking book by UCLA historian and political scientist Anthony Pagden explores 2,500 years of division between East and West, and how the conflict of cultures and ideologies can change in a globalized world.

Bridging the

“East is East, and West is West, and never the twain shall meet,” declared British writer Rudyard Kipling in one of the most well-known ballads of the 19th century.

Kipling’s refrain echoes a historical reality presented by Anthony Pagden, a professor of history and political science in the College, in his latest book, *Worlds at War: The 2,500-year struggle between East and West*. The widely reviewed book is the latest in a string of scholarly, highly-accessible historical epics for which Pagden is noted.

Pagden is one of the foremost experts on empire. In this book, he describes the boundaries between East and West, highlighting how nations are built on shared memories, both good and bad, and why victory and defeat in battles is an important element of nationhood.

Educated in Chile, Spain, France and Oxford, Pagden reminds us that the millennia-long East-West conflict is far from over. As such, *Worlds at War* lays the historical groundwork for the political thinking that many feel is badly needed in our globalized post-9/11 world.

In a wide-ranging interview, Pagden talked with *UCLA Today* writer Ajay Singh about what separates the West from the non-West and how the East-West divide might be bridged.

Are the East and West entrenched?

Yes. Their histories are long and memories of those histories are profound. Americans tend to forget that—Americans are in a part of the world where the sense of time is very different, where each generation has forgotten what the previous generation lived through.

In other areas of the world, people don’t forget what the previous generation lived through. They haven’t forgotten what happened in the First World War and in many cases haven’t forgotten what happened in the 14th and 15th centuries. They may not be real memories, real representations of either the East or the West. The whole point of my book is how these images are recycled over time, how they’re used politically.

If certain states have historically been at war for a variety of reasons, is it fair to describe the conflicts in terms of an East-West struggle?

It’s not fair if you take a long-term position. But—and I keep on stressing this in my book—these divisions are Western conceptions, predominantly because of the longest conflict between the “Orient” and the “West”—namely the con-

flict between the various states of Europe and the Ottoman Empire—an image emerged in the West of something called the Orient, which is sometimes a caricature, sometimes not.

As a consequence of the decline of the Ottoman Empire from the 17th century on, an image of the West was exported from the Ottoman world to the East. The central piece of the conflict is this Ottoman–European conflict. It’s a long imaginary conflict between East and West that is played out from the conquest of Constantinople in 1453 by the Ottomans to the re-conquest of Constantinople by combined allied forces.

So why not call it a conflict between Christianity and Islam, which are both crusading faiths?

What I try to do in the book is to track it back further because it isn’t just a conflict between Christianity and Islam, but also a conflict between the ways of life they represent. The European states chose to represent themselves as something older, namely the Greco-Roman world, of which there is less in the Eastern side.

I wanted to try and suggest that there’s something more at stake than just one religion pitted against another. After all, both have more in common with each other than anything else—something that Islam recognizes and to a great extent Christianity doesn’t.

So I wanted to show that behind the religious issues lie ones of conflict over what kind of societies you live in, how you organize your lives and, crucially, who is it that controls the law. That is the point I keep on making in the book: Who makes the law: is it God or man? And the answer that the West came up with, after considerable struggle, is that it’s man—human constructs for human use and nothing more than that.



The Battle of Giaour and Hassan, 1835, Eugène Delacroix (1798–1863) ©Musée de la Ville de Paris, Musée du Petit-Palais, France/Giraudon/The Bridgeman Art Library

Divide

A point I wanted to get across—and a lot of the book reviewers failed to pick up on it—is that these two blocks of cultures have an enormous amount in common, and a common origin apart from anything else. And that was my reason for taking history back to the beginnings—to show how Europe comes out of Asia (and Asia in the European sense is the land West of the Himalayas, not the other side).



Anthony Pagden: “It isn’t just a conflict between Christianity and Islam, but also a conflict between the ways of life they represent.”

What role has 20th-century globalization played into this conception of hostility between East and West?

Globalization as an economic phenomenon has made labor more mobile. In Europe, there’s been a massive migration of Muslims from all over the former European colonies—and this has very much changed the ethnic landscape in quite dramatic ways. On the other hand, if there’s any hope that we can get past old, entrenched views, globalization’s going to help it.

We are moving slowly into a world in which there is much greater diversification—people see things in much more global terms. I have two teenage children who see things in the world in a way that is completely different from the way I saw the world as a teenager.

You use the phrase ‘perpetual enmity’ in your book. What do you mean by it?

It was Herodotus’ term for why the Greeks fought the Persians. The cast of characters change, the images change, but there is a sense of continual warfare between Europe and Asia over 2,500 years. And what I was looking at is why this is so. Why is it in that particular part of the world that Islam arises? Why doesn’t Islam arise in, you know ... France? There are reasons for that—but they are reasons that are linked to that continual history. They are historical and cultural reasons.

Can globalization be accelerated?

The standard Western way of dealing with regime change—send in an army, followed by a ballot box, hoping that the people who vote are going to vote the way you want them to vote—isn’t going to solve things.

Take Iraq. In the beginning of the Iraq war, lots of people kept invoking the Marshall Plan, which was later dropped. The Marshall Plan was the one piece of really successful post-World War II American policy that succeeded because it gave people resources. If they had produced schools and welfare systems and all of the infrastructures that weren’t there in Iraq, there might have been some hope. If you use economic development and the world market as a forefront for democratization, you’ve got some chance of success. 

The Impact of Discretionary Giving: Tackling New Challenges and Addressing

Unrestricted giving to the UCLA Fund can be designated to support the greatest needs, as well as the most important opportunities.

Ben Nickoll, co-founder and managing partner of Ore Hill Partners, an asset management company, graduated from UCLA with honors in history in 1986. Ann Goldberg, a former magazine advertising salesperson, attended UCLA Extension classes in marketing in the 1950s.

What do these two Bruins have in common?

They both chose to support the UCLA College of Letters and Science through discretionary giving.

Gifts to the UCLA Fund can be designated to provide discretionary resources to a particular department or division, or to the College as a whole. These unrestricted funds enable department heads and deans to address the greatest needs, as well as the greatest opportunities.

Discretionary giving to the College allows talented students and eminent professors and researchers to explore new ideas, pursue important discoveries, and find solutions that impact local and worldwide populations.

Alumnus Ben Nickoll and his wife, Christine Armstrong, chose to support the Department of History with a gift of \$100,000 to the Chair's Discretionary Fund.

"I had a great experience at UCLA," Nickoll said. "Now I'm in a very fortunate position to be able to give something back."

As a business owner, Nickoll recognizes that the department's leaders have the best perspective about how a gift can provide maximum impact.

"The department chair is in a better position than I am to allocate my gift," Nickoll said. "I didn't want to attach any strings to it."

Said Edward Alpers, chair of the Department of History, "Our greatest needs are for graduate student support and staffing of undergraduate seminars that are required for the major. Because of the unrestricted nature of Ben's gift, the Department of History is able to add a full year's support for four exceptional graduate students, each of whom will teach as many as 80 undergraduates.

"In short, Ben's gift will have a direct impact on the educational experience of approximately 325 UCLA history students, both graduate and undergraduate."

A native of Kansas, Ann Goldberg arrived in Los Angeles in 1945 and later joined the editorial staff of *Vogue* magazine; she also worked in mail-order advertising and office management for *Glamour*. While she was working, she took UCLA Extension classes in marketing. It was in Los Angeles that she met her husband, Stephen Goldberg, a UCLA engineering alumnus. Together they became enthusiastic supporters of UCLA.

The Goldbergs' generosity to UCLA began in 1968 and has grown steadily since then. Dedicated members of the Chancellor's Associates, they established a discretionary fund in 2001 for faculty recruitment and retention in the College of Letters and Science with a gift of \$250,000; they enlarged the fund in 2004. This type of unrestricted support provides crucial resources that enable the College to recruit the finest faculty members and retain outstanding professors across all departments.

Stephen Goldberg passed away in 2002, but Ann has remained an active Bruin. This year the Goldbergs' discretionary fund helped the Department of Art History retain a faculty member who had received an offer from another university by providing housing assistance and supplementary research funds.

Ann Goldberg: "I understand the difficulty of luring faculty members away from heavily endowed private institutions and keeping our top professors here. If we offer just a little spur, it can really help."



Senior Class Giving: Graduating Students Create Their Own Legacy

Growing numbers of seniors are demonstrating their commitment to UCLA by participating in senior class giving.

Every year, UCLA gains a special new cadre of donors: graduating seniors. With the opportunity to contribute to the Senior Class Giving Campaign—a reflection of commitment to the university where they just earned their degrees—these new Bruin alumni are responding with growing enthusiasm.

“Even a small gift can have a significant impact, and we want students to understand that,” said Julie Lanier, assistant director of student giving in the UCLA Fund. “For 2008, we focused on increasing participation, and the results far exceeded our goal.”

Of 6,313 seniors who graduated during the 2008–09 academic year, 2,876 pledged their support, for a total of \$62,000. This level of participation is a record—more than twice the number of students who participated in the Senior Class Giving Campaign in 2007.

Graduating seniors can designate their gifts, through the UCLA Fund, to departments or divisions of their choosing. Karen Paulson, currently a senior majoring in anthropology, actually made her first gift last year, contributing unrestricted support for the Division of Social Sciences. Karen serves on the Senior Class Giving Committee as vice chair of marketing and events.

“The senior class gift offers a way for current students to begin lifelong giving that will ensure the Bruin experience for future generations,” Paulson said.

New alumna Jodi Berzak, a former member of the committee, chose to support the Department of Psychology, where she was awarded her bachelor’s degree in June. Berzak is currently a medical student.

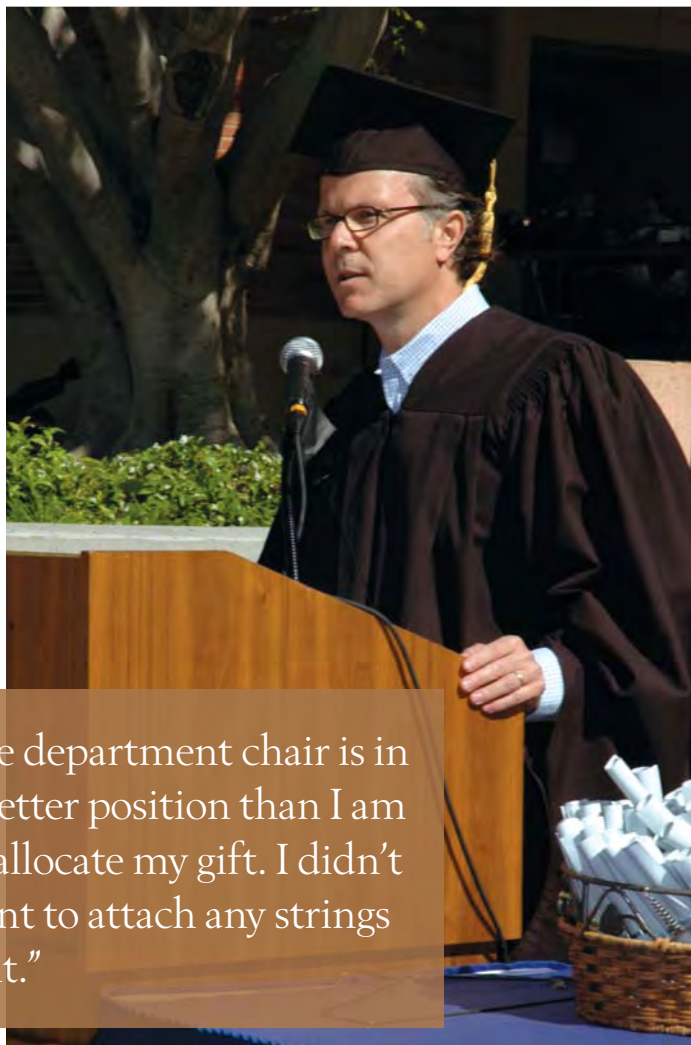
“UCLA gave me so many opportunities, it was only right that I give back,” she said. “Knowing that my discretionary gift would go to great use was all the enticement I needed.”

These young people—like others who graduated before them—are dedicated Bruins who want to leave a legacy for the next generation of UCLA undergraduates. Senior class giving is a vital tradition that enables them to fulfill that dream. [UR](#)



Karen Paulson: “The senior class gift offers a way for current students to begin lifelong giving that will ensure the Bruin experience for future generations.”

New Opportunities



“The department chair is in a better position than I am to allocate my gift. I didn’t want to attach any strings to it.”

“I had a great experience at UCLA,” said Ben Nickoll (shown here as the keynote speaker at the 2008 commencement celebration for the Department of History). “Now I’m in a very fortunate position to be able to give something back.”

“It’s thrilling,” said Ann Goldberg. “It’s not a large amount of money, but it kept this scholar at UCLA.”

“I understand the difficulty of luring faculty members away from heavily endowed private institutions and keeping our top professors here, especially with the terrible cost of living in Los Angeles. But if we offer them just a little spur, if we demonstrate that the College is willing to go this extra mile to bring them here, or keep them here, it can really help.”

For information about discretionary giving to the College, call (310) 206-1953. [UR](#)

Creating a “Rich and Lush

The dedication of two donors is providing unprecedented support for the Center for Jewish Studies.

UCLA’s Center for Jewish Studies recently became the beneficiary of two generous gifts from prominent members of Southern California’s Jewish community: a gift of \$1.4 million from Andrew Viterbi and his family will create the Viterbi Family Program in Mediterranean Jewish Studies, and \$4 million from Michael Ross will establish the Michael and Irene Ross Endowment in Yiddish and Jewish Studies—extraordinary new resources that will help propel the center to a position of international leadership in Jewish studies.

“Because the Mediterranean region has been at the crossroads of commerce and ideas for thousands of years, it has been the site of one of the richest and most diverse Jewish cultures in history. I want to see that culture studied and talked about, and explored and recognized.”

Andrew Viterbi was born in Bergamo, Italy, and immigrated to the United States with his parents in 1939, at age four, to escape fascist persecution. The family settled in Boston, where Viterbi graduated from Boston Latin School and MIT. He earned a Ph.D. in electrical engineering from USC and then taught for ten years at UCLA, where he invented the Viterbi algorithm, which is used in most digital communication systems today. Later he co-founded Qualcomm, and retired in 2000. For his outstanding achievements in technology, Viterbi recently received the 2007 National Medal of Science from the President of the United States.

Since 2006, Viterbi’s family foundation has supported a successful pilot program in Italian-Jewish studies in UCLA’s Center for Jewish Studies. Now, with their new gift of \$1.4 million, he and his wife Erna and their three children have established an endowment that will ensure the future of Mediterranean Jewish studies at UCLA.

Viterbi, who can trace his family’s history in Italy back to



Andrew Viterbi

the sixteenth century, believes the study of history is crucial to any understanding of human culture and society.

“Because the Mediterranean region has been at the crossroads of commerce and ideas for thousands of years, it has been the site of one of the richest and most diverse Jewish cultures in history,” said Viterbi. “I want to see that culture studied and talked about, and explored and recognized.”

The Viterbi Family Program in Mediterranean Jewish Studies will bring an eminent scholar to UCLA for one quarter each year to address an aspect of Mediterranean Jewish culture or history. The endowment will also fund lectures and seminars on subjects related to Jewish society throughout the Mediterranean region, spanning southern Europe, northern Africa, and westernmost Asia.

According to David Myers, professor of history and director of the center, the Viterbi Program marks a major step in the advancement of this important field.

“Increasingly, the study of history is moving beyond traditional political boundaries in order to understand transnational commercial and cultural connections,” Myers said. “This approach is especially suited to the study of the Jews, given the wide-ranging familial, social, and economic ties that they

Garden”

developed in the Middle East and Europe from antiquity to the present.

“We are very grateful for the Viterbi family’s remarkable generosity, for it will enable us to see these connections in much richer detail.”

The second major gift came to the Center this year from Michael (“Mickey”) Ross, an award-winning television writer and producer. Ross’ Yiddish-speaking parents were immigrants from eastern Europe who settled in New York, where Ross was born and raised. Throughout his life, Ross has “always had a very warm feeling for both the language and the culture of Yiddish.”

After graduating from City College of New York and serving as a bomber pilot in the Air Force during World War II, Ross became involved in theater and comedy, and, later, television. A high point of his career came when he was a producer and a member of the Emmy-winning writing team on the pioneering sitcom, “All in the Family.” Together with his partners, Bernard West and Don Nicholl, Ross later developed and executive produced the sitcoms “The Jeffersons” and “Three’s Company.”

About ten years ago, Ross began to look for ways to support the preservation of Yiddish language and culture. When he learned that Yiddish was being taught at UCLA, he eagerly began to provide annual funding for the program.

Ross’ \$4 million endowment will ensure that Yiddish language and culture will be a subject of research and teaching at UCLA in perpetuity.

The Ross Endowment will provide for the creation of the Michael and Irene Ross Endowed Chair in Yiddish Studies, as well as funding for Yiddish instruction, support for faculty and graduate student research, and related programs. Ross wanted to “promote not just the preservation of the Yiddish language but the spirit of Yiddishkeit as it existed in the ghetto and the pale—communities in which the welfare of one’s neighbors and the community as a whole were more important than personal ambition.”

“One overarching goal of the center is to create a rich and lush garden of Jewish cultures,” said Myers. “We’re very, very blessed by Mr. Ross’ generosity and his passion for Yiddish. It will allow us to create a top-flight program in one of the greatest of Jewish linguistic cultures.

“The common thread of these two extraordinarily generous gifts,” said Myers, “is that both are animated by passion

“It’s particularly important and meaningful for us to have donors who have the passion and the willingness to assure the study of these extraordinary cultures.”

born of personal experience. Both the Yiddish cultural experience and the Italian-Jewish cultural experience contain that mix of bitterness and sweetness, of tragedy and triumph, as does so much of the Jewish historical experience.

“It’s particularly important and meaningful for us to have donors who have the passion and the willingness to assure the study of these extraordinary cultures for generations to come.” 



Michael Ross

For information about supporting the UCLA College of Letters and Science, call Tracie Christensen, assistant vice chancellor of development (310)206-0699.

Imagine a

"I've always been interested in how things work, particularly living things. My field is molecular biology, investigating the unusual properties of biological systems. I've been at it for sixty years. It's quite addictive.

"I believe the very best work happens when research and training are intermixed. Many of my most valued colleagues have been the graduate students and postdoctoral fellows with educated imaginations, fresh perspectives and questions no one had asked.

"The Nobel work solved a classic problem—how energy is captured and used in living cells. I'd been studying this unsuccessfully for years. Then, in 1970, looking back through the old data, I saw what all of us had missed: energy wasn't used to create a key substance. It was used

Lots of institutions dispense existing knowledge. The mission of a research university is something more: to produce new knowledge.

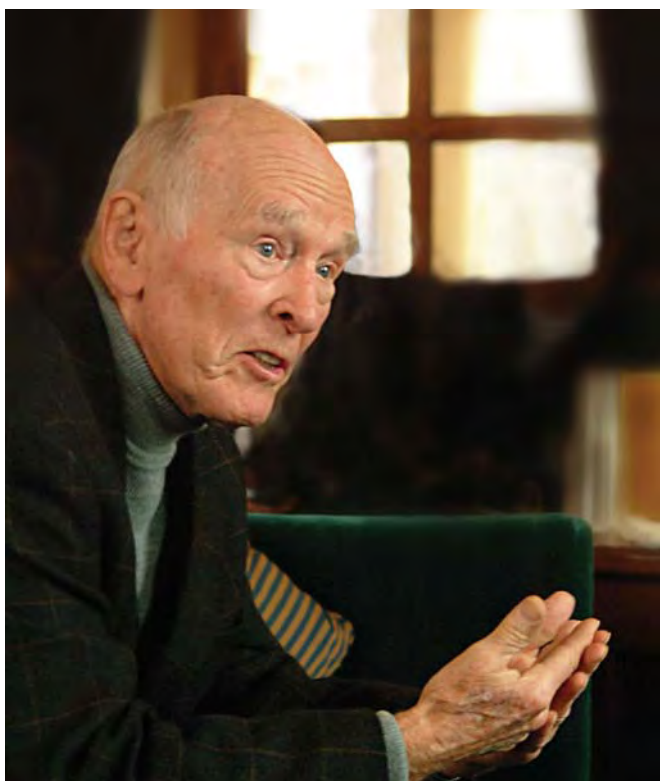
to release that substance in the cell. From that moment, we were on the path to understanding how cells obtain the energy to serve the needs of living things.

"UCLA research is an enormous, diverse enterprise. Just look at the breadth and depth of new knowledge that flows from here year after year.

great river.

"But, there's another factor that's less apparent but equally remarkable—a unique, deliberate research culture here that capitalizes upon that breadth and depth and thrives on interchange among researchers and disciplines.

UCLA has a worldwide reputation for creating knowledge across an astounding range of inquiry. How does it do that?



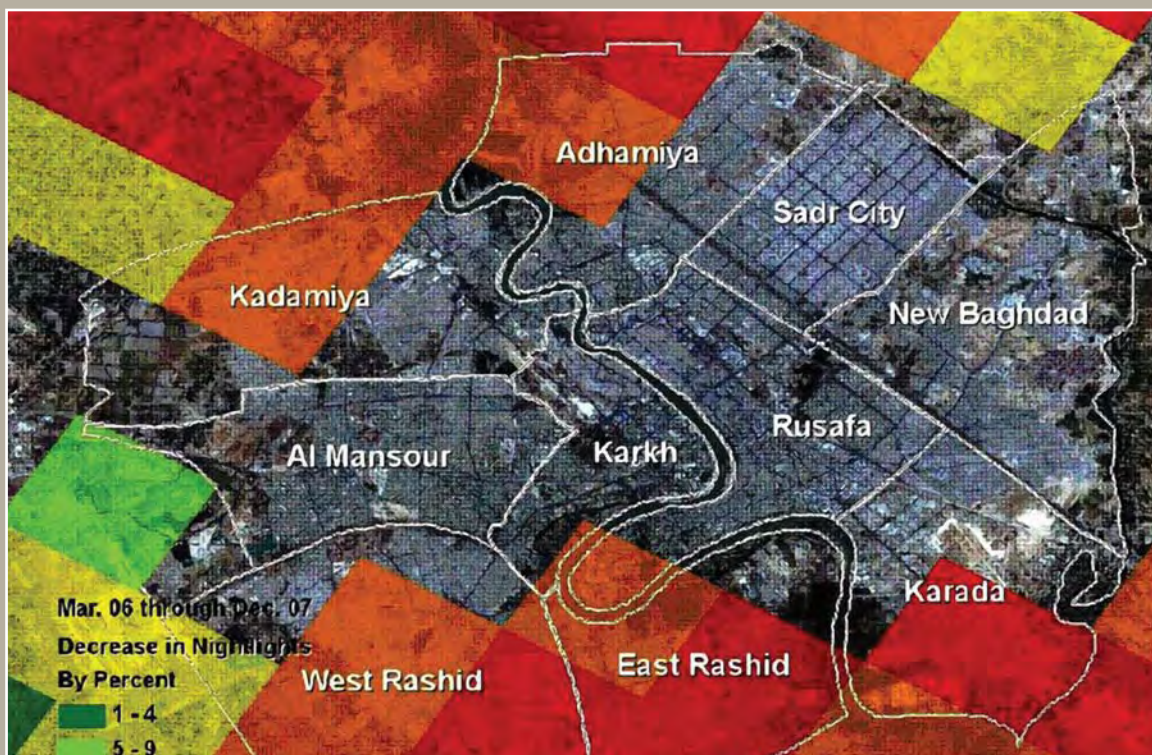
This may not sound unusual, but—in too many academic settings—competition trumps cooperation.

"You know what lures me back on campus when I could be home, working on my low back-hand volley? There are a dozen or more research groups here, moving beyond my work, asking their own questions about protein structure and function, stem cells, gene splicing and cancer.

"And who knows what else?"

Paul Boyer. UCLA, Unabashed.

Did the 2007 U.S. troop surge in Iraq achieve its mission? With satellite images that track the amount of light emitted by Baghdad neighborhoods at night, a team of UCLA geographers has uncovered fresh evidence that the surge may not have been as effective at improving security as some U.S. officials have maintained. For more on this research, see page 6.



UCLA
COLLEGE
 R E P O R T

2300 Murphy Hall
 405 Hilgard Avenue
 Los Angeles, California 90095

Non-Profit Org.
 U.S. Postage
 PAID
 UCLA